

**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, 2021

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)
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Braskem S.A.

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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, 2021 was:

451,668,652 Common Shares, without par value

344,158,226 Preferred Shares, Class A, without par value

478,790 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 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 provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

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

U.S. GAAP

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

Other

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

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

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PRESENTATION OF FINANCIAL AND OTHER INFORMATION

All references herein to “*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.

On March, 31, 2022, the *real*/U.S. dollar exchange rate was R\$4.7378 to US\$1.00, based on the selling rate as reported by the Central Bank. The selling rate was R\$5.5805 to US\$1.00 as of December 31, 2021, R\$5.1967 to US\$1.00 as of December 31, 2020 and R\$4.0307 to US\$1.00 as of December 31, 2019, in each case, as reported by the Central Bank. The *real*/U.S. dollar exchange rate fluctuates widely, and these selling rates may not be indicative of future selling rates.

Solely for the convenience of the reader, we have translated, to the extent applicable, *real* amounts in this annual report into U.S. dollars at the selling rate as reported by the Central Bank as of December 31, 2021 of R\$5.5805 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.

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

Braskem Financial Statements

We maintain our books and records in *reais*. Our consolidated financial statements as of December 31, 2021 and 2020 and for the three years ended December 31, 2021 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 consolidated financial statements in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB.

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 global petrochemical industry, international market prices for petrochemicals products and per capita consumption in certain geographic regions principally from reports published by IHS, Inc. (“IHS”). We derive information relating to Brazilian imports and exports from ComexStat, produced by the Brazilian Ministry of Development, Industry and Foreign Trade (Ministério da Indústria, Comércio Exterior e Serviços, the “MDIC”). We also derive information from reports published by Brazilian Association of the Alkali, Chlorine and Derivatives Industry (Associação Brasileira da Indústria de Álcalis, Cloro e Derivados, the “Abiclor”). We also include information and statistics regarding economic growth in emerging economies obtained from the International Monetary Fund, and statistics regarding gross domestic product, 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); the U.S. Bureau of Economic Analysis of the U.S. Department of Commerce; the statistical office of the European Union (Eurostat); and the Mexican Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía).

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We provide information regarding domestic apparent consumption of some of our products based on information available from ComexStat, produced by the MDIC and reports published by Abiclor. 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.

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

Certain Industry Terms

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

Term	Meaning	Main uses	In the context of our business
Aliphatics	Aliphatics are open-chain hydrocarbons that contain no stable rings connecting their atoms, in contrast to aromatics.	Used as fuels, solvents and as basic chemicals in the petrochemical industry.	We produce aliphatics, such as ethylene and propylene, in our chemicals operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.

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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 operations that are part of our Brazil Segment. Butene is supplied by our chemicals operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment. 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.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.

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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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
Ethane	A type of natural gas liquid (NGL), ethane is a colorless, odorless gas, 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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment, which are 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 operations that are part of our Brazil Segment.

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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 operations that are part of our Brazil Segment, 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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
GHG emissions	Emissions of the six gases listed in the Kyoto Protocol: carbon dioxide (CO ₂); Methane (CH ₄); Nitrous Oxide (N ₂ O); Hydrofluorocarbons (HFCs); Perfluorocarbons (PFCs); and Sulphurhexafluoride (SF ₆).	Used as a metric for our management and in accordance with applicable laws to measure GHG emissions	We use the metric to assess our performance and define a strategy for reducing GHG emissions
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 operations that are part of our Brazil Segment.
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 Segment as a raw material to produce HDPE.

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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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
Hydrogenated solvents	Odorless, colorless solvents treated with hydrogen.	Used in the manufacture of paints.	We produce hydrogenated solvents in our chemicals operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.

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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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment 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 operations that are part of our Brazil Segment.

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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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.

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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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.

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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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment as a by-product of steam cracking. Propylene is also the main raw material that we use to produce polypropylene in our polyolefins operations that are part of our Brazil Segment, and United States and Europe Segment.
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 operations that are part of our Brazil Segment 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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.
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 operations that are part of our Brazil Segment.

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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 operations that are part of our Brazil Segment.
Toluene	An aromatic hydrocarbon.	Used predominantly as an industrial feedstock and a solvent.	We produce toluene in our chemicals operations that are part of our Brazil Segment.
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 Segment.
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 operations that are part of our Brazil Segment.

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;
- “production capacity” means the annual projected capacity for a particular facility, calculated based upon operations for 24 hours each day of a year and deducting scheduled downtime for regular maintenance;
- “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.

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Rounding

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

CAUTIONARY STATEMENT WITH RESPECT TO FORWARD-LOOKING STATEMENTS

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

Statements that are predictive in nature, that depend upon or refer to future events or conditions or that include words such as “expects,” “anticipates,” “intends,” “plans,” “believes,” “estimates” and 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 pandemic (the “COVID-19 pandemic”) and others, on our Brazilian and international sales and operations, and on the Brazilian and international petrochemical industry;
- the adverse effect of war and other armed conflicts, such as the conflict involving Russia and Ukraine, and others on our Brazilian and international sales and operations, and on the Brazilian and international petrochemical industry;
- the adverse effect of inflation globally on our Brazilian and international business;
- demand for our petrochemical products, our manufacturing facilities, price of raw materials and other inputs of our production, global logistics for our products, raw materials and other inputs of our production, and supply chains;
- general economic, political and business conditions in the markets or jurisdictions in which we operate, including governmental and electoral changes, and demand and supply for, and prices of, petrochemical and thermoplastic 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;
- our ability to successfully carry out our sustainable development strategy, and to successfully develop initiatives to adapt to and mitigate climate change;
- competition in the global petrochemical industry;
- our ability to successfully develop our innovation projects, in particular in renewable and recycling initiatives;
- prices of naphtha, ethane, ethanol, 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 controlling shareholder;
- inherent risks related to any change of our corporate control;

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- 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;
- political conditions in the countries where we operate, particularly in Brazil and Mexico;
- future changes in Brazilian, Mexican, American and European policies, including the adoption of new environmental policies and related actions undertaken by those governments;
- a deterioration in the world economy that could negatively impact demand for petrochemicals and thermoplastic products;
- unfavorable 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 of operations or other developments may differ materially from the expectations expressed in our 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, readers should not rely on these forward-looking statements.

All forward-looking statements attributed to us or a person acting on our behalf are qualified in their entirety by this cautionary statement, and you should not place undue reliance on any forward-looking statement included in this annual report. 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.

For additional information on factors that could cause our actual results of operations to differ from expectations reflected in forward-looking statements, please see “Item 3. Key Information—Risk Factors.”

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

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.”

Summary of Risk Factors

Below is a summary of certain material factors that make an investment in our securities speculative or risky. Importantly, this summary does not address all of the risks and uncertainties that we face. This summary is qualified in its entirety by a more complete discussion of such risks and uncertainties. In evaluating an investment in our securities, investors should carefully read the risks described below, as well as other risks and uncertainties that we face, which can be found under “Risk Factors” of this annual report. If any of the following events occur, our business, financial condition and operating results may be materially adversely affected. In that event, the trading price of our securities could decline, and you could lose all or part of your investment. Such risks include, but are not limited to:

- We may be affected by instability in the global economy and by financial turmoil, including as a result of military conflict between Russia and Ukraine.

Risks Relating to Us and the Petrochemical Industry

- Global or regional health pandemics or epidemics, including that related to the COVID-19 pandemic, may adversely affect our business, financial condition and results of operations.
- The cyclical nature of the petrochemical industry may reduce our net revenue and gross margin.
- Adverse conditions in the petrochemical industry may adversely affect demand for our products.
- Global macroeconomic factors have had, and may continue to have, adverse effects on the margins that we realize on our products.
- We face competition from suppliers of polyethylene, polypropylene, PVC and other products.
- 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.
- Higher raw materials costs would increase our cost of products sold and may reduce our gross margin and negatively affect our overall financial performance.

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- We depend on Petrobras to supply us with a substantial portion of our naphtha, ethane, propane and propylene needs, and also on logistics services.
- We depend on ethane supplied by Pemex TRI in Mexico.
- We rely on limited or sole-source suppliers for our raw materials, inputs and energy, including transportation thereof.
- We may be materially adversely affected if there is an imbalance in global logistics, which may cause disruptions to our transport, storage and distribution operations, negatively impacting the costs related thereto.
- We rely on access to third-party licensed technology and related intellectual property, and if such rights 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, certain of our production facilities, our operating results and financial condition could be adversely affected.
- 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.
- 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.
- We may face conflicts of interest in transactions with related parties.
- 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.
- Adjustments in tariffs on imports that compete with our products could cause us to lower our prices.
- 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.
- A failure to comply with export control or economic sanctions laws and regulations could have a material adverse impact on our results of operations, financial condition and reputation.
- Our business and operations are inherently subject to environmental, health and safety risks. As a result, our business is also subject to several stringent regulations, including environmental regulations.
- Unfavorable outcomes in pending or future litigation may reduce our liquidity and negatively affect our financial performance and financial condition.
- We could be materially affected by violations of the U.S. Foreign Corrupt Practices Act (“FCPA”), the Brazilian Anti-Corruption Law and similar anti-corruption laws.
- Climate change may negatively affect our business, financial condition, results of operations and cash flow.
- 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.
- Unauthorized disclosure or loss of intellectual property, trade secrets, other sensitive business or personal information, or disruption in information technology by cyberattacks or other security breaches, as well as our failure to comply with data protection laws and information security requirements can subject us to significant penalties or liability and can adversely impact our operations, reputation, and financial results.
- There can be no assurance that Novonor will remain our controlling shareholder. Novonor and Petrobras may enter into transactions or other arrangements that may result in us not having a controlling shareholder. If no single shareholder or group of shareholders holds more than 50% of our voting stock or exercise a controlling interest, there may be increased opportunity for alliances between shareholders and conflicts between them.
- Novonor and Petrobras have requested us to conduct studies for a potential migration of Braskem to the Novo Mercado listing segment of the B3, which, if completed, would lead to the conversion of all of our class A and class B preferred shares into common shares and the revision of our corporate governance practices to conform to the Novo Mercado rules.

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- The intended corporate reorganization communicated by Novonor and Petrobras to us may not be approved or implemented, and the migration to the Novo Mercado listing segment of the B3 may not occur.
- We expect to lose the right of preference set forth in the current shareholders' agreement with respect to new business opportunities in the petrochemical sector, and as result, Petrobras, which is our largest supplier of raw materials in Brazil, will be able to invest in the petrochemical sector independently from us and without first giving us a preference to do so.
- 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.

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.
- 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.
- 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 financial performance.

Risks Relating to Mexico

- 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.
- Political events in Mexico could affect the Mexican economic policy and our business, financial condition and results of operations.
- We source part of our ethane feedstock from Pemex TRI in Mexico, which we expect to be our primary source of ethane until the Ethane Import Terminal is operational.

Risks Relating to Our Equity and Debt Securities

- All of the shares issued by Braskem and owned by NSP Inv. are secured for the benefit of certain secured creditors of the Novonor Group.
- Holders of our class A preferred shares or the ADSs may not receive any dividends or interest on shareholders' equity.
- 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 relative volatility and liquidity of the Brazilian securities markets may adversely affect holders of our class A preferred shares and ADSs.
- Brazilian bankruptcy laws may be less favorable to holders of our shares, ADSs and outstanding debt securities than bankruptcy and insolvency laws in other jurisdictions.

We may be affected by instability in the global economy and by financial turmoil, including as a result of military conflict between Russia and Ukraine.

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. Concerns over inflation, geopolitical issues, the global financial markets, unstable global credit markets and financial conditions and the COVID-19 pandemic, have led to periods of significant economic instability, declines in consumer confidence and discretionary spending, diminished expectations for the global economy and expectations of slower global economic growth going forward, and increased unemployment rates. In addition, we face several risks associated with international business and are subject to global events beyond our control, including war, public health crises, such as pandemics and epidemics, trade disputes, economic sanctions, trade wars and their collateral impacts and other international events. Any of these changes could have a material adverse effect on our reputation, business, financial condition or results of operations.

There may be changes to our business if there is instability, disruption or destruction in a significant geographic region, regardless of cause, including war, terrorism, riot, civil insurrection or social unrest; and natural or man-made disasters, including famine, flood, fire, earthquake, storm or disease.

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In particular, global markets are currently operating in a period of economic uncertainty, volatility and disruption following Russia's invasion of Ukraine on February 24, 2022. Although the length and impact of the ongoing military conflict is highly unpredictable, it and any other geopolitical tensions could have an adverse effect on the economy and business activity globally, including the following:

- credit and capital market disruptions,
- significant volatility in commodity prices (such as oil and gas and raw materials to our business),
- significant volatility in petrochemical product prices;
- increased expenses related to direct and indirect materials used in our production process (i.e., logistics and inputs, among others),
- increased costs of resources (such as energy, natural gas and coal) for our operations,
- slowdown or disruption of the global and local supply chain, which may lead to shortages and lack of critical materials, commodities and products in the market and to our business,
- potential appreciation of the U.S. dollar,
- increase in interest rates and inflation in the markets in which we operate, which may contribute to further increases in the prices of energy, oil and other commodities, and
- lower or negative global growth.

Additionally, the recent military conflict between Russia and Ukraine has led to sanctions and other penalties being imposed, proposed and threatened by the United States, European Union and other countries. Such sanctions are rapidly evolving, and the United States and other countries could impose wider sanctions and take other actions should the conflict further escalate. See “—A failure to comply with export control or economic sanctions laws and regulations could have a material adverse impact on our results of operations, financial condition and reputation.” Russian military actions counter measures or retaliatory actions (including cyberattacks and espionage) could adversely affect the global economy and financial markets and lead to further instability and lack of liquidity in capital markets, potentially leading, for example, to difficulties in obtaining additional funds and sources of financing for our operations. Already the conflict has caused market volatility, a sharp increase in certain commodity prices, such as oil, and an increasing number and frequency of cybersecurity threats. Actual and threatened responses to such military action, as well as a rapid peaceful resolution to the conflict, may also impact the markets for certain Russian products, such as oil, natural gas and other commodities, and may likely have collateral impacts and disruptions on such sectors globally. It is not possible to predict the length and impact of the ongoing military conflict or its broader consequences, which could include further sanctions, embargoes, regional instability, geopolitical shifts and adverse effects on macroeconomic conditions, currency exchange rates and financial markets. Any such event may increase our costs, decrease our revenues or limit our production and sales volume and adversely affect our business, results of operations and financial condition.

Geopolitical and economic risks have also increased over the past few years as a result of trade tensions between the United States and China, Brexit, and the rise of populism. Growing tensions may lead, among others, to a deglobalization of the world economy, an increase in protectionism or barriers to immigration, a general reduction of international trade in goods and services and a reduction in the integration of financial markets, any of which could materially and adversely affect our business, financial condition and results of operations.

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Risks Relating to Us and the Petrochemical Industry

Global or regional health pandemics or epidemics, including that related to the COVID-19 pandemic, 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 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 COVID-19 pandemic 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 final effects that the 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 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 operating data for the year 2021 and the publicly reported expected impact on certain industries that are customers to our products (such as automotive and construction), we believe that 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 have closely monitored the effects of the COVID-19 pandemic on our business and the communities located in the regions in which we operate. On March 20, 2020, we formed a crisis committee to establish procedures focusing on the health and safety of our employees and the continuity of our operations. To that end, we have adopted the following measures: (i) ordered all of our employees and contractors who were most vulnerable to COVID-19 to work remotely until criteria for a safe return to their worksite were met; (ii) ordered all of our employees and contractors who were not directly related to the safe continuity of our operations to work remotely until criteria for a safe return to their worksite were met; (iii) reduced the number of employees and contractors working at our industrial plants and prioritized operations with fewer people, while ensuring that all rules relating to ensuring personal safety and operational reliability were followed; (iv) restricted visits by non-routine third parties and suppliers to our facilities; (v) created agendas jointly with our customers and local communities to assess whether products on our portfolio could be used to help fight the COVID-19 pandemic; and (vi) created, implemented and monitored the indicators of the Plan for Safe Return to Braskem plants and offices.

During the second quarter of 2020, the capacity utilization rates of our plants in Brazil and the United States were temporarily reduced to 70% and 90%, respectively, to adjust to the weaker demand for our products and to the destocking trend in the petrochemical and plastics production chains. The capacity utilization rates followed market demand and export opportunities that arose in other regions, especially with the restart of economies in Asia, which occurred before other regions of the world.

During the third quarter of 2020, there was strong recovery in demand for resins in Brazil and in the United States that led the capacity utilization rates of the petrochemical plants to return to normal levels. In the fourth quarter of 2020, the demand for resins remained strong and the capacity utilization rates in Brazil and the United States remained at levels similar to those of the previous quarter.

In Europe and Mexico, the capacity utilization rates returned to their normal levels in the second quarter of 2020, following the gradual recovery in demand, resulting in capacity utilization rates of 83% and 80%, respectively. With regard to the fourth quarter of 2020, despite the recovery in demand that began in the previous quarter, the capacity utilization rate in Europe was 64% due to the scheduled shutdown of our European plant. In the first and second quarters of 2021, the utilization rates of petrochemical plants remained above 70% in most regions where we operate. Specific cases of reduction in rates were identified in Mexico due to instability in the supply of ethane by Pemex, and are not directly related to the effects of the COVID-19 pandemic. The utilization rate of petrochemical plants in the third quarter of 2021 in Brazil was 79%, representing an increase when compared to the second quarter of 2021, mainly due to the normalization of activities after a scheduled maintenance stoppage at the ABC petrochemical center, in the state of São Paulo.

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The utilization rate of the PP plants in the United States was 94%, representing a decrease when compared to the previous quarter due to several small reliability interruptions in the PP plants during such period. In Europe, the utilization rate of PP plants was 92%, representing a decrease when compared to the second quarter of 2021 due to minor interruptions in the reliability of PP plants during such period. Finally, the utilization rate of PE plants in Mexico was 68%, representing an increase when compared to the previous quarter due to the higher volume of ethane imports from the United States through the Fast-Track solution, which offset the reduction in the supply of ethane by Pemex.

In 2021, the capacity utilization rates of the petrochemical complexes in Brazil remained in line with the previous year (80.7%). In the United States, capacity utilization declined in relation to 2020 from 92.0% to 85.5%, due to impacts from Winter Storm Uri on the U.S. Gulf Coast in early 2021 and operational faults at one of the PP plants in the last quarter of 2021. In Europe, the capacity utilization rate of the PP plants was 91.2%, and the increase was supported by stronger demand in the region, which was affected by Covid-19 in 2020. The capacity utilization rate of the PE plants in Mexico declined in relation to 2020, from 74.3% to 66.3%, explained by (i) the restriction in operations during most of first quarter 2021 after interruption in natural gas transport; (ii) the unscheduled shutdown during May due to the temporary instability in power supply at Braskem Idesa; and (iii) the reduction in ethane supply volume by PEMEX during 2021.

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.

In addition, relevant events or changes in the cycle and in the petrochemical industry, including technological innovations and regulatory changes, may materially affect the future profitability of our business and consequently reduce the recoverable value of our assets, which is reviewed by the annual impairment test, which may adversely affect the profit attributable to our shareholders.

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

Sales of our petrochemical and chemical products are tied to global production levels and demand, which can be affected by macro-economic factors such as interest rates, international oil prices, shifts to alternative products, consumer confidence, employment trends, regulatory and legislative oversight requirements, trade agreements, regulatory developments, as well as regional disruptions, armed conflicts, natural disasters, epidemics, pandemics, or other global events. Therefore, our net revenue, feedstock costs and gross margin are increasingly linked to global conditions that we cannot control, and which may adversely affect our results of operations and financial position. For example, the persistence of the COVID-19 pandemic or the conflict involving Russia and Ukraine (including economic sanctions and other regulations imposed by the United States and other international countries as a result thereof) could negatively impact supply chains worldwide and demand for our products and the raw materials we use. Should the conflict in Ukraine or other international locations further escalate, it is difficult to anticipate the extent to which the consequences of such conflict, including without limitation effects on the price of oil and current or future sanctions could increase our costs, disrupt our supplies, reduce our sales or otherwise affect our operations. Moreover, the extent to which the COVID-19 pandemic impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including the severity of the 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 may be 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.

In addition, If the viability of the business of certain of our customers deteriorates, it could have a material adverse effect on our cash flows and results of operations.

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. As of December 31, 2021, our total trade accounts receivable, net of expected credit losses (R\$131.6million) was R\$7,167.0million.

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, considering our loss experience and the average 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 ability to obtain financing for working capital such as sales of receivables.

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, including global inflation, adversely affect our business because demand for our products is reduced and our costs increase.

According to the latest report released by the International Monetary Fund (the “IMF”) in January 2022, the world’s GDP growth for 2021 is estimated at 5.9%. In 2020, the world’s GDP contracted by 3.1%, representing a decrease of 6.3 percentage points in relation to 2019. Regarding the Brazilian economy, the IMF expects a 4.7% growth for 2021. According to the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*, or the “IBGE”), in 2020, Brazilian GDP contracted by 4.1% when compared to growth of 1.2% in 2019, and 1.8% in 2018.

According to the latest report released by the IMF in January 2022, the U.S. GDP growth forecast for 2021 was 5.6%. In 2020, U.S. economy contracted by 3.4%, compared to growth of 2.3% in 2019, and 2.9% in 2018. According to the IMF, the expectation for 2021 is a growth of 5.2% for the European economy, compared to a 6.3% contraction in 2020. In addition, according to the IMF, the expectation for the Mexican economy is for growth of 5.3% in 2021, compared to a contraction by 8.3% in 2020.

In addition, raw materials and other costs in our business are subject to wide fluctuations depending on market conditions and government policies. These costs are influenced by several factors over which we have little or no control, including, but not limited to, international and national economic conditions, including higher natural gas costs in Europe, regulations, government policies (including those applicable to the pricing policies of Petrobras, which is one of our main suppliers in Brazil), tariff adjustments and global effects of supply and demand, particularly on commodity prices. We cannot assure that the prices of our products may be increased in a timely manner or be sufficient to keep pace with, or offset, increases in inflation, operation costs and expenses, amortization of investments and taxes. As a result, we might not be able to pass on the increased costs to our customers, which could decrease our profit margin and result in a material adverse effect on our business, financial condition and results of operations.

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 and logistics constraints may impair our ability to export our products. Prolonged volatility in economic activity in our key export markets, such as United States, 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 suppliers of polyethylene, polypropylene, PVC and other products.

We face strong competition across all of our products. Some of our foreign competitors are substantially larger and have greater financial, manufacturing, technological and/or marketing resources than us. Our U.S. operations face competition in the United States from other local suppliers that serve the North-American market. Our European operations face competition in Europe and the other export markets that it serves from European and other foreign suppliers 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, suppliers of almost all continents have regular or specific sales to trading companies and direct customers in Brazil for our products, including resins.

We generally follow the international markets with respect to the prices for our products sold in Brazil. We generally set the prices for our products exported from Brazil based on international market prices. We set the prices for products sold in the United States and Europe based on market pricing in such region. The price for polyethylene in Mexico is based on prices in the U.S. Gulf Coast region.

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As a result of the commissioned fractioned gas-based ethylene new capacities and of the expected new capacities for production of resins and petrochemicals, coupled with the competitive pricing of feedstock for petrochemicals production such as ethane, 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 our products.

In addition, exchange rates variation may affect the competitiveness dynamics in different regions in which we operate. For instance, the appreciation of the *real* against the U.S. dollar may increase the competitiveness of imported products, which may increase the competition in Brazil from resins producers. Also, (i) the appreciation of the Euro against the U.S. dollar may increase the competitiveness of imported products and, as a consequence, increase competition from imports and (ii) the appreciation of Mexican peso against the U.S. dollar may increase the competition from other resins producers in Mexico.

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 global 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 and constantly evolving 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, therefore, affect our results of operations and financial position.

Plastic waste and climate change are global environmental concerns that receive growing attention from the society in general, national and local governments, private companies, trendsetters, and consumers worldwide. There has been a growing trend to attempt to move away from the use of plastic products, which has been backed by governmental and lawmaking initiatives.

In 2019, the European Union parliament approved regulations banning as of 2021 single-use plastic items such as plates, cutlery, straws and cotton buds sticks and adopting 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 in other countries, for example in China and Brazil, have also proposed or implemented bans on single-use plastic products. With regard to regulatory issues related to plastic for single use in Brazil, proposed regulations are being discussed in the Brazilian congress that aim to regulate issues the single use of plastic and even ban plastic. Additionally, legislative proposals aiming for the carbon-intensive products taxation have been discussed in the United States (Border Carbon Adjustments) and in the European Union (Carbon Border Adjustment Mechanism), including proposals related to the taxation of virgin thermoplastic resins. The expansion of regulation or the prohibition of plastic products use and sale could increase the costs incurred by our customers or otherwise limit the application of these products, and could lead to a decrease in demand for resins and other products we make. Such a decrease in demand could adversely affect our business, results of operations and financial condition.

We have as a core part of our strategy to grow our “green” business, including renewables and recycling. We are supporting several initiatives to foster a “circular economy” (reusing and repurposing resources within the economy), including, but not limited to: (i) partnerships to develop new products and applications to improve efficiency and promote recycling and reuse (circular design); and (ii) investing in the development of new renewable products and technologies to support the circular economy at the beginning of the value chain including through partnerships. We cannot predict the outcome of such initiatives since there still are many goals to be accomplished to reduce plastic waste and marine litter, which may lead to decreased interest in our products by our customers and consumers, and impact our results of operations and financial condition. Moreover, we may not be able to successfully implement to successfully pursue our strategy to grow our “green” business or to establish partnerships to grow our renewables business, which could adversely affect our financial condition and results of operations.

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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 marketing 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 employing 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 promote 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 financial or other 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.

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. In connection with our Brazil Segment, ethane and propane accounted, directly and indirectly, for 0.9% and 1.3%, respectively, of our consolidated cost of products sold during the year ended December 31, 2021. Comparatively, they accounted for 0.8% and 0.9%, respectively, in 2020.

Naphtha, a crude oil derivative, is the principal raw material used by our Brazil Segment. For the year ended December 31, 2021, Naphtha accounted, directly and indirectly, for 37.0% of our consolidated cost of products sold. Comparatively, it represented 35.1% in 2020.

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 United States and Europe Segment. We also purchase propylene in the Brazilian market for certain of our Brazilian polypropylene plants. Propylene accounted, directly and indirectly, for 29.6% and 20.9% of our consolidated costs of products sold during the year ended December 31, 2021 and 2020, 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. In connection with our Mexico Segment, ethane accounted, directly and indirectly, for 1.3% and 1.7% of our consolidated costs of products sold during the year ended December 31, 2021 and in 2020, respectively.

In Brazil, we purchase the naphtha used by our chemicals operations that are part of our Brazil Segment at prices based on the Amsterdam-Rotterdam-Antwerp naphtha price, or the ARA price, and the ethane and propane on United States market references. We purchase ethane used by our Mexico Segment at prices based on Mont Belvieu ethane. We purchase the propylene used in Brazil and United States 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 international references based on monthly contract price for propylene for Europe. We purchase light refinery hydrocarbon used in the São Paulo petrochemical complex at a price related to imported natural gas price.

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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. During the year period ended December 31, 2021, the average price of naphtha increased 78.9% when compared to 2020 reaching US\$764 per ton, as a result of oil prices increase due to an increase of the global demand and supply restriction by OPEP+ producers and allies. We cannot guarantee that such prices will be sustained.

For the year ended December 31, 2021, the average price of ethane, reference Mont Belvieu, was US\$0.31 per gallon, or US\$229.0 per ton, increasing 62.7% from 2020, resulting from: (i) the increase in the natural gas price, due to the increase in exports given the restrictions on supply in the European region; (ii) the demand increase for ethane for the production of ethylene as a result of the normalization of petrochemical operations in the United States; and (iii) the restrictions on natural gas production in the Gulf of Mexico in the fourth quarter of 2021 as a result of the impacts of Hurricane Ida.

During the year ended December 31, 2021, the average price of the USG reference propylene was US\$1,587.3 per ton, representing an increase of 116.3% compared to 2020, which is explained by: (i) the increase in demand; (ii) the lower supply in the first quarter of 2021 due to the impacts of winter storm Uri in the United States; and (iii) the unscheduled maintenance shutdowns propane dehydrogenation facilities during the period.

For the year ended December 31, 2021, the average price of propylene in Europe was US\$1,279.8 per ton, representing an increase of 54.7% compared to 2020, which is explained by: (i) the supply reduction due to scheduled and unscheduled stoppages by local producers and supply chain constraints; and (ii) the healthy demand in the region.

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 *reais*. Any increase in naphtha, ethane, propane or propylene costs would reduce our gross margin and negatively affect our overall financial performance to the extent we are unable to pass on these increased costs to our customers and could result in reduced sales volumes of our products.

We do not hedge against price changes in our raw materials and, as a result, we are exposed to such fluctuations.

Currently, we do not hedge our exposure to feedstock price changes beyond transit periods when buying cargoes from foreign sources. We believe there is a natural hedge in the petrochemical industry operations, mainly due to the historical correlation observed between naphtha, the principal feedstock of a marginal producer and with higher production costs, and its final products (PE, PP, PVC, and others). Historically, naphtha price fluctuations show a high correlation with changes in the first- and second-generation petrochemical products. Therefore, any hedge solely with respect to naphtha's price would break this natural protection, most likely making our results more volatile. Compared to naphtha and propylene, ethane and propane prices show a lower correlation to our final products. As a result, final consumer prices may not reflect feedstock cost fluctuations.

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

Petrobras is a relevant Brazilian supplier of naphtha for us and has historically supplied up to 70% of the naphtha consumed by our chemicals operations that are part of our Brazil Segment. Currently, Petrobras is also our primary supplier of ethane, propane and light refinery hydrocarbon and has historically supplied the ethane, propane and light refinery hydrocarbon 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.

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We are a party to several propylene contracts with Petrobras refineries, which have historically supplied 40% of our propylene need to produce polypropylene in Brazil at prices based on international references. 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.

One of our propylene agreements with Petrobras will expire on October 31, 2022 and others will expire between 2026 and 2029. 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, with a term of five years following the expiration of the prior agreement with Petrobras, establish the supply of a minimum annual volume of 650,000 tons and, at the option of Petrobras, an additional volume of up to 2.85 millions of 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, we also renewed the storage agreement with Petrobras until 2025 at REFAP located in the city of Canoas, and until June 2024 for the storage at TEDUT located in the city of Osório.

In December 2020, we concluded the renewal of our feedstock supply agreements in Brazil with Petrobras for the supply of petrochemical naphtha to our industrial unit in São Paulo and ethane and propane to our industrial unit in Rio de Janeiro. The agreements, with a term of five years following the expiration of the prior agreements, establish the supply of up to 2.0 million tons per year of petrochemical naphtha to our industrial unit in São Paulo and up to 580,000 tons of ethylene equivalent (volume of ethylene per ton of ethane and propane) per year to our industrial unit in Rio de Janeiro, with prices based on international reference.

Petrobras controls a substantial portion of the pipeline infrastructure used to transport naphtha across Brazil and is our primary supplier of naphtha, ethane, propane, propylene and light refinery hydrocarbon. 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 by negotiating with Transpetro and, if necessary, the National Petroleum Agency, or the ANP, which would grant access to the pipeline infrastructure at a cost defined by the ANP. For more information about Related Party Transactions, see “—Item 7. Major Shareholders and Related Party Transactions.”

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, propylene and light refinery hydrocarbon 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

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- 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 and propylene to us and some logistic infrastructure assets.

If the supply agreements are terminated or not renewed, our production volumes and net revenue would likely decrease, while our costs would likely increase, and adversely affect our overall financial performance.

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 which would reduce our gross margin and negatively affect our overall financial performance. For a discussion of additional risks related to sole-source suppliers, see “—We rely on limited or sole-source suppliers for our raw materials, inputs and energy, including transportation thereof.”

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, 2021, we had fourteen long-term supply agreements with multiple suppliers. The pricing formulas for propylene under these supply agreements are generally based on market prices. 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 two long-term supply agreements that provide for the supply of 90% of the propylene requirements of these plants. We have two main supply agreements in Germany. One expired in September 2021 and was replaced by a new five-year agreement effective as of October 1, 2021 with a term until September 30, 2026, and thereafter will automatically be renewable for consecutive one-year terms, unless terminated by one of the parties. The other agreement expires in December 2023, and thereafter will also be automatically renewable for consecutive one-year terms, unless terminated by one of the parties. We have entered into a third contract that will expire at the end of 2022 increasing the supply of our plants to 93% of the propylene required. The pricing formula for propylene under these supply agreements is based on market prices. 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 a significant portion of our supply of ethane, which is the primary feedstock used in our polyethylene production process, from Pemex Transformación Industrial (“Pemex TRI”), a state-owned Mexican entity, which is a subsidiary of Petróleos Mexicanos, 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 the Mont Belvieu purity ethane price, a U.S. dollar-based international reference price. 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:

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- 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 and Pemex Exploración y Producción or Pemex PEP, related to the ethane supply agreement, including the non-recognition or non-payment of shortfall penalties and the decrease or failure to supply the contracted volume of ethane;
- 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 breach or termination by Pemex TRI or by us of the ethane supply agreement, or any breach or termination by other Mexican state-owned companies of related supply (including those for the transportation of supplies) agreements, such as Cenagas (*Centro Nacional de Control del Gas Natural*); 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.

Under the ethane supply agreement with Pemex, if Pemex TRI fails to deliver the contracted minimum daily volume during a given quarter, it may offset for this shortfall by delivering additional quantities of ethane during the two immediately subsequent quarters. If it does not do so, Pemex TRI will be required to pay Braskem Idesa a penalty equivalent to the average price of the ethane that was not delivered in the period in question. On the other hand, if Braskem Idesa fails to purchase the contracted minimum daily volume, we may be able to offset this deficit by purchasing additional amounts of ethane during the two immediately subsequent quarters. If it does not do so, Braskem Idesa will be required to pay a penalty to Pemex TRI equivalent to the average price of ethane that was not purchased during the period in question.

Furthermore, the ethane supply agreement could also be impacted by changes in laws and regulations, terminated or repudiated by Pemex TRI as a result of political pressure or be subject to expropriation or other adverse measures by the Mexican government or government entities. Braskem Idesa may also renegotiate the terms of the ethane supply agreement, voluntarily or as a result of changes in laws and regulations, or otherwise.

The provisions for early termination by Pemex TRI under the Ethane Supply Agreement include: (i) failure by Braskem Idesa 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 Braskem Idesa's insurers consider the complex to be a total loss, or after which Braskem Idesa cannot or does not resume operations for 48 months.

If Pemex TRI (i) delivers less than an average of 70% of the agreed volume over a six-month period, (ii) reaches the annual limit in respect of shortfall penalties owed by Pemex TRI to Braskem Idesa and such limit is not waived by Braskem Idesa, or (iii) materially breaches any of its obligations related to the supply of ethane thereunder; Braskem Idesa has the right to notify Pemex TRI through a notice of breach. If such breach continues for more than six months after notice, or an extended period if the parties agree, Braskem Idesa has the right to terminate the ethane supply agreement and require Pemex TRI and Pemex PEP to repay certain outstanding debt and compensate Braskem and Idesa according to an agreed valuation formula including the repayment of certain of our debt in the form of a put option right under the ethane supply agreement.

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Braskem Idesa and its operations in Mexico, including agreements entered into with state-owned or state-controlled entities, are subject to political interference by the Mexican government, which may lead to the termination or repudiation of certain contractual relationships and interference on Braskem Idesa's operations that may materially and adversely affect us.

Any termination, cancellation or modification of the ethane supply agreement or reduction in the amount of shortfall penalties 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 Segment—Supply Contracts of the Mexico Segment—Ethane" and "Item 5. Operating and Financial Review and Prospects—Capital Expenditures—Joint Venture—Mexico Complex."

We depend on services and products supplied by a Mexican state-owned company

Braskem Idesa has entered into agreements with Mexican state-owned companies for the transportation of natural gas and water supply, among others. Any termination, cancellation or modification of such agreements could have an adverse effect on our results of operations and financial condition.

Furthermore, such agreements could also be impacted as a result of changes in laws and regulations, terminated or modified as a result of political pressure or be subject to expropriation or other adverse measures by the Mexican government or government entities. We may also renegotiate the terms of such agreements, voluntarily or as a result of changes in laws and regulations, or otherwise.

In early December 2020, Braskem Idesa received a notification from Cenagas (*Centro Nacional de Control del Gas Natural*), a Mexican state-owned agency responsible for all natural gas pipelines and transportation in Mexico, related to the unilateral termination of the service of natural gas transportation, an essential energy input for the production of PE in our Mexico Segment. As a result, in compliance with safety protocols, Braskem Idesa initiated procedures for the immediate interruption of its operating activities. Later in January 2021, Braskem Idesa partially resumed its operations based on an experimental business model to produce PE. Braskem Idesa has taken legal measures pursuant to the ethane supply agreement entered into with Pemex. Braskem Netherlands B.V, which is Braskem Idesa's direct shareholder, has also taken legal measures under applicable international investment protection standards to protect the interests of Braskem Idesa and its parent company with regard to their investment in Mexico. Such measures include a negotiation period to attempt to resolve the dispute between the parties.

In the first quarter of 2021, Braskem Idesa entered into the following agreements under a strict reservation of all of its rights: (i) a memorandum of understanding with Pemex TRI setting out certain understandings regarding potential amendments to the ethane supply agreement and the development of an ethane import terminal, subject to further negotiation, a definitive agreement and approval by Braskem Idesa's shareholders and creditors; and (ii) a natural gas transport service agreement with Cenagas for a term of 15 years, which was conditioned upon the execution of the definitive agreement referenced in item (i) above. Following the execution of these agreements by Braskem Idesa, it resumed receiving natural gas transportation services from Cenagas, which had been unilaterally terminated by Cenagas in December 2020.

On September 27, 2021, Braskem Idesa signed the following documents: (i) an amendment to the ethane supply contract with Pemex revising certain of its terms; and (ii) an agreement with Pemex and other government entities that establishes support measures for the project to build an ethane import terminal, with the capacity to meet all of Braskem Idesa's raw material needs. In October, Braskem Idesa obtained the applicable corporate approvals, including the final approval of its shareholders and creditors regarding the executed agreements, resulting in the entry into force of the agreements describe above.

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Failure by Cenagas to renew the agreement for transportation of natural gas or any other agreement with a Mexican state-owned company could have a material adverse effect on our business, results of operations and financial condition. For a discussion of additional risks related to sole-source suppliers, see “—We depend on ethane supplied by Pemex TRI in Mexico,” “—We rely on limited or sole-source suppliers for our raw materials, inputs and energy, including transportation thereof.”

Political conditions in Mexico may affect actions or decisions by the Mexican government, including Pemex TRI and Cenagas, which are, respectively, Braskem Idesa's main suppliers of ethane and provider of natural gas transportation services and Mexican state-owned enterprises subject to political interference and related risks.

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 or on our operations. 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.

In 2021, the Mexican government took measures that would strengthen Pemex and the Federal Electricity Commission (*Comisión Federal de Electricidad*) power over Mexico's energy market and threaten the country's prospects for private renewable energy generation, including the annulment of certain previous energy policies and the proposed amendments to Mexico's Energy Sector Law (*Ley de la Industria Eléctrica*) and to the Hydrocarbons Law (*Ley de Hidrocarburos*). Furthermore, in October 2021, the President of Mexico presented to the Mexican Congress an initiative that, if approved, could imply profound reforms in the Mexican Constitution and in the Mexican energy sector.

One of our main ethane suppliers, Pemex TRI, is a subsidiary of Pemex, a state-owned entity of the Mexican government. The Mexican government controls Pemex, as well as its annual budget, which is approved by the Mexican Congress. The Mexican government may cut or reallocate spending in the future. Any cutbacks or reallocation could adversely affect Pemex's annual budget and its ability to provide us with our contracted supply of ethane. In addition, Cenagas, a Mexican state-owned agency, is responsible for all natural gas pipelines and transportation in Mexico. As a result, Cenagas' failure to renew the agreement for transportation of natural gas to our Mexico Complex, or interruptions in such service, could have a material adverse effect on our business, results of operations and financial condition and on our ability to develop and operate the ethane import terminal.

Pemex also produces polyethylene and competes in the same commercial market as we do. The Mexican government may intentionally interfere with us and our operations in various ways in order to limit our commercial competitiveness. According to Pemex's public disclosure, its production of oil, natural gas and ethane, over which we have no control, has decreased in recent years, and no assurance can be given that there will not be a decrease in the delivery of ethane in the future.

In light of the allegations of undue payments related to the Ethylene XXI project, which were originally published in the media in Mexico and were included in the testimony by the former CEO of Pemex to the Office of the Attorney General of Mexico, Braskem S.A., together with Braskem Idesa, in compliance with the standards established by Braskem's Global Compliance System Policy and Braskem Idesa's governance guidelines, approved the hiring of an U.S. law firm with proven experience in similar cases to conduct an independent internal investigation of the allegations (the “Investigation”). The investigation was concluded in February 2022 and did not find evidence to support the allegations by the former CEO of Pemex regarding allegedly improper payments in connection with or otherwise related to the Ethylene XXI project.

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

We rely on Petrobras for most or all of our supply of ethane, propane, light refinery hydrocarbon and propylene in Brazil, a few companies for a large portion of our supply of propylene in our United States and Europe Segment, and Pemex TRI for most of our supply of ethane in Mexico. In Mexico, Cenagas (*Centro Nacional de Control del Gas Natural*), which is a state-owned agency, is the sole provider of gas transportation services. We rely on Cenagas for the transportation of natural gas to our Mexico Complex. For naphtha supply to Brazil we rely on 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 most of the supply only to the cracker located in the state of São Paulo and we rely on Petrobras for the major part of our supply of ethane and propane in the state of Rio de Janeiro. Also, we are subject to substantial risks because of our reliance on these and other limited or sole-source suppliers of raw materials, additives, catalyzers, other inputs, energy and other utilities, including the following risks:

- if a supplier does not provide naphtha, ethane, propane, light refinery hydrocarbon, propylene, sea salt, other inputs (including natural gas) 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, natural gas or other inputs, as the case may be, on satisfactory financial terms;
- if an interruption of supply of naphtha, ethane, propane, light refinery hydrocarbon, propylene, sea salt, other inputs (including natural gas) 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;
- some of our suppliers are state-owned enterprises subject to political interference, including in Mexico; 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, light refinery hydrocarbon, propylene, sea salt, other inputs (including natural gas) or energy of acceptable quality, or our inability to obtain such acceptable naphtha, ethane, propane, light refinery hydrocarbon, propylene, sea salt, other inputs (including natural gas) or energy in the quantities we need or at all, may adversely affect our revenue and results of operations.

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Our Brazil Segment depends on our chemicals operations to supply them with their ethylene and propylene requirements. In addition, our Brazil Segment depends on certain providers of environmental services for the treatment of effluents, industrial waste and water supply for industrial use.

Our chemicals operations, which form a part of our Brazil Segment, are the only supplier of ethylene to our vinyls operations, the only supplier of ethylene to the polyethylene plants and the principal supplier of propylene to the polypropylene plants of our polyolefins operations. Additionally, as the cost of storing and transporting ethylene and its derivatives, including butadiene, is significant and there is no adequate infrastructure in Brazil that allows for the storage of large volumes, a relevant reduction in sales of these products may impact the rate of use of the chemical operation, impacting product availability for the polyolefins and vinyls operations in Brazil.

Our polyolefins and vinyls operations in Brazil are highly dependent on the supply of these products by our chemicals operations. Consequently, our production volumes of, and net revenue from, polyolefins and vinyls operations 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 operations 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 operations, whether as a consequence of an accident, natural disaster, fire or otherwise;
- any significant reduction in the supply of naphtha to our chemicals operations, as naphtha is the principal raw material used by our chemicals operations 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 by our petrochemical complex located in the Rio de Janeiro Complex.

Also, our production volumes of, and net revenue from, our chemicals operations 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 operations that are part of our Brazil Segment through which ethylene is consumed.

Our Brazil Segment depends on Cetrel S.A. (“Cetrel”), Água de Camaçari (“DAC”), both of which are our subsidiaries, Distribuidora de Água Triunfo (“DAT”), Companhia Riograndense de Saneamento (“CORSAN”), Aquapolo Ambiental S.A (“Aquapolo”), Refinaria de Paulínia (“REPLAN”) and Refinaria Duque de Caixas (“REDUC”) for the services such as: (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, DAT, CORSAN, Aquapolo, REPLAN or REDUC may result in the shutdown of all of our plants at the Northeastern Complex, Southern Complex, São Paulo Complex, Paulínia plants and Rio de Janeiro Complex, in addition to increased environmental risks. If such a shutdown were to happen, our production volumes and net revenue from sales from our plants referred to above would decrease, and our financial performance and results of operations would be adversely affected.

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We may be materially adversely affected if there is an imbalance in global logistics, which may cause disruptions to our transport, storage and distribution operations, negatively impacting the costs related thereto.

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;
- disruption in the global supply chain, including container shortages;
- war and other armed conflicts, such as the conflict involving Russia and Ukraine; 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. We cannot assure, however, that we will be able to act in the same way in potential new strikes that may arise in the future. 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, as from January 2020, the International Maritime Organization (IMO) set a limit for sulphur in fuel oil used onboard ships of 0.50% m/m (mass by mass), 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, and if such rights 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, 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. There can be no assurance that we will be able to replace any such third-party technology, intellectual property or technical support service for any adequate substitute technology, intellectual property or technical support in a timely manner to avoid any unscheduled interruption of our production processes or facilities, or in a cost-efficient manner. Any of these circumstances could harm our business, financial condition and results of operations.

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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 projects and investments 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 investment programs involving engineering, procurement and construction of facilities could materially adversely affect our ability to achieve forecasted rates of return and results of operations and financial position. Delays due to 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 gear 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
- non-performance by, or disputes with, vendors, suppliers (including those responsible for transportation of supplies), contractors or subcontractors. Any one or more of these factors could have a significant impact on our ongoing 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 insurance coverage may be ineffective, either due to the lack of coverage for any claim, or due to insufficient coverage limits in the event of damage.

We maintain property, business interruption, general liability, environmental, construction, marine, credit and other types of insurance that we believe are appropriate for our business and operations as well as in line with industry practices. However, we are not fully insured against all potential hazards and incidents inherent in our business, including losses resulting from natural disasters, wars or terrorist acts in Brazil. Changes in insurance market conditions have caused, and may in the future cause, premiums and deductibles for certain insurance policies to increase substantially and, in some instances, for certain insurance to become unavailable or available only for reduced amounts of coverage. If we were to incur a significant liability for which we were not fully insured, we might not be able to finance the amount of the uninsured liability on terms acceptable to us or at all, and might be obligated to divert a significant portion of our cash flow from normal business operations. Also, in the event of an accident, we are required to undergo a regulatory assessment through which the insurance coverage needs to be confirmed. If coverage is not confirmed, there will be no indemnity to be paid.

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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 for operations, additions to fixed assets and future business and investments 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 ratings at: (i) Standard & Poor's of BBB- with a stable outlook (ii) Fitch Ratings of BBB- with a stable outlook and (iii) Moody's of Ba1 with a stable outlook. Our ratings are higher than the Brazilian sovereign rating by all these three main rating agencies. On a national basis, we maintain investment grade rating at: (i) Standard & Poor's of brAAA with a stable outlook and (ii) Fitch Ratings of AAA with a stable outlook.

Our credit rating is sensitive to any change in the Brazilian sovereign credit rating. The credit rating of the Brazilian federal government was downgraded in January 2018.

In 2020, the COVID-19 pandemic 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 COVID-19 pandemic 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. In May 2020, Fitch Ratings revised the outlook of the Brazilian sovereign credit rating to negative from stable. In November 2020, Fitch Ratings affirmed the negative outlook and later in December 2021, Fitch Ratings reaffirmed Brazil's rating of BB- maintaining the same outlook.

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Any decision by these rating agencies to downgrade the Brazilian sovereign credit rating, our ratings and the ratings of our debt securities in the future would likely result in higher interest rates and other financial expenses related to the loans and debt securities, and the inclusion of financial covenants in the agreements regulating such new debts, which may significantly reduce our ability to raise funds under satisfactory conditions or in the amounts necessary to ensure our liquidity, as well as force us to issue cash collateral as a result of our covenants, or letters of credit to back collaterals given by us.

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 Novonor S.A. – Em Recuperação Judicial, or Novonor, formerly called Odebrecht S.A., about discussions that were being held between Novonor and LyondellBasell Industries N.V., or LyondellBasell, regarding a potential transaction involving the transfer to LyondellBasell of all of Novonor's interest in us. In June 2019, we were informed by Novonor 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 Novonor will not initiate discussions with other parties regarding a change of control transaction in the future.

On August 7, 2020, we received a correspondence from our controlling shareholder, Novonor, informing that, in order to fulfill certain commitments assumed with bankruptcy and non-bankruptcy creditors (*credores concursais e extraconcursais*), it had taken preliminary measures to structure a process for the private sale of up to its total equity ownership in our company, which, if implemented, will result in the change of our corporate control, adopting the necessary measures to organize such process, with the support of legal and financial advisors.

On December 15, 2021, we received a letter sent jointly by our shareholders Novonor and Petróleo Brasileiro S.A. regarding the progress of discussions for the potential sale of their equity interests in us. In such communication, Novonor and Petrobras disclosed that they agreed to seek the adoption of the necessary measures: (i) for the sale, through a secondary public offering, of up to all our class A preferred shares held directly or indirectly by them; (ii) to enable Braskem's migration to the Novo Mercado listing segment of the B3, including in relation to necessary changes to Braskem's corporate governance, which shall be subject to applicable approvals at the appropriate time and negotiation of a new shareholders' agreement to conform their rights and obligations to such amended governance structure; and (iii) after the conclusion of Braskem's potential migration to the Novo Mercado listing segment, carry out the sale of the remaining common shares held directly or indirectly by them and issued by us. The effective implementation of the commitments assumed by Novonor and Petrobras is subject, among other factors, to relevant approvals and market conditions. We are unable to predict the result of the implementation of the commitments assumed, as well as their possible impacts. On January 28, 2022, we received a communication sent jointly by our shareholders Novonor and Petróleo Brasileiro S.A. whereby they decided to temporarily cancel the shares offering due to volatility conditions in the financial and capital markets. Also, Novonor and Petrobras ratified their interest in resuming the equity offering in the future, at a time when a more favorable economic situation with less volatility is verified, and the term sheet entered into between the parties remains in force and the commitment of both to dispose of their respective equity interests in the Company through a secondary public offering(s), in addition to taking all necessary measures to enable the Company to migrate to the Novo Mercado segment of B3, including the necessary amendments to its governance, as the studies in this regard that are being carried out by the Company and referred to in the material fact disclosed on Form 6-K on December 16, 2021 are concluded and to the extent that market conditions are favorable.

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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 Novonor Judicial Restructuring Proceedings (for more information about Novonor's judicial restructuring proceedings, see "—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"), 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 Novonor Judicial Restructuring Proceedings, and no assurance can be given on the outcome of the Novonor Judicial Restructuring Proceedings or their effect on us.

Additionally, all common and preferred shares issued by Braskem and held by NSP Investimentos S.A., or NSP Inv. were pledged with fiduciary assignment (*alienação fiduciária*) as a collateral given under certain financing agreements entered into by Novonor and certain of its subsidiaries with specific non-bankruptcy creditors (*credores extraconcurrais*). It is possible that, under certain circumstances, the pledge over such shares may be enforced, with the consequent sale of the shares, which could result in a change of Braskem's control and other consequences arising therefrom.

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.

Novonor S.A. (Novonor), directly or through its wholly-owned subsidiary NSP Inv., owns 38.32 % of our total share capital, including 50.11% of our voting share capital, and Petrobras holds 36.15% of our total share capital, including 47.03% of our voting share capital. Nominees of Novonor constitute a majority of the members of our board of directors. Under a shareholders' agreement to which Novonor and Petrobras are parties, which we refer to as the Braskem S.A. Shareholders' Agreement, all matters that may be resolved at a shareholder's meeting or by our board of directors shall be decided by consensus among Novonor and Petrobras (except for our business plan, which is approved separately by the directors appointed by Novonor, as described under "Item 7. Major Shareholders and Related Party Transactions—Major Shareholders—Shareholders' Agreements"), taking into account our best interest. Furthermore, the shareholders' agreement provides for the possibility (and not the obligation), if deemed necessary, to hold prior meetings, as a legitimate mechanism for alignment between Novonor and Petrobras, with a view to ensuring consistency and uniformity in their decisions, which could affect holders of class A Preferred Shares and American Depositary Shares, or ADSs.

Furthermore, on June 17, 2019, Novonor, 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 judicial restructuring and emergency relief staying certain foreclosure actions by their secured creditors, or the Novonor Judicial Restructuring Proceedings. The Novonor Judicial Restructuring Proceedings does not include us.

We are exposed to certain risks related to the Novonor Judicial Restructuring Proceedings, such as risks related to the change of our corporate control resulting from decisions taken and/or agreed in the context of 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 Novonor Judicial Restructuring Proceedings, and no assurance can be given on the outcome of the Novonor 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 related parties, including Petrobras, which is our Brazilian supplier of naphtha and other raw materials such as propylene, ethane, propane and light refinery hydrocarbon. These trade accounts receivable and trade accounts payable balances result mainly from purchases and sales of goods, which are made based on international price references. These and other transactions between us and our related parties can result in conflicting interests, which may adversely affect our results of operations and financial condition .

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, international market 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 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.

In addition, we cannot guarantee that we will succeed in identifying, negotiating or concluding any asset divestment plan. If we fail to implement an asset divestment plan, it could adversely affect our 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 disbursed significant capital 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;
- global demand for, and supply balance of, PE;

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- 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 (see “Item 3. Key Information—Risks Relating to Us and the Petrochemical Industry—We depend on ethane supplied by Pemex TRI in Mexico”);
- any termination, cancelation or modification of the ethane supply agreement for any other reason (see “Item 3. Key Information—Risks Relating to Us and the Petrochemical Industry—We depend on ethane supplied by Pemex TRI in Mexico”);
- the failure by Cenagas to renew the agreement for transportation of natural gas to our Ethylene XXI Project (see “Item 3. Key Information—Risks Relating to Us and the Petrochemical Industry—We depend on natural gas transportation service by Cenagas”);
- the ability of Braskem Idesa to service its debt;
- an unstable and non-continuous supply (including the transportation of supplies) of ethane, natural gas and other inputs, including energy and water (see “Item 3. Key Information—Risks Relating to Us and the Petrochemical Industry—We depend on ethane supplied by Pemex TRI in Mexico”); and
- increased competition from domestic or foreign competitors and/or the emergence of new domestic or foreign competitors.

In early December 2020, Braskem Idesa received a notification from Cenagas (*Centro Nacional de Control del Gas Natural*), a Mexican state-owned agency responsible for all natural gas pipelines and transportation in Mexico, related to the unilateral termination by Cenagas of the service of natural gas transportation, an essential energy input for the production of PE in our Mexico Segment. As a result, in compliance with safety protocols, Braskem Idesa initiated procedures for the immediate interruption of its operating activities. Later in January 2021, Braskem Idesa partially resumed its operations based on an experimental business model to produce PE. Braskem Idesa has taken legal measures pursuant to the ethane supply agreement entered into with Pemex. Braskem Netherlands B.V, which is Braskem Idesa’s direct shareholder, has also taken legal measures under applicable international investment protection standards to protect the interests of Braskem Idesa and its parent company with regard to their investment in Mexico. Such measures include a negotiation period to attempt to resolve the dispute between the parties. For additional information, see “—We rely on limited or sole-source suppliers for our raw materials, inputs and energy, including transportation thereof” and “We depend on ethane supplied by Pemex TRI in Mexico.”

In the first quarter of 2021, Braskem Idesa entered into the following agreements under a strict reservation of all of its rights: (i) a memorandum of understanding with Pemex TRI setting out certain understandings regarding potential amendments to the ethane supply agreement and the development of an ethane import terminal, subject to further negotiation, a definitive agreement and approval by Braskem Idesa’s shareholders and creditors; and (ii) a natural gas transport service agreement with Cenagas for a term of 15 years, which was conditioned upon the execution of the definitive agreement referenced in item (i) above. Following the execution of these agreements by Braskem Idesa, it resumed receiving natural gas transportation services from Cenagas, which had been unilaterally terminated by Cenagas in December 2020.

On September 27, 2021, Braskem Idesa signed the following documents: (i) an amendment to the ethane supply contract with Pemex revising certain of its terms; and (ii) an agreement with Pemex and other government entities that establishes support measures for the project to build an ethane import terminal, with the capacity to meet all of Braskem Idesa’s raw material needs. In October, Braskem Idesa obtained the applicable corporate approvals, including the final approval of its shareholders and creditors regarding the executed agreements, resulting in the entry into force of the agreements describe above.

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We cannot assure you that the Mexico Complex will provide the expected benefits to us, even after having completed five 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.

The first, second and third generation of petrochemical products currently rely on imports tariffs imposed by Mercosur member states to balance competition in the Mercosur domestic market. 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 November 2021, the Brazilian government enacted Resolution GECEX No. 269 providing for temporary reduction in Brazil by 10% of the import tax rates set forth in Resolution No. 125 of the Foreign Trade Chamber, of December 15, 2016. As a result, the current rates for PP, PE and PVC resins were lowered from 14% to 12.6%. The new rates came into force on November 12, 2021 and shall be effective, initially, until December 31, 2022.

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 balance the level of competition of 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.

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.

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A failure to comply with export control or economic sanctions laws and regulations could have a material adverse impact on our results of operations, financial condition and reputation.

We operate on a global basis and face risks related to compliance with export control and economic sanctions laws and regulations, including those administered by the United Nations, the European Union and the United States, including the U.S. Treasury Department's Office of Foreign Assets Control. Economic sanctions programs restrict our dealings with certain sanctioned countries, territories, individuals and entities. Economic sanctions are complex, frequently changing, and often increase in number, and may impose incremental prohibitions, fines, restrictions on dealings with additional countries, territories, individuals or entities or compliance obligations on our dealings in certain countries and territories. We have conducted, and may in the future seek to conduct, business in certain countries that are subject to sanctions under the laws of the United States, the European Union, or other countries. Although we have pursued these transactions, and intend to pursue any future transactions, in full compliance with applicable laws and regulations, we may not be successful in ensuring compliance with limitations or restrictions on business with companies in any such countries. Additionally, Russia's annexation of Crimea, recent recognition of two separatist republics in the Donetsk and Luhansk regions of Ukraine and subsequent military interventions in Ukraine have led to sanctions and other penalties being levied by the United States, European Union and other countries against Russia, Belarus, the Crimea Region of Ukraine, the so-called Donetsk People's Republic, and the so-called Luhansk People's Republic, including the agreement to remove certain Russian financial institutions from the Society for Worldwide Interbank Financial Telecommunication, or SWIFT, payment system. Additional potential sanctions and penalties have also been proposed and/or threatened and the United States and other countries could impose wider sanctions and take other actions should the conflict further escalate. If we are found to be in violation of applicable sanctions laws or regulations, we may face criminal or civil fines or other penalties, we may suffer reputational harm and our results of operations and financial condition may be adversely affected. Additionally, there can be no assurance that our employees, directors, officers, partners or any third parties that we do business with, including, among others, any distributors or suppliers, will not violate sanctions laws and regulations. We may ultimately be held responsible for any such violation of sanctions laws and regulations by these persons, which could result in criminal or civil fines or other penalties, have a material adverse impact on our results of operations and financial condition and damage our reputation.

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.

We may not be able to obtain or renew all licenses, permits and authorizations necessary for conducting our business.

We are subject to a wide variety of federal, state and municipal laws, regulations and licensing requirements, and depend on obtaining licenses, permits and authorizations to carry out our activities.

We cannot guarantee that we will be able to maintain, renew or obtain any new authorization, license, grant, or permit, in a timely manner, or that any additional requirements will not be imposed in connection with such renewal order.

Failure to obtain or maintain the permits, authorizations and licenses necessary for our operations, or failure to obtain or timely maintain them, may result in fines, loss or early termination of permits, authorizations and/or licenses, as well as closing of facilities, or breach of financing and commercial contracts, which could have a material adverse effect on our results of operations and financial condition.

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

As a company operating in the petrochemical industry, our operations, operated by us or third parties, 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, contamination of soil and water, spilling of polluting substances or other hazardous materials, smoke or odor emission, 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, terminals and pipelines, environmental damage, delays in production, and, in certain circumstances, liability in civil, labor, criminal and administrative lawsuits, difficulties in obtaining or maintaining operating permits and environmental licenses, and impacts on our reputation, among other consequences.

In addition, our operations, operated by us or third parties, could generate impacts to the communities, from our regular operations, as well as in the management of the existing environmental liabilities, which may result in environmental, material and human damages, fines and sanctions, including loss of operating license, in addition to damage to our image and reputation.

For example, over 30 years ago, a leak of chemical products occurred from a tank installed on a property owned by the company Companhia Carbonos Coloidais (“CCC”), located in Madre de Deus, in the State of Bahia. These products were property of the company Tecnor Tecnologen Química do Nordeste Ltda. (“Tecnor”) and may have been acquired by domestic producers at the time, including by Companhia Petroquímica de Camaçari, a company that subsequently was merged into Braskem. Both CCC and Tecnor are companies that have never had any corporate relations with Braskem and no longer have any operating activities.

Given our experience in the chemical and petrochemical industry and related products, the authorities requested Braskem's collaboration for analysis, studies and environmental remediation, with monitoring by local authorities, which has been occurring since 2003. Following the agreement between the City of Madre de Deus, the Public Ministry of the State of Bahia and the “CCC” in 2015, by means of an Amendment to this Term of Commitment, Braskem is supporting the implementation of a vacancy program of an area near to the “CCC” property, declared as public utility by the City Hall in February of 2021. The vacancy of about 197 properties is necessary for the safe continuity of the remediation. As of December 31, 2021, we provisioned R\$60.7 million for the program implementation.

Changes to applicable laws may impose changes on standards we have already implemented, which can take time to review and update. For example, we have concluded or are currently concluding studies related to dams located 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. The detailed assessments of our dams indicated some risks with regard to two structures located in Triunfo, in the State of Rio Grande do Sul. 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.

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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 or does not to meet the conditions established in the licenses or environmental permits, we may be subject to fines ranging from R\$500 to R\$50 million, and the Brazilian government may reverse mentioned licenses or permits, partially or totally suspend our activities and impose other civil and criminal sanctions on us, including our managers.

Pursuant to Brazilian environmental legislation and regulations, our corporate veil may be pierced to ensure that sufficient financial resources are available to parties seeking compensation for damage caused to the environment. In this sense, officers, shareholders and/or business partners or affiliates may, together with the polluting company, be held liable for damage to the environment.

In addition, our production and logistics processes are subject to inherent safety risks, which may lead to injuries, disability or death of our employees or individuals participating in such processes and communities, as well negatively impact the environment. Such risks cannot be entirely eliminated or mitigated even with full compliance with all safety measures applicable to us or required by laws or regulations. We may face a negative impact on our image and reputation, and on our business, financial condition and results of operations.

Until May 2019, we operated rock salt extraction wells located in Maceió, in the state of Alagoas. The operation was permanently interrupted due to the indication that it would have contributed to the occurrence of relevant subsidence in the region of four districts, with the occurrence of damage to properties and public roads located in the region. Several individual and collective lawsuits were filed in the state of Alagoas in relation to this geological event.

We have been taking the necessary actions for closing and monitoring the salt wells, environmental actions and other technical matters. Based on the findings of sonar and technical studies, Braskem has defined stabilization and monitoring actions for all 35 existing salt mining wells. Considering the discussions held in December 2021, based on studies of the specialists, the recommendation was to fill five additional salt wells with solid material, for a total of nine wells to be filled, a process that should last for four years. For the remaining 26 existing salt mining wells, the recommended actions are: (i) conventional closure using the tamponade technique, which consists of promoting the cavity pressurization, applied worldwide for post-operation cavities; (ii) confirmation of natural filling status; and, (iii) for some wells, sonar monitoring.

Also in December 2021, an important development in the environmental diagnosis occurred, which resulted in the preliminary proposal of actions for dealing with the environmental impacts identified, which will follow the protocols set forth in the agreement for socio-environmental reparation entered into on December 30, 2020.

Our actual costs related to this matter, considering the actions for closing and monitoring the salt wells, environmental actions and other technical matters for which the amount of R\$1.7 billion, net of the adjustment to present value, has been provisioned as of December 31, 2021 may be materially altered based on a variety of factors, including, but not limited to, the result of the monitoring and backfilling actions of the wells, potential future determinations by ANM, unforeseen technical difficulties or costs, or other factors.

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Also due to the geological event, we have entered into agreements to terminate three public-interest civil actions or civil public actions filed by the competent authorities:

- ACP Labor settlement: we committed to disbursing R\$40 million to fund 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. This agreement has been fulfilled in its entirety.
- ACP of Residents settlement: we committed to supporting the relocation and to compensate residents, business owners and owners of vacated properties located in the risk areas defined in the Civil Defense Map through the Financial Compensation and Support for Relocation Program (*Programa de Compensação Financeira e Apoio à Realocação – PCF*), by offering proposals for financial compensation and entering into individual agreements ratified by court (as of December 31, 2021, the risk area encompasses approximately 15,000 properties); and
- ACP Socio-environmental settlement: we committed to (i) adopting the necessary measures to stabilize the cavities and monitor the soil, implementing the measures of the mine closure planning presented to ANM and subject to its approval; (ii) repairing, mitigating or compensating potential environmental impacts and damages resulting from the mining activities (salt extraction) in the city of Maceió, to be defined by an Environmental Diagnosis developed by an expert and independent company approved by the Prosecutor's Office; (iii) allocating R\$1.58 billion to implement measures in the vacated area, actions related to urban mobility and to compensate potential socio-urbanistic impacts and damages, and for social collective moral damages.

On February 2, 2021, the Company was notified of the filing of a lawsuit by Companhia Brasileira de Trens Urbanos (“CBTU”), initially requesting only a preliminary injunction for maintaining the terms of the cooperation agreement previously signed by the parties. The request was denied in lower and appellate courts, given the fulfillment of the obligations undertaken by Braskem. On February 24, CBTU filed an amendment to the initial request claiming the payment of compensation for losses and damages in the amount of R\$222 million and for moral damages in the amount of R\$500 thousand, as well as the imposition of obligations, including the construction of a new rail line to replace the stretch that passed through the risk area. As of December 31, 2021, the updated amount of this action is R\$1.4 billion (the initial amount attributed to the claim, by CBTU, is R\$1.3 billion). Braskem signed a memorandum of understanding with CBTU seeking a consensual solution and to maintain the lawsuit active during the negotiation period. As a result of a joint petition by the parties, the lawsuit was stayed until December 20, 2022.

Based on our assessment and that of our external advisors, taking into account the short and long-term effects of the technical studies, the existing information and the best estimate of the expenses for implementing the various measures related to the geological event in Alagoas, the provision recorded as of December 31, 2021 was R\$7,661.3 million, of which R\$4,378.1 million is under current liabilities and R\$3,283.2 million is under non-current liabilities.

The provisions are based on current estimates and assumptions and may be updated in the future due to new facts and circumstances, including changes in time, extension and way of execution of action plans; new repercussions or developments relating to the geological event; and the conclusion of possible studies that indicate recommendations of experts, and other new developments on the topic.

The measures related to the mine closure plan are subject to the analysis and approval of ANM, the monitoring of results of the measures under implementation, as well as the changes related to the dynamic of geological events.

Continuous monitoring is crucial to confirm the result of current recommendations. As a result, the plans for closing the wells may be revised according to the need to adopt technical alternatives to stabilize the subsidence resulting from rock salt extraction. Furthermore, the completion of studies to confirm the natural filling of cavities and the assessment of the future behavior of the cavities that will be monitored by sonar may indicate the need for additional measure for stabilization.

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The claims to repair, mitigate or offset potential environmental impacts and damages, as provided for in the Socio-Environmental Remediation Agreement, to be financed by Braskem, will be proposed according to the environmental diagnosis, to be conducted by a specialized and independent company. Once all discussions with the regulatory authorities and agencies are concluded as provided for under the agreement, an action plan will be developed, which will become part of the measures for a Plan for Recovering Degraded Areas (PRAD).

At this time, preliminary actions for dealing with the environmental impacts have been identified, but we are unable to predict the final outcome of the environmental analysis, as well as any costs in addition to the estimated costs already provisioned by us.

Additionally, the Socio-Environmental Remediation Agreement provides for the possible adhesion of other entities, including the Municipality of Maceió. In this context, we are negotiating our claims with the Municipality of Maceió. So far, we cannot predict the results and deadline for completion of such negotiation, as well as its possible scope and associated expenses.

It is not possible to anticipate all the new claims, for indemnity or other natures, which may be presented by individuals or groups who understand that they have suffered impacts and/or damage in any way related to the geological phenomenon and the vacancy of risk areas. We are still facing (see Note 26 to our audited consolidated financial statements included elsewhere in this annual report) and may face several lawsuits, including individual lawsuits filed by individuals or legal entities not served by the PCF or that disagree with the individual proposal agreement, new collective demands and claims filed by public service concessionaires, so it is not possible to estimate the number of possible claims, their nature or amounts involved. We cannot assure you that there will be no future developments relating to the geological event in Alagoas, or the relocation program and related measures related to vacated areas and its surroundings.

Therefore, we cannot rule out future developments related to the geological event in Alagoas or its associated expenses, and the costs to be incurred by us may differ from our estimates and provisions.

For additional information, see “Item 8. Financial Information—Legal Proceedings—Alagoas – Mining Activities.”

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 if environmental violations activities are found to have taken place.

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 GHG 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.

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Such existing stringent environmental and related regulations require significant capital expenditures, 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.

On December 14, 2016, we entered into a leniency agreement with the MPF (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 (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 U.S. Department of Justice (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 Controllship (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 DoJ, the 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.

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As of December 31, 2021, we had paid R\$2.8 billion, as follows:

- R\$559.9 million to the AGU, CGU and MPF;
- R\$296.7 million (US\$53.2 million) to the DoJ;
- R\$407.3 million (CHF94.5 million) to the OAG;
- R\$1,282.5 million to the MPF; and
- R\$206.5 million (US\$37.0 million) to the SEC

There is still R\$1.1 billion under the MPF Agreement and CGU/AGU Agreement, in four annual installments adjusted by the variation in the SELIC rate and due by January 30, 2025. To guarantee payment of these upcoming installments, Braskem gave as collateral assets from its property, plant and equipment corresponding to one annual installment.

By reason of the Global Agreement, we will continue to cooperate with these relevant governmental authorities and improve our governance and anti-corruption compliance practices. Over the three years between 2017 and 2020, we were subject to independent monitoring as a result of the Agreements. Such monitors were responsible for verifying compliance with the Global Agreement, as well as the effectiveness of our internal controls, policies and procedures to reduce the risk of non-compliance with anti-corruption laws.

In March 2020, based on the certification report issued by the independent monitors who have monitored us for the past three years, the MPF confirmed the monitoring conclusion, the effectiveness of our compliance program and compliance with the obligations of the MPF Agreement. Later, on May 13, 2020, the DoJ and the SEC confirmed the end of the monitoring provided for in the agreements with such authorities.

We remain under external monitoring with the AGU/CGU until the end of 2022. At this time, all compliance obligations are being met as recommended by the authorities.

The Global Settlement does not prevent Braskem from being held liable to any legitimate third party, which may seek indemnification for damages for the facts subject to the agreements, including other authorities with jurisdiction over us may seek to impose monetary sanctions or fines on, or to initiate investigative proceedings against us, which could adversely affect our results of operations and financial condition.

We cannot guarantee that the total amount agreed will be sufficient to fully repair any harm.

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. 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.

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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, and such agreement does not represent the admission of any wrongdoing or liability by Braskem. Said decision became final and unappealable.

On August 25, 2020, a lawsuit was filed against us and some of our current and former executives in the District Court of New Jersey, in the United States, on behalf of an alleged class of investors who acquired Braskem's securities. The action is grounded in the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), and its rules, based on allegations that the defendants made false statements or omissions related to the geological event in Alagoas. On January 15, 2021, the court named two plaintiffs to act as lead plaintiffs in the action. On April 28, 2021, a lead plaintiff filed a consolidated petition with its initial arguments, defining as relevant period the acquisition of our securities between March 21, 2019 and July 8, 2020. We engaged a U.S. law firm to represent us in the class action and presented a motion to dismiss, which is pending review by the court.

Our management, based on its assessment and that of its external legal advisors, and given the initial phase of the class action mentioned above, considers it is not possible at the moment to reliably estimate the potential amount involved.

We cannot reliably predict the future developments of this matter or the expenses arising from it, including rates and costs in solving the dispute.

In the context of the geological events occurred in Maceio, we entered into agreements for the termination of three public-interest civil actions (ACP Labor, ACP Socio-environmental and ACP of Residents). The terms of the settlements were as follows:

- ACP Labor settlement: we committed to investing R\$40 million to fund 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. This agreement has been fulfilled in its entirety.
- ACP of Residents settlement: we committed to supporting the relocation and compensating residents, merchants, business owners and property owners located in the risk areas defined in the Civil Defense Map subject to relocation, by offering proposals for financial compensation and entering into individual agreements ratified in court (as of December 31, 2021, the risk area encompasses approximately 15,000 properties); and
- ACP Socio-environmental settlement: we committed to (i) adopting the necessary measures to stabilize the cavities and monitor the soil, implementing the measures of the mine closure planning presented to ANM and subject to its approval; (ii) repairing, mitigating or compensating potential environmental impacts and damages resulting from the mining activities (salt extraction) in the city of Maceió, to be defined by an Environmental Diagnosis developed by an expert and independent company approved by the Prosecutor's Office; (iii) allocating R\$1.28 billion to implement measures in the vacated area, actions related to urban mobility and to compensate potential socio-urbanistic impacts and damages; and (iv) allocating R\$300 million for social collective moral damages.

It is not possible to anticipate all the new claims, for indemnity or other natures, which may be presented by individuals or groups who understand that they have suffered impacts and/or damage in any way related to the geological phenomenon and the vacancy of risk areas. We are still facing (see Note 26 to our audited consolidated financial statements included elsewhere in this annual report) and may face several lawsuits, including individual lawsuits filed by individuals or legal entities not served by the PCF or that disagree with the individual proposal agreement, new collective demands and claims filed by public service concessionaires, so it is not possible to estimate the number of possible claims, their nature or amounts involved, nor their outcome. We cannot assure you that there will be no future developments relating to the geological event in Alagoas, or the relocation program and measures related to vacated areas and its surroundings.

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

Labor strikes may materially and adversely affect our operations.

Labor strikes in our plants and facilities may have a material adverse effect on our financial condition or results of operations. 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 or suppliers 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 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 products or supplies or result in costly repairs, replacements or other costs, which could have a material adverse effect on our financial performance.

Our energy risk policy dictates that we purchase energy in advance at fixed prices through long-term contracts. However, the majority of Brazilian power generation capacity is provided by hydroelectric 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 and our policy of purchases in advance at fixed prices through long-term contracts may be ineffective. 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 FCPA, 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. Furthermore, the Brazilian Anti-Corruption Law provides for joint and several liabilities between companies of the same economic group. See “—We could be materially adversely affected by the impacts of the Global Settlement.”

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For example, in light of the allegations of undue payments related to the Ethylene XXI project, which were originally published in the media in Mexico and were included in the testimony by the former CEO of Pemex to the Office of the Attorney General of Mexico, Braskem S.A., together with Braskem Idesa, in compliance with the standards established by Braskem's Global Compliance System Policy and Braskem Idesa's governance guidelines, approved the engagement of a U.S. law firm to conduct an independent internal investigation of the allegations. The investigation was concluded in February 2022 and did not find evidence to support the allegations by the former CEO of PEMEX regarding allegedly improper payments in connection with, or otherwise related to, the Ethylene XXI project.

Climate change may negatively affect our business, financial condition, results of operations and cash flow.

A considerable number of experts, international organizations, regulators and other analysts argue that global climate change has contributed, and will continue to contribute, to the increase in the unpredictability, frequency and severity of natural disasters (among but not limited to hurricanes, droughts, tornadoes, freezes, other storms and fires) in some parts of the world. As a result, several legal and regulatory measures, in addition to social measures, have been and will be established in several countries to reduce carbon and other GHG emissions and combat climate change globally. Such reductions in GHG emissions is expected to lead to an increase in energy, transport and input costs, in addition to requiring us to make additional investments in facilities and equipment. It is not possible to predict the impact of global climate change, if any, or legal, regulatory and social measures in response to climate change concerns, and whether such factors could negatively affect the business, financial condition, results of operations and operating cash flows.

Also, several countries are evaluating and seeking to implement carbon pricing policies for carbon emitting companies that are producers in these countries or that export products to these countries. If this occurs, our costs may be negatively impacted as we, as a petrochemical company, have a material carbon footprint.

Laws and regulations that seek to reduce GHG may be defined in the future, which could have a material adverse impact on our operating results, cash flows and financial condition. One of the possible effects of the increase in requirements related to the reduction of GHG emissions is the increase in costs, mainly due to the demand for the reduction of fossil fuel consumption and the implementation of new technologies in the production chain.

Additionally, the difficulty of adapting to climate change and reducing the emission of GHG in production processes and the value chain could negatively affect our business, financial condition, results of operations and cash flow.

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.

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. Investigations conducted by us internally or through outside counsel on potential violations of any applicable anti-corruption laws, including the FCPA by our employees or agents can be expensive and require significant time and attention from senior management. Our Anti-Corruption Program may not be completely effective for identifying, monitoring and mitigating these risks.

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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 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, together with a ratings downgrade due to such a change of control, 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 Novonor ceases to own, directly or indirectly, capital stock representing more than 50% of the voting power of our capital stock outstanding, or if its control power is reduced, and if because of such a change of control our ratings are downgraded under certain thresholds. As a result, if Novonor ceases to control, or in some cases, own a certain percentage of our common shares, whether as a result of the Novonor Judicial Restructuring Proceedings (or agreements entered into within the context of the Novonor Judicial Restructuring Proceedings) that result in a ratings downgrade, an alternative sale, foreclosure by secured creditors, reorganization, restructuring or other similar circumstance in connection with the Novonor 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 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 Subordinated Resettable Fixed Rate Notes due 2081, 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.

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Unauthorized disclosure or loss of intellectual property, trade secrets, other sensitive business or personal information, or disruption in information technology by cyberattacks or other security breaches, as well as our failure to comply with data protection laws and information security requirements 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 personal data in connection with our business operations. We must ensure that any personal data activity such as 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 information relating to our business partners (customers and suppliers), employees and confidential information related to our business is critical to us. We rely on commercially available systems, software and monitoring tools to provide secure processing, transmission and storage of relevant information, such as business confidential information and personal data including sensitive information.

The Brazilian Constitution, Law No. 10.406/2002 (Civil Code), Law No. 8.078/1990 (Consumer Protection and Defense Code), Law No. 12.965/2014 (Brazilian Civil Rights Framework for the Internet), Decree No. 8771/2016 and the recent Law No. 13.709/2018 (Brazilian General Data Protection Law or LGPD), which entered into force on September 18, 2020, are the main laws governing the practice of processing personal data in Brazil.

The LGPD is a comprehensive legislation, which regulates practices related to the processing of personal data, through a set of rules that impacts all sectors of the economy and organizations of all sizes, both digitally and physically. The LGPD establishes a new legal framework to be observed in personal data processing transactions and provides, among other measures, the duty of transparency on the part of the data controller, the rights of the holders of personal data, hypotheses in which the processing of personal data is allowed (legal bases), obligation to designate a data controller, rules related to information security, incidents involving personal data, requirements and obligations related to international data transfer and data sharing. The LGPD also provides for administrative sanctions that can be applied in case of non-compliance with its provisions by the National Data Protection Authority (“ANPD”), responsible for preparing guidelines and supervising compliance with the law. Non-compliance with any provisions provided for in the LGPD may result in the following consequences: (i) the filing of lawsuits or administrative proceedings by individual or collective competent bodies seeking compensation for damages arising from violations, among others, that are based not only on the LGPD, but also on sparse or specific data protection regulation still in force; and (ii) the enforcement by consumer protection agencies of penalties provided for in the sparse data protection regulation, such as those set forth in the Consumer Protection and Defense Code and the Brazilian Civil Rights Framework for the Internet, once that even before the LGPD enters into force and the ANPD is finally structured such agencies have already acted in this regard, mainly in cases concerning security incidents that result in improper access to personal data.

Since August 1, 2021, with the entry into force of the LGPD's administrative sanctions, if the ANPD understands that we are not in compliance with the LGPD, we may be subject to individual or cumulative sanctions, warning, requirement to disclose the incident, temporary blocking and/or exclusion of personal data to which the violation refers, daily fine, simple fine of up to 2% of the company, group or conglomerate's revenue in Brazil in its last fiscal year, excluding taxes, and up to the aggregate amount of R\$50.0 million per infringement. In case of recurrence, more severe administrative penalties provided for in the LGPD may be applied, such as partial suspension of the database operation to which the infringement refers for a maximum period of six months, extendable for an equal period, until the regularization of the activity of processing by the controller, suspension of the exercise of the activity of processing the personal data to which the infringement refers for a maximum period of six months, extendable for an equal period or partial or total prohibition of the activities related to the processing of data.

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In addition, we may be held liable for material, moral, individual or collective damages caused to the holders of personal data, including when caused by our subsidiaries or by third parties that process personal data on our behalf or as controllers together with us due to non-compliance with the obligations provided by the LGPD. In this sense, we cannot guarantee that we will be successful in adapting our activities, procedures, documentation and the relationship with third parties hired by us to meet the high standards provided by the LGPD. Administrative sanctions or legal convictions may cause material financial impacts, in addition to adversely affecting our reputation in the market.

Even if we adopt practices in line with the provisions and obligations set forth in the LGPD, it cannot be guaranteed that the measures adopted to adapt our personal data processing activities will be considered adequate or sufficient by ANPD, by other public authorities, such as the Public Ministry and consumer protection bodies, or by the court.

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 to be increasingly subject to laws and regulations relating to personal data activity such as collection, use, retention, security, and transfer of our employee and customer data. These may change over time and may vary by jurisdiction, and it is possible they will be interpreted and applied in ways that will materially and adversely affect our business. Any failure—real or perceived—by Braskem to comply with any applicable privacy or data protection-related laws and regulations could cause our customers to reduce their use of our products and services.

Compliance with data protection laws requires us to expend resources to revise our procedures and policies. There are no guarantees that we have sufficient resources to comply with new regulations or to successfully comply with this changing regulatory environment. Further, there is a risk of improper implementation and sanctions or reputational damage for noncompliance, both of which could have a material adverse effect on our operations, financial condition, and prospects.

In addition, despite the information 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, cyberattacks (including ransomware and phishing), computer viruses, misplaced or lost data, programming or human errors, or other similar events. The ongoing military conflict between Russia and Ukraine has led to an increasing number of cyberattacks globally. Any security breach or perceived threat resulting in the loss or other unauthorized disclosure of confidential information could damage our reputation, expose us to litigation risk and liability, subject us to negative publicity, disrupt our operations and harm our business.

Cyberattacks or security breaches could compromise critical information and cause a disruption in our operations, which 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. A significant cyberattack, 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.

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Our own security measures cannot be guaranteed and are susceptible to new cyberattacks. On October 4, 2020, we detected a cyberattack on our information technology environment.

There can be no assurance that Novonor will remain our controlling shareholder. Novonor and Petrobras may enter into transactions or other arrangements that may result in us not having a controlling shareholder. If no single shareholder or group of shareholders holds more than 50% of our voting stock or exercise a controlling interest, there may be increased opportunity for alliances between shareholders and conflicts between them.

Currently, Novonor, directly or through its wholly-owned subsidiary NSP Inv., owns 38.32% of our total share capital, including 50.11% of our voting share capital, and Petrobras holds 36.14% of our total share capital, including 47.03% of our voting share capital. Each of Novonor (our indirect controlling shareholder) and Petrobras are currently a party to a shareholders' agreement governing the exercise of their voting rights, appointment of directors and officers and other matters related to our corporate governance and their interests in us. In the event there is a change in our corporate control, we may be subject to significant changes to our management, business plan and strategies, as well as to our current corporate governance practices, all of which may have a material adverse effect on our results of operations and financial condition.

In June 2018, we were informed by Novonor that discussions were being held between Novonor and LyondellBasell Industries N.V. ("LyondellBasell") regarding a potential transaction involving the transfer to LyondellBasell of all of Novonor's interest in us. In June 2019, we were informed by Novonor that such discussions for a change of control transaction with LyondellBasell had been terminated. Subsequently, on August 7, 2020, we received a correspondence from Novonor informing us that, in order to fulfill certain commitments assumed with bankruptcy and non-bankruptcy creditors, it had taken preliminary measures to structure a process for the private sale of up to its total equity ownership in us, which, if implemented, would have resulted in the change of our corporate control. We cannot assure you that Novonor will not re-initiate any similar discussions or processes regarding the potential sale of its equity interest in us.

In addition, as disclosed by us on December 16, 2021, we were notified by Novonor and Petrobras that each of their governance bodies approved, on December 15, 2021, the execution of a term sheet providing for Novonor's and Petrobras' mutual commitment to take necessary measures that could, if implemented, ultimately result in a change of control of our company (the "Notice").

Pursuant to the Notice, Novonor and Petrobras agreed to seek the adoption of the necessary measures: (i) for the sale, through this secondary public offering, of up to all our class A preferred shares held directly or indirectly by them; (ii) to enable Braskem's migration to the *Novo Mercado* listing segment of the B3, including in relation to necessary changes to Braskem's corporate governance, which shall be subject to applicable approvals at the appropriate time and negotiation of a new shareholders' agreement to conform their rights and obligations to such amended governance structure; and (iii) after the conclusion of Braskem's potential migration to the *Novo Mercado* listing segment, carry out the sale of the remaining common shares held directly or indirectly by them and issued by us. We are unable to predict the result of the implementation of the commitments assumed, as well as their possible impacts. On January 28, 2022, we received a communication sent jointly by our shareholders Novonor and Petróleo Brasileiro S.A. whereby they decided to temporarily cancel the shares offering due to volatility conditions in the financial and capital markets. Also, Novonor and Petrobras ratified their interest in resuming the equity offering in the future, at a time when a more favorable economic situation with less volatility is verified, and the term sheet entered into between the parties remains in force and the commitment of both to dispose of their respective equity interests in the Company through a secondary public offering(s), in addition to taking all necessary measures to enable the Company to migrate to the *Novo Mercado* segment of B3, including the necessary amendments to its governance, as the studies in this regard being carried out by the Company and referred to in the material fact disclosed on Form 6-K on December 16, 2021 are concluded and to the extent that market conditions are favorable.

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If Braskem effectively migrates to the *Novo Mercado* in the future, all of our class A and class B preferred shares will be converted into common shares, resulting in Novonor no longer holding indirectly the majority of our voting stock. Even if Novonor and Petrobras enter into a new shareholders' agreement, the potential material sale of our common shares held by either or both of them could leave Novonor and Petrobras with less than 50% plus one share of our voting stock.

Irrespective of whether the transactions described in the Notice are implemented, Novonor or Petrobras may initiate discussions regarding other transactions that could ultimately have similar effects in the future.

Should Novonor and Petrobras cease to hold more than 50% of our voting stock, there can be no assurance that the influence by such shareholders will be maintained, including, without limitation, in relation to corporate governance, business plan, strategic, and key management matters. If a control group emerges with decision-making power over us, we may experience sudden and unexpected changes to our corporate governance and strategic policies, including through the replacement of directors and key executive officers.

The absence of a controlling shareholder or controlling group of shareholders may also affect our decision-making process, as the minimum quorum required by Brazilian law for certain decisions by shareholders may not be reached. In that case, we may be unable to effectively pursue our business plan and strategies. Additionally, we may be more vulnerable to a hostile takeover.

Additionally, all common and preferred shares issued by Braskem and held by NSP Inv. were pledged with fiduciary assignment (*alienação fiduciária*) as a collateral given under certain financing agreements entered into by Novonor and certain of its subsidiaries with specific non-bankruptcy creditors (*credores extraconcursais*). It is possible that, under certain circumstances, the pledge over such shares may be enforced, with the consequent sale of the shares, which could result in a change of Braskem's control and other consequences arising therefrom.

Any unexpected change to our management team, business plan and strategies, any dispute between our shareholders, or any attempt to acquire our control may divert our management's attention and also have an adverse effect on our business plan, strategies, financial condition and results of operations.

Novonor and Petrobras have requested us to conduct studies for a potential migration of Braskem to the Novo Mercado listing segment of the B3, which, if completed, would lead to the conversion of all of our class A and class B preferred shares into common shares and the revision of our corporate governance practices to conform to the Novo Mercado rules.

In order to be listed on the *Novo Mercado* listing segment of the B3, a company may only have common shares outstanding. If we were to migrate to the *Novo Mercado* listing segment of the B3, we would be required to convert all of our class A and class B preferred shares into common shares. Such change to our capital structure would lead to significant changes to our corporate governance, which could have a potential impact on our ability to pursue and implement our business plan and strategies.

Our class A preferred shares may be converted into common shares that will be listed on the *Novo Mercado* listing segment of the B3 in Brazil. The changes to our corporate governance (including amendments to our by-laws) in connection with a potential migration to the *Novo Mercado* listing segment, as well as the terms and timing of such migration, including the conversion ratio of the class A and class B preferred shares into common shares, are still subject to studies, discussions and approvals involving us and our shareholders, and we cannot foresee or assure how this process will unfold or what its end result will be. The listing of our shares on the *Novo Mercado* listing segment of the B3 would require us to take certain steps related to corporate governance matters, including the approval, by our shareholders at a shareholders' meeting, of the conversion of class A and class B preferred shares into common shares, migration to the *Novo Mercado* listing segment of the B3, and changes to our bylaws to comply with the *Novo Mercado* listing rules. In addition, pursuant to applicable Brazilian law, holders of our common shares are not entitled to the same dividend and liquidation preferences that holders of our preferred shares have.

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The intended corporate reorganization communicated by Novonor and Petrobras to us may not be approved or implemented, and the migration to the Novo Mercado listing segment of the B3 may not occur.

As disclosed by us on December 16, 2021, we were notified by Novonor and Petrobras that each of their governance bodies approved, on December 15, 2021, the execution of a term sheet providing for Novonor's and Petrobras' mutual commitment to take necessary measures that could, if implemented, lead to the migration of Braskem to the *Novo Mercado* listing segment of the B3 (the Notice, as defined above).

Pursuant to the Notice, Novonor and Petrobras agreed to seek the adoption of the necessary measures: (i) for the sale, through this secondary public offering, of up to all our class A preferred shares held directly or indirectly by them; (ii) to enable Braskem's migration to the *Novo Mercado* listing segment of the B3, including in relation to necessary changes to Braskem's corporate governance, which shall be subject to applicable approvals at the appropriate time and negotiation of a new shareholders' agreement to conform their rights and obligations to such amended governance structure; and (iii) after the conclusion of Braskem's potential migration to the *Novo Mercado* listing segment, carry out the sale of the remaining common shares held directly or indirectly by them and issued by us. We are unable to predict the result of the implementation of the commitments assumed, as well as their possible impacts. On January 28, 2022, we received a communication sent jointly by our shareholders Novonor and Petróleo Brasileiro S.A. whereby they decided to temporarily cancel the shares offering due to volatility conditions in the financial and capital markets. Also, Novonor and Petrobras ratified their interest in resuming the equity offering in the future, at a time when a more favorable economic situation with less volatility is verified, and the term sheet entered into between the parties remains in force and the commitment of both to dispose of their respective equity interests in the Company through a secondary public offering(s), in addition to taking all necessary measures to enable the Company to migrate to the Novo Mercado segment of B3, including the necessary amendments to its governance, as the studies in this regard being carried out by the Company and referred to in the material fact disclosed on December 16, 2021 are concluded and to the extent that market conditions are favorable.

A potential migration of Braskem to the *Novo Mercado* listing segment of the B3 is subject to certain measures and steps that would need to be taken and conditions that would need to be fulfilled, many of which are outside our control, including the satisfactory conclusion of the current studies being conducted by us, as well as the approval by the applicable listing commission of the B3, the approval by our shareholders at a general shareholders' meeting of Braskem's revised by-laws to comply with the *Novo Mercado* listing rules, and the approval by the holders of our class A and class B preferred shares at a separate shareholders' meetings for each class.

As a result of the foregoing, we may not be able to migrate to the *Novo Mercado* listing segment of the B3 in a timely manner, or at all.

We expect to lose the right of preference set forth in the current shareholders' agreement with respect to new business opportunities in the petrochemical sector, and as result, Petrobras, which is our largest supplier of raw materials in Brazil, will be able to invest in the petrochemical sector independently from us and without first giving us a preference to do so.

Novonor and Petrobras are currently parties to a shareholders' agreement that provides, among other matters, for the commitment between them to use their best efforts in the development of new business opportunities in the "petrochemical sector" (defined as business opportunities that involve: (i) the use of ethylene and propylene for the manufacture of PE, PP, PVC and cumene; (ii) petrochemical investments for the production of butadiene, paraxylene, PE, PP, PVC, cumene, PTA and PET, as well as the sale of these products; (iii) investments based on pyrolysis of hydrocarbons for the petrochemical industry; and (iv) other investments or products that Novonor and Petrobras may agree in good faith to include in the definition of the "petrochemical sector" relating to new production processes that may be developed in the future), with a right of preference given to us.

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Subject to some exceptions related to specific projects, if there is a direct or indirect business initiative, opportunity, undertaking, investment or participation that each of Novonor or Petrobras intends to pursue in the petrochemical sector (an “Opportunity”) that overlaps with certain objectives described in such shareholders’ agreement, the party that identified the Opportunity (the “Identifying Party”) shall grant Braskem a preference to explore the Opportunity.

If we do not express an interest in exercising the right of preference over a given Opportunity, and the Identifying Party subsequently decides to pursue such Opportunity, the Identifying Party shall offer us the right to market the products related to the Opportunity under mutually satisfactory market conditions.

On December 15, 2021, Novonor and Petrobras entered into an amendment to such shareholders’ agreement, generally providing that, if Braskem’s potential migration to the *Novo Mercado* listing segment of the B3 is not implemented, Braskem’s right of preference with regard to any future Opportunity will lapse by October 31, 2024. As a result, if the potential migration of Braskem to the *Novo Mercado* listing segment of the B3 is not completed by October 31, 2024, or, if before October 31, 2024 such migration is completed but such shareholders’ agreement expires or terminates for any reason and no new agreement on preference rights is agreed upon by the parties, Braskem would lose its right of preference with regard to any future Opportunity. The execution of such shareholders’ agreement amendment by Braskem, as an intervening party, is still subject to the appropriate governance approvals. On January 28, 2022, we received a communication sent jointly by our shareholders Novonor and Petróleo Brasileiro S.A. whereby they decided to temporarily cancel the shares offering due to volatility conditions in the financial and capital markets. Also, Novonor and Petrobras ratified their interest in resuming the equity offering in the future, at a time when a more favorable economic situation with less volatility is verified, and the term sheet entered into between the parties remains in force and the commitment of both to dispose of their respective equity interests in the Company through a secondary public offering(s), in addition to taking all necessary measures to enable the Company to migrate to the Novo Mercado segment of B3, including making the necessary amendments to its governance, as the studies in this regard being carried out by the Company and referred to in the material fact disclosed on Form 6-K on December 16, 2021 are concluded and to the extent that market conditions are favorable.

The loss of the right of preference with regard to an Opportunity may result in a decision by Petrobras, which is Braskem’s largest supplier of raw materials in Brazil, to invest in the petrochemical sector, which may affect the implementation of our strategic and growth plans and adversely affect our revenues and results of operations.

We are subject to audit by the tax authorities in the jurisdictions in which we operate, which may adversely affect our operating results and financial condition.

We operate in and sell our products into several countries, such as Brazil, Argentina, Colombia, Chile, the United States, Germany, Netherlands, Mexico and Singapore, each with its own tax legislation and specific audit procedures. The tax legislations in each country are frequently ambiguous and subject to interpretation, which may lead to divergent views between the tax authorities in each country and us and/or our advisors.

We are routinely audited by the tax authorities in different countries and other sub-national authorities in Brazil and abroad. As a result of such audits, our tax positions may be questioned by the tax authorities. We cannot guarantee that we will make provisions in amounts sufficient for lawsuits resulting from inspection, nor that there will be no identification of additional tax exposure. As a result, the increase in the amount of taxation as a result of disputes over our tax positions may adversely affect our business, operating results and financial condition.

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For more information on the impact of our tax disputes, see “Item 3. Key Information—Risks Relating to Us and the Petrochemical Industry—Unfavorable outcomes in pending or future litigation may reduce our liquidity and negatively affect our financial performance and financial condition” and “Item 8. Financial Information—Legal Proceedings.”

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.

We operate in several countries, such as Brazil, Argentina, Colombia, Chile, the United States, Germany, Netherlands, Mexico and Singapore. Besides, we sell our products to several other countries through different commercial approaches.

Each of these countries has its own tax legislation, and these tax laws undergo frequent changes according to specific government purposes in each country. An example is the Brazilian government, which 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.

We cannot predict the changes to Brazilian tax law or in any other jurisdiction in which we operate that may be proposed and enacted in the future. However, future changes in these tax laws 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 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 slightly increase in 2022, when compared to 2021;
- 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.

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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 Novonor, 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, its later reversion and other 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. The political divisions in Brazil that arose prior to 2018 elections will continue during 2022, when a new presidential election will occur. The presidential election outcomes could result in congressional deadlock, political unrest and massive demonstrations and/or strikes that could materially adversely affect our operations.

Additionally, uncertainties in relation to the implementation by a new government of changes relating to monetary, tax, labor 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 could materially adversely affect our operations and may increase market volatility of Brazilian securities issued abroad.

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. In August 2020, the Brazilian government temporarily suspended the application of these measures due to doubts about the feasibility of China returning to export to Brazil. However, after a strong increase in Chinese imports, in September 2021, anti-dumping measures were reapplied at the request of Brazilian industry. The anti-dumping measures applied to suspended PVC imports from the United States and Mexico would initially expire in September 2021, but we requested the extension of these measures for additional 5 years. Currently, our request is under analysis by the Brazilian government until September 2022, when a decision must be taken. During this period, the anti-dumping measures in question remain in effect. The anti-dumping measures applied to suspended PVC imports from China were recently renewed and remain in effect until August 2025.

Additionally, in December 2010, CAMEX imposed an anti-dumping duty of 10.6% on PP imports from the United States, which was extended in November 2016. In August 2014, the Brazilian government imposed anti-dumping duties on PP imports from South Africa, India and South Korea of 16.0%, 6.4% to 9.9%, and 2.4% to 6.3%, respectively. These measures were revised in 2020, when the Brazilian government decided to extend the anti-dumping measures applied to PP imports from India, reduce the duties applied to South Africa to 4.6%, and remove the duties applied to PP imports from South Korea. The anti-dumping measures applied to PP imports from the United States would expire in November 2021, but we requested the extension of these measures for additional 5 years. Currently, our request is under analysis by the Brazilian government until November 2022, when a decision must be taken. During this period, the anti-dumping measures in question remain in effect. The anti-dumping measures applied to PP imports from South Africa and India expire in December 2025.

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Finally, in December 2020, the Brazilian government temporarily reduced to 4%, for an initial period of three months initially, for a quota of 160,000 tons, the import tariffs levied on imports of PVC resins from countries that do not benefit from preferential import rates in Brazil. The Brazilian government extended such reduction in March 2021 for three additional months and 160,000 additional tons. In March 2021, the Brazilian government also temporarily reduced to 0%, for an initial period of three months, for a quota of 77,000 tons, the tariffs levied on imports of PP from countries that do not benefit from preferential import rates in Brazil. In November 2021, the Brazilian government enacted Resolution GECEX No. 269 providing for temporary reduction in Brazil by 10% of the import tax rates set forth in Resolution No. 125 of the Foreign Trade Chamber, of December 15, 2016. As a result, the current rates for PP, PE and PVC resins plummeted from 14% to 12.6%. The new rates came into force on November 12, 2021 and shall be effective until December 31, 2022, at first.

In 2019, 31.4% of Brazilian PE, PP and PVC resins were imported products, which reflected an 8.5% annual increase in the volume of resins imported.

In 2020, 32.4% of Brazilian PE, PP and PVC resins were imported products, which reflected an 11% annual increase in the volume of resins imported.

In 2021, approximately 36.4% of Brazilian PE, PP and PVC resins were imported, which reflected a 17.1% annual increase in the volume of resins imported.

Changes in industrial policy and related actions undertaken by the Brazilian government and local state governments in Brazil 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 and local state governments in Brazil 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, in part or in full, 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, reduction of the tax burden and tax incentives in certain regions to foster local industries.

In July 2021, the President of Brazil sanctioned Conversion Bill No. 12/2021, arising from the approved amendments of Provisional Measure No. 1,034/2021, later converted into Law No. 14.183/2021, providing for the gradual reduction of the petrochemical industry special regime (REIQ) until January 1, 2025, when it shall be terminated.

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In December 2021, the Brazilian government issued Provisional Measure No. 1095/2021 amending Law No. 10,865, of April 30, 2004, and Law No. 11,196, of November 21, 2005, in order to extinguish REIQ's special taxation regime, extinguishing it from April 1, 2022. In order to be effective, the Chamber of Deputies and the Federal Senate must approve such regulation by June 1, 2022. Pursuant to Brazilian laws, the provisional measure must be converted into law to continue to produce effects after it expires. In addition to following legislative proceedings in order to extend its effects, we are evaluating the filing of a lawsuit since the tax benefit was given for a certain and determinate term, which is protected under Article 178 of the Brazilian constitution and by judicial precedent.

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 14.5% during 2018, depreciated by 7.9% during 2019, depreciated by 30.7% during 2020 and depreciated by 4.6% during 2021.

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\$46,743.5 million (US\$8,376.2 million) as of December 31, 2021 (including an aggregate amount of R\$12,311.5 million (US\$2,206.2 million) outstanding as of December 31, 2021 in connection with our secured debt related to our Mexico Complex), representing 98.6% of our consolidated indebtedness. As of December 31, 2021, we had R\$6,683.4 million (US\$1,229.9 million) in foreign currency-denominated cash and cash equivalents, including the aggregate amount of R\$1,773.3 million (US\$317.8 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 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. However, we cannot assure that the designation of part of our U.S. dollar-denominated liabilities as a hedge for our future exports will be enough to not affect our financial results.

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. For the year ended December 31, 2021, naphtha accounted, directly and indirectly, for 37.0% of our consolidated cost of products sold. When the *real* depreciates against the U.S. dollar, the cost in *reais* of our U.S. dollar-denominated and U.S. dollar-linked raw materials increases, and our operating income in *reais* may decrease to the extent that we are unable to pass on these cost increases to our customers.

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

Historically, Brazil has experienced high rates of inflation. Inflation, as well as government efforts to combat inflation, had significant negative effects on the Brazilian economy, particularly prior to 1995. The inflation rate, as measured by the General Price Index—Internal Availability (*Índice Geral de Preços—Disponibilidade Interna*, or the “IGP-DI”), reached 2,708% in 1993. Although inflation rates have been substantially lower since 1995 than in previous years, inflationary pressures persist. Inflation rates, as measured by the IGP-DI, were negative 0.4% in 2017, 7.1% in 2018, 7.3% in 2019, 23.1% in 2020 and 17.7% in 2021. 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 financial performance.

Our financial expenses are affected by changes in the interest rates that apply to our floating rate debt. As of December 31, 2021, we had, among other debt obligations:

- R\$46.9 million of loans and financing that were subject to the Interbank Deposit Certificate (*Certificado de Depósito Interbancário*, or “CDI”), rate;
- R\$590.0 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\$5,552.9 million of certain of our loans and financing that were subject to the London Interbank Offered Rate (LIBOR), maturing between 2026 and 2031.

The CDI and the IPCA 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.

Due to the concerns regarding LIBOR, there have been market initiatives to enact its replacement. In June 2021, the Federal Reserve's Alternative Reference Rates Committee selected the Secured Overnight Financing Rate (“SOFR”), as the preferred alternative to U.S. Dollar LIBOR. Subsequently, a schedule has been announced for the cessation of LIBOR. The ICE Benchmark Association, or IBA, has announced that it has ceased to publish the 1-week and 2-month LIBOR after December 31, 2021. The remaining tenors of LIBOR would remain in publication until June 2023, on a representative basis; after this date, publication will cease altogether. New risk-free rates, or RFRs, are also being introduced alongside SOFR for interbank offered rates in other currencies, such as the Euro, British pound, Swiss franc and Japanese yen. Due to these changes, interest rates on future indebtedness may be adversely affected, in which case we would need to renegotiate the terms of our existing facilities to replace LIBOR with the new standard, and to otherwise agree with lenders, trustees or agents, as applicable, on a new means of calculating interest. 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.

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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 98.6% of our indebtedness on a consolidated basis as of December 31, 2021, 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.

Risks Relating to Mexico

Political and economic conditions and government policies in Mexico, including political interferences in state-owned companies such as Pemex TRI and Cenagas, 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.

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For additional information, see “—We depend on ethane supplied by Pemex TRI in Mexico,” “—We rely on limited or sole-source suppliers for our raw materials, inputs and energy, including transportation thereof” and “We depend on ethane supplied by Pemex TRI in Mexico.”

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

Mexico has historically experienced uneven periods of economic growth. Mexican GDP increased by 2.2% in 2018, before two subsequent decrease by 0.1% and by 8.2% in 2019 and 2020, respectively, and then increasing by 5.0% in 2021. We cannot assure you that these estimates and forecasts will prove to be accurate. Any future economic downturn, including downturns in the United States, Europe, Asia or anywhere else in the world, could affect our financial condition and results of operations.

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 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 (the “USMCA”). The USMCA replaced NAFTA and, although it entered into force on July 1, 2020, it may fail to be implemented. If such event occur, it could adversely impact our business and operations. Although the USMCA, which replaced NAFTA as the principal trade agreement between the U.S., Mexico and Canada, went into force in July 2020, its long-term impact on our operations remains uncertain. With the current U.S. Administration having taken power in January 2021, the status of U.S. trade policy and U.S. involvement in international trade agreements going forward remains to be determined and could drastically shift in a manner that increases or mitigates adverse effects on our businesses. The last U.S. Administration also implemented changes to U.S. immigration policy and other policies that impact trade, including increasing tariffs, and the current U.S. Administration has taken steps to reverse some of these changes and could take other relevant measures concerning these matters. Such policy changes or other measures could adversely affect imports and exports between Mexico and the U.S. and negatively impact the U.S., Mexican and other economies and the companies with whom we conduct business, which could materially adversely affect our business, financial condition, results of operations, cash flows and/or prospects.

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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., Mexico or Canada administrations, including changes to or non-compliance with the USMCA requirements 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.

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 the Mexican economic policy and our business, financial condition and results of operations.

In Mexico, political instability has been a determining factor that investors, in general, take into consideration when deciding on business investment. Political circumstances in Mexico may significantly affect Mexican economic policies, which could affect our operations. Significant changes in laws, public policies and/or regulations, or the use of public referendums (*consultas populares*) could affect Mexico's political and economic situation, which could, in turn, adversely affect our business. We cannot provide any assurances that political developments in Mexico, over which we have no control, will not have an adverse effect on our business, results of operations, financial condition and prospects.

We cannot assure you that changes in the Mexican federal government policies or regulations will not adversely affect our business, financial condition and results of operations.

In general, changes that may be made to the existing legal framework, as well as the impact of new regulations, may result in increased costs to us or our customers and may require us to amend existing permits, secure additional permits to operate natural gas, ethane or render our services, or take additional measures to secure permits for our projects. Specifically, Mexican tax legislation is subject to continuous change, and we cannot assure you that the Mexican government will maintain existing political, social, economic or other policies or that such changes would not have a material adverse effect on our business, financial condition, results of operations and prospects.

The administration of Mr. López Obrador has taken actions that have significantly undermined investors' confidence in private ventures following the results of public referendums, such as the cancellation of public and private projects authorized by previous administrations, including the construction of the new Mexican airport, which immediately prompted the revision of Mexico's sovereign rating from stable to negative and the cancellation of the construction of a brewing facility of "Constellation Brands" in Baja California, Mexico. Investors and credit rating agencies may be cautious about the president's political party administration's policies, which could contribute to a decrease in the Mexican economy's resilience in the event of a global economic downturn. We cannot assure you that similar measures will not be taken in the future, which could have a negative effect on Mexico's economy.

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Additionally, President López Obrador has conducted and expressed his intentions to move forward with certain substantial changes in Mexico's policies and laws, including various austerity measures, the cancellation of government trusts, amendments to the pension system and the national energy generation and distribution system, among others. Also, he has declared that he will seek government de-centralization, meaning that there could be important changes to the constitution, laws, policies and regulations, or a decrease or elimination of the independence of government agencies, which may change the economic and political situation of the country. We cannot predict if the new administration will implement substantial changes in law, policy and regulations pertaining to the petrochemical sector in Mexico, any of which could negatively affect our business, financial condition, operations and prospects. For instance, in October 2021, President López Obrador submitted an initiative to the Mexican Congress, aiming to carry out substantial reforms at the Mexican energy generation and distribution framework. Such reforms imply potential significant changes to the Federal Electricity Commission (Comisión Federal de Electricidad), and other energy authorities and agencies and individuals participating in the Mexican power sector. If approved under such proposed terms, the effects that such reforms may have in our business and operations are still unknown and could adversely affect our business, financial condition and results of operations.

Measures adopted by the Mexican government with respect to the economy and productive state-owned companies could have a significant effect on the private sector companies in general, including the Company, as well as on Mexican market conditions, securities and commodities prices and the return on investment of certain Mexican securities issuers.

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 Braskem Idesa's operations, affect its ability to generate revenue and increase the cost of its 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.

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

Our Mexico Segment currently sources part of the ethane for the production of polyethylene at our Mexico Complex from Pemex TRI pursuant to the ESA and the Amended ESA. The ESA, including the Amended ESA, is a complex agreement and, for that reason, we may interpret certain of its provisions differently than Pemex TRI does. For example, if Pemex TRI fails to supply a determined percentage of the ethane contractually specified under the Amended ESA for six consecutive months, we will have the right to terminate the Amended ESA and require Pemex TRI to pay to the other parties involved in the project an amount equal to the termination value of the project (the value of which is determined pursuant to the ESA 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 Amended ESA, including the termination provisions, could have an adverse effect on our results of operations and financial position. Further, under Mexican law any dispute regarding the interpretation of the Amended ESA shall be resolved by mediation and/or arbitration before International Chambers of Commerce.

We source part of our ethane feedstock from Pemex TRI in Mexico, which we expect to be our primary source of ethane until the Ethane Import Terminal is operational.

We currently source part 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 (“Pemex”), the state-owned Mexican oil and gas company. Pursuant to the Amended ESA, ethane prices negotiated under such an agreement are referenced to the Mont Belvieu purity ethane price, which is a U.S. dollar-based international reference price. As a result, in case one or more of the following events occurs, our production volumes, net revenue and profit margins would likely decrease, materially adversely affecting our overall financial performance:

- 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 and Pemex Exploración y Producción (“Pemex PEP”), (which engages in exploration and production activities) related to the Amended ESA, including the non-recognition or non-payment of shortfall penalties and the decrease or failure to supply the contracted volume of ethane;
- any material default by us or by Pemex TRI to supply ethane in the contractually agreed volumes or qualities negotiated under the ESA;
- any repudiation or termination by Pemex TRI or by us of the Amended ESA, or any repudiation or termination by other Mexican state-owned companies of related supply (including those for the transportation of supplies) agreements, such as Cenagas (Centro Nacional de Control del Gas Natural); 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.

As provided in the Amended ESA, any daily volume rejected by us must be purchased in installments in subsequent deliveries until the deficit has been resolved, and the same mechanics apply to Pemex TRI delivery obligations. If Pemex TRI delivers to us less than the volumes required under the ESA and fails to compensate for the shortfall in subsequent deliveries, it needs to pay compensation for shortfall penalties to us.

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Furthermore, the Amended ESA could also be impacted by changes in laws and regulations, terminated or repudiated by Pemex TRI as a result of political pressure or be subject to expropriation or other adverse measures by the Mexican government or government entities. We may also renegotiate the terms of the Amended ESA, voluntarily or as a result of changes in laws and regulations, or otherwise.

The provisions for early termination by Pemex TRI under the Amended ESA 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 petrochemical complex to be a total loss, or after which we cannot or do not resume operations for 48 months.

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, have in the past and would in the future have a material adverse effect on our business, results of operations and financial condition.

Risks Relating to Our Equity and Debt Securities

All of the shares issued by Braskem and owned by NSP Inv. are secured for the benefit of certain secured creditors of the Novonor Group.

Pursuant to a shares fiduciary assignment agreement (*alienação fiduciária em garantia*) entered into by the Novonor Group and some non-bankruptcy creditors (*credores extraconcursais*) on November 27, 2013, as amended on May 13, 2016, July 19, 2016, April 24, 2017, May 23, 2018, March 29, 2019 and October 9, 2020, all ordinary and preferred shares issued by Braskem and held by NSP Inv. are secured for the benefit of certain secured creditors of the Novonor group in connection with certain financing agreements entered into by Novonor and certain of its subsidiaries. In the event that Novonor and certain of its subsidiaries default on such financing agreements, or if such financing agreements are accelerated and, as a result, or if creditors consolidate the ownership of the shares and dispose them (assuming that Petrobras does not exercise its preemptive rights to acquire such shares) we may be subject to a change of control following statutory, legal and procedural formalities required pursuant to our shareholders' agreement. A change of control under these circumstances may adversely affect us.

The foreclosure or sale of our shares held by NSP Inv. - whether in the Novonor Judicial Restructuring Proceedings or agreements entered into within the context of the Novonor Judicial Restructuring Proceedings - may result in a change of our control. As we do not have the ability to consent to or otherwise influence or control the Novonor Judicial Restructuring Proceedings or the acquirer of the shares from any such disposal, we may be subject to a change in our corporate control in the foreseeable future.

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

As permitted by Law No. 6,404/76 (the "Brazilian Corporate 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 Corporate Law allows a publicly traded company like ours to not distribute the Mandatory Distribution of Dividends in any particular year if our board of directors informs in connection with an annual shareholders' meeting that such distributions would be incompatible with our financial condition, 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. The non-payment of dividends may frustrate expectations of cash return on the part of our investors, and may lead to a loss in the value of our shares in the market.

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In addition, the income tax exemption on the dividends distribution and the taxation currently levied on the payment of interest on equity provided for in current legislation may be revised through tax reforms carried out by the Brazilian government, and both dividends received and distributed by the Company may become taxed or, in the case of interest on equity, have its taxation increased in the future, reducing the net amount to be paid to shareholders, which may have an adverse effect on the price of the securities we issue.

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 Corporate 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 Corporate 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.

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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 debt securities, and could also have a material adverse effect on our business, financial condition and results of operations.

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 debt securities. 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 debt securities. 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 debt securities in foreign currency. 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 debt securities. 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 debt securities would be possible through such mechanism.

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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 Corporate Law.

Our corporate affairs are governed by our by-laws and the Brazilian Corporate 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 Corporate 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 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, debt securities or related guarantees would be payable only in reais.

If proceedings are brought in the courts of Brazil seeking to enforce our obligations under our equity securities, ADSs, the guarantees under our outstanding debt securities 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 equity securities, 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.

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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 shareholder 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 SEC, or (2) the offering of shares resulting from the capital increase qualifies for an exemption from the registration requirements of the U.S. Securities Act of 1933, as amended (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 general and broad scope of Law No. 10,833/2003, and the absence of judicial precedent, 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.

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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 example, 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, crisis in other emerging countries may diminish investor interest in securities of Brazilian issuers, including our shares and ADSs and our debt securities. This could adversely affect the market price of our 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.

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

In addition, the persistence of the COVID-19 pandemic could negatively impact the market value of securities of Brazilian issuers, including our shares and ADSs and our debt securities. The extent to which the COVID-19 pandemic impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including the severity of the COVID-19 pandemic, actions to contain it or treat its impact, among others

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 debt securities 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 debt securities 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 debt securities and other indebtedness, and using the proceeds therefrom as permitted by the agreements governing these issuances, including lending the net proceeds of the debt securities 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 debt securities issued by it and other indebtedness will depend our financial condition and results of operations and those of our subsidiaries that are debtors of Braskem Finance Limited or Braskem Netherlands Finance, respectively. In the event of an adverse change in our financial condition or results of operations or those our subsidiaries that are debtors 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 debt securities.

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

The outstanding debt securities are fully guaranteed by Braskem. The Braskem guarantees constitute senior unsecured obligations of Braskem. The guarantees rank equal in right of payment with all of Braskem's other existing and future senior unsecured indebtedness. Although the guarantees provide the holders of the debt securities with a direct, but unsecured claim on Braskem's assets and property, payment on the guarantees is 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 debt securities, 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 will be subject to the prior claims of the creditors of such subsidiaries and jointly controlled entities. The indentures relating to the outstanding debt securities include a covenant limiting the ability of Braskem and its subsidiaries to create liens, although this limitation is subject to significant exceptions.

The construction of 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. In October 2021, Braskem Idesa issued sustainability-linked debt securities in the aggregate amount of US\$1.2 billion, maturing in ten years. The coupon of 7.0% can be increased by up to 37.5 basis points in case of non-compliance with the sustainability target. The proceeds obtained from the sale of the bonds, plus a credit line of US\$150 million, were used to pay off the Project Finance signed in 2012.

As of December 31, 2021, Braskem had (1) consolidated corporate debt, of R\$35,094.2 million (US\$6,288.7 million), and (2) consolidated Braskem Idesa debt related to our Mexico Complex of R\$12,311.5 million (US\$2,206.2 million). Of the consolidated corporate debt, R\$721.0 million (US\$129.2 million) was unsecured debt of Braskem S.A., R\$0.3 million (US\$1.6 million) was secured debt of Braskem S.A., R\$ 34,365.9 million (US\$6,158.2 million) was unsecured debt of Braskem's subsidiaries and special purpose entities (other than Braskem Idesa SAPI) and R\$6,938.3 million (US\$1,243.3 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 debt securities, Braskem may rely, in part, on cash flows from its subsidiaries and jointly controlled companies, mainly in the form of dividend payments. 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 of the outstanding debt securities are subordinated to certain statutory preferences.

Under Brazilian law, Braskem's obligations under the guarantees of the outstanding debt securities 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 debt securities may be unable to collect amounts due under the outstanding debt securities.

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Brazilian bankruptcy laws may be less favorable to holders of our shares, ADSs and outstanding debt securities 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 debt securities, 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

We are the largest producer of plastics in the Americas, based on the annual production capacity of our plants in Brazil, in the United States and in Mexico as of December 31, 2021, according to IHS. We are the only integrated petrochemical company producing basic chemicals and polymers in Brazil, and the largest producer of PE in Mexico and of PP in the United States.

As of December 31, 2021, our business operations were organized into three segments, which corresponded to our principal production processes, products and services. Our reportable segments were as follows:

- our Brazil Segment (former Polyolefins, Chemicals and Vinyls segments), which includes:
 - (i) 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;
 - (ii) supply of electricity and other inputs produced in these complexes to second-generation producers located in the petrochemical complexes;
 - (iii) production and sale of PE, including the production of “green PE” from renewable resources, and PP produced by us in Brazil; and
 - (iv) our production and sale of PVC and caustic soda;

The Brazil Segment accounted for net revenue of R\$69,494.9 million, including exports from Brazil, or 64.1% of our consolidated net revenue of all reportable segments;

- our USA and Europe Segment, which includes our production, operations and sale of polypropylene in the United States and Germany. This segment accounted for net revenue of R\$32,403.6 million, or 29.9% of our consolidated net revenue of all reportable segments; and
- our Mexico Segment, 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\$6,506.3 million, or 6.0% of our consolidated net revenue of all reportable segments.

In 2021, 2020 and 2019, 52.9%, 55.3% and 54.5% of our net revenue, respectively, related to sales performed in Brazil, and 47.1%, 44.7% and 45.5% of our net revenue in 2021, 2020 and 2019 was derived from our international operations.

Our Competitive Strengths

Leading Plastics Producer in the Americas

We are the largest producer of plastics in the Americas, based on the annual production capacity of our plants in Brazil, in the United States and in Mexico as of December 31, 2021, according to IHS. We are the only integrated petrochemical company producing basic chemicals and polymers in Brazil, and the largest producer of PE in Mexico and of PP in the United States. Globally, we have a global installed capacity of 21.4 million tons per year.

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We produce a diversified portfolio of petrochemical and thermoplastic products, including polyethylene, green polyethylene (biopolymer), polypropylene, and PVC. Our products are typically used in large volume applications, and we benefit from our world-scale plants to enhance our competitiveness.

Global Leader in Green PE, Pioneer in Renewable Plastics

We are the global leader in green PE production and benefit from our presence in Brazil, which is the world's largest producer of ethanol from sugarcane, with ample access to bio-ethanol feedstock. Our green PE made from ethanol from sugarcane is the first PE of renewable origin to be produced in industrial scale in the world. We have developed a robust global portfolio of clients, and our green PE has more than 180 customers in over 40 countries. Green PE also has an attractive price point, as demand for sustainable products generally outstrips supply.

We believe that our green PE has distinctive capabilities compared to other alternative solutions. Compared to biodegradable, recycled and fossil-based PE, we believe our renewable product has: (i) negative carbon footprint, (ii) higher feedstock sustainability, (iii) lower risk and better equipment fit as process uses same existing equipment, (iv) proven technology and scale, (v) better applicability with same properties and applications as fossil-PE, and (vi) better recyclability as products as 100% recyclable.

We invested approximately US\$290.0 million in 2010 to build a green ethylene plant with capacity to produce 200 kilotons per year. In February 2021, considering the robust demand for our products, we announced a project to expand our green ethylene production capacity to 260 kilotons per year, with an estimated additional investment of US\$87.0 million. The expansion is expected to be completed in by the end of 2022.

We are also exploring new business opportunities to produce other bio-based chemicals. In addition to green PE production, in 2017 we entered into a bio-monoethylene glycol ("MEG") technology cooperation agreement with Haldor Topsoe, a Denmark-based global leader in supply of catalysts, technology, and services for the chemical and refining industries. MEG is a raw material for PET (polyethylene terephthalate), which has numerous applications and is an essential feedstock in industrial sectors such as textiles and packaging, especially beverage bottles. According to IHS, the global MEG market represented approximately US\$26.3 billion in 2021 and is predominantly supplied by fossil-based feedstocks. In 2020, we were able to produce the first-ever demo-scale bio-based MEG through pioneering technology that transforms sugar into renewable MEG.

Benchmark Operator, With World Class Safety Practices and Track Record

We are widely recognized as an experienced and capable operator of petrochemicals plants. Our plants have recorded low accident rates and high utilization levels compared to industry peers.

Between 2012 and 2021, our ethylene plants in Brazil achieved an average utilization rate of 87.7% compared to a global industry average of 88.4%, according to IHS. In addition, our PP plants in the United States and Europe achieved in the same period an average utilization rate of 91.8% compared to global industry average of 86.7% according to IHS.

From 2012 to 2018, the average of recordable and lost-time injury frequency rate stood at 0.95 (events/million hours worked), which is 71% below the industry average of 3.29, according to the American Chemistry Council.

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Competitive Asset and Raw Material Base

Our plants are located close to customer demand. In Brazil in particular competitors need to bring in products from locations as far away as the Middle East and face import tariffs which reduces their competitiveness compared to us. Considering freight and import tariffs, Brazilian producers have an advantage with respect to PE, PP and PVC on average 37.6% higher than average international reference prices from IHS for these products in 2021.

We rely on a diversified mix of raw materials, such as naphtha, ethane, propane, propylene and ethanol. We also source our raw materials from a diversified base of suppliers, which we continuously work to expand in the regions where we operate.

Our green PE is made from ethanol from renewable sugarcane in Brazil, the main producer for sugarcane globally. Our other Brazilian businesses operate on naphtha, ethane, propane and propylene sourced from Brazil and several other sources abroad. As a result of our continued efforts to further diversify our feedstock base, only 30.6% of our naphtha consumption was sourced by local suppliers as of December 31, 2021.

Our businesses in the United States and in Mexico benefit from propylene and ethane availability from producers that are well situated on their respective global cost curves. Our PP plants in the Northeast region of the United States are able to source refinery-grade and chemical-grade propylene from non-U.S. Gulf Coast refineries and steam crackers at an advantaged cost compared to polymer-grade propylene. In the United States Gulf Coast, we have a well-diversified supply base with well-developed pipeline connectivity that allow us to source feedstock at a competitive cost in the region. With over 15 sources of supply in North America, our geographic and logistics diversity allows for redundancy in supply and flexibility at our PP plants.

Global Marketing Platform

We are a client-focused organization, and we have built a deep network of local relationships with over 2,200 clients worldwide. We have a lengthy history of development of long-term and close partnerships with clients, focusing on their needs and individual value creation solutions. Our market orientation and wide network are underpinned by a global platform with commercial offices in the Americas, Europe and Asia. Our global marketing platform combines market-focused teams for key market segments as well as regional teams for broader coverage. We encourage innovative thinking, an entrepreneurship mindset, a focus on the value chain and on product quality and service level.

Innovation and Technology, and Research and Development Capabilities

We drive innovation to extract value from our existing assets and create new value propositions to our customers. As a result of our innovation efforts, over 16.4% of our current products have been introduced in the last five years. We employ 303 employees globally in innovation and technology, spread across our research and development centers in Pittsburg (United States), Wesseling (Germany), Coatzacoalcos (Mexico), Triunfo, Campinas and São Paulo (Brazil).

Additionally, in November 2021, Braskem and Lummus Technology, a worldwide leader in ethylene, petrochemical, energy transition and other process technologies, executed a memorandum of understanding to jointly license Braskem's green ethylene technology to two projects in different regions of the world, displaying a global interest in the technology.

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Qualified Management Team with Proven Success

Our senior management team combines deep operational expertise and knowledge of petrochemical global markets developed over long tenures. We have a strong mergers and acquisitions track record that supported our global expansion in the last decade, including into the US and Europe.

We have proven success in executing large, complex projects. Through our subsidiary Braskem Idesa, we built and operated the largest petrochemical complex in Latin America, which started operations in April 2016. In September 2020, we successfully started the production of PP from our Project Delta greenfield in La Porte, Texas, with a production capacity of 450 kilotons per year.

Robust Financial Performance Through the Industry Cycles

We have a track record of robust financial performance through the cycle, based on our scale and competitiveness. Our net cash generated (used) from operating activities was R\$14,786.5 million (US\$2,649.7 million), for the year ending in December 31, 2021, R\$6,293.0 million (US\$1,127.6 million) for the year ending in December 31, 2020, R\$2,265.3 million (US\$405.9 million) for the year ending in December 31, 2019, which represents our ability to generate positive, robust results across the industry cycles and varying macroeconomic circumstances.

Our Strategy

The key pillars of our strategy include:

Grow Renewables and Recycling

We have a long-standing commitment with sustainable development, and a proven track record in the implementation of successful initiatives that reinforce sustainability and mitigation of climate change, as exemplified by the ground-breaking investment in green PE in 2010, or our reduction of GHG emissions intensity by 17% in the period from 2008 to 2020.

We currently see strong demand for sustainable renewable products at attractive prices and intend to grow our capacity to meet this demand. The Company's commitment, approved by the Board of Directors, is to reach 1.0 million tons of Green PE production capacity by 2030, which represents a growth of 5.0x of our current production capacity. Moreover, we are working to accelerate the delivery of such commitment through strategic and financial partnerships.

Besides the expansion of our green PE production capacity, we continue to pursue further opportunities to grow this business in Brazil and abroad including: (i) the MoU with Lummus described above, and (ii) the MoU to perform feasibility studies to jointly invest with SCG Chemicals in a new bio-ethanol dehydration plant in Thailand to produce green ethylene.

We also intend to increase the sale of recycled products, work on preventing the disposal of plastic waste, and make our products increasingly more circular. By 2025, we aim to expand our portfolio to include 300,000 tons of thermoplastic resins and chemicals with recycled content and grow to 1.0 million tons of thermoplastic resins and chemicals with recycled content by 2030. To deliver our targets, we intend to work through partnerships with other companies in our value chain to strengthen both mechanical and chemical recycling globally. Just as an example of our commitment, we recently announced that we invested capital in the acquisition of a minority equity stake in Nexus Circular LLC, a Company which operates in advanced recycling that converts landfill-bound plastics into circular feedstocks used in the production of sustainable virgin plastic.

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We intend to be among the best companies in the chemical industry in terms of GHG emissions and a key player in capturing carbon dioxide (“CO₂”) emissions through the use of renewable raw materials. We have announced our ambition to be net zero by 2050 in scope 1 and 2 emissions, and to achieve a 15% reduction of current emissions by 2030.

Grow the Existing Business with Productivity and Competitiveness

We intend to continue to invest in our current business to maintain productivity and competitiveness, focusing on operational efficiency and excellence, commercial and logistics effectiveness, cost leadership, and differentiation through our relationships with clients.

As part of these investments, we are working on further expanding capacity of the “Fast Track” solution in Mexico that involves the incorporation of additional unloading stations, which could enable Braskem Idesa to reach maximum ethane import volume capacity of up to 35,000 barrels per day, with the project’s conclusion expected for the second quarter of 2022.

Additionally, we intend to invest on a new ethane terminal to support our Mexican operations by 2024. In September 2021, Braskem Idesa entered into an agreement with Pemex and other Mexican government entities that establishes the support measures to build this terminal with the capacity to meet all of Braskem Idesa’s raw material requirements.

We continue to evaluate opportunities arising from the reorganization of the global chemical industry, new feedstock availability in Brazil (from pre-salt) and elsewhere, downstream expansion utilizing our large base chemical volumes, and upstream integration into propylene in the United States and Europe.

We continue to implement processes and operations optimization initiatives through our global efficiency program called “Transform for Value,” which was developed to coordinate and accelerate improvement initiatives across different areas including our digital center, capital expenditures, competitiveness and productivity, energy, and other continuous improvement efforts

Continue to Innovate

We intend to continue to invest in innovation, in particular in renewables and recycling, but also across our traditional business.

A robust pipeline of sustainable solutions aims to provide step-change process, technology and upgrades for energy efficiency and carbon emission reduction, applications for plastic waste reduction, new renewable chemicals and polymers and more efficient carbon capture and utilization.

In December 2021, the I&T project portfolio included 223 projects for the development of new products, markets and processes, of which 61 projects are already under development. Our pipeline includes projects across the following strategic fronts: (i) improvements in core product & process, (ii) advances in circular plastic economy, (iii) increase in renewable feedstock initiatives; (iv) other.

Strengthen our Governance

Our shares are listed on the Level 1 listing segment of the B3 and on the New York Stock Exchange under the ticker BAK. We also voluntarily follow other high corporate governance standards, such as the implementation of a statutory audit committee in 2021 and the maintenance of at least 20% of independent board members.

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We are committed to strengthening our governance, compliance and people management systems, as well as our reputation with all stakeholders, positioning ourselves as a human-oriented, forward-thinking global company that cultivates strong relationships and generates value for all our stakeholders.

We have adopted a Code of Conduct, a Compliance System Policy and an Anti-corruption Policy, and several internal directives 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 by the compliance team and submitted for evaluation by our Ethics Committee and/or our Compliance and Statutory Audit Committee.

Responsible Capital Allocation and Shareholder Remuneration

We intend to continue to seek a balance in our capital allocation, returning capital to shareholders, while investing in our capital-intensive business and the growth opportunities it presents.

We are a company that consistently presents positive operating cash flow, even in downturns in the petrochemical cycle and our decision-making process aims to maximize the net present value of our future cash generation. We also have a strong liquidity position, with most debt maturing in the very long term (beyond 2030), in addition to solid credit metrics. We are considered an investment grade company by S&P Global Ratings and Fitch, with a BBB- corporate credit rating on a global scale and a stable outlook from both credit rating agencies.

We have captured opportunities through disciplined and profitable growth investments, whether building, acquiring or partnering on assets. We also have a rigorous process to manage our asset footprint, which has led us to selectively shut down plants in the past.

Our biopolymers strategy derives from investments that we expect to be value accretive due to strong expected growth in demand and competitive prices.

We remain focused on meeting our commitments and pursuing a disciplined financial strategy to limit the risks associated with the exposure to the cyclical and capital-intensive nature of our business.

Industry Overview and Trends

According to IHS, global demand for PE, PP, and PVC in 2021 is estimated to be 115 million metric tons, 85 million metric tons, and 49 million metric tons, respectively. Between 2020 and 2025, global demand for PE, PP, and PVC is expected to grow by 4.2%, 4.7%, and 4.5% per year, respectively, according to IHS. This is driven by strong end market dynamics, global gross domestic product growth, and infrastructure and construction projects spending. Polymers will likely continue to replace traditional materials, such as aluminum, steel, wood, and glass, in applications where they can provide cost advantages and better performances.

Green PE and Green Ethylene could represent a US\$10.0 billion addressable market by 2025 and US\$15.0 billion by the end of 2030, according to IHS. This represents a 18.5% growth per year between 2025 and 2030 for Green PE and Green Ethylene that would together represent approximately 5.0% of the total market for PE and ethylene including fossil and bio-based products in 2030.

Latin America and the US are our home markets, but we also very competitive in exports to Asia. Latin America, in particular, has high potential for polyolefin demand growth given its low plastics consumption per capita rates.

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Although market participants have announced a robust pipeline of supply additions, we believe that many such projects will be delayed and canceled, as has been the case over the last decade, leading to our industry enjoying high operating rates and strong margins.

Our History

Creation of Braskem

In July 2001, in partnership with the Mariani Group, Novonor (former Odebrecht) acquired a controlling interest in Copene (Camaçari Petrochemical Complex) in the state of Bahia. In August 2002, with the merger of Copene with five other companies, Braskem was created.

Consolidation of the Brazilian petrochemical industry

Between 2006 and 2010, we have invested in the consolidation of the petrochemical industry in Brazil. Two relevant steps in this stage of our growth were conducted in partnership with Petrobras, which led to the increase of their stake in the Company: the consolidation of our Southern Complex, which was executed between March 2007 and May 2009; and the acquisition of Quattor, which owned significant assets in São Paulo and Rio de Janeiro, announced in January 2010.

This consolidation strengthened the Brazilian petrochemical sector and allowed us to reach a new level of scale to face the challenges of the international market.

Beginning and consolidation of our internationalization

In February 2010, we announced the acquisition of the PP assets of Sunoco Chemicals and in July 2011, we announced the acquisition of Dow Chemical's PP business, including four plants (two plants in the United States and two plants in Germany). This acquisition represented an important step in the consolidation of our growth strategy in the Americas, consolidating us as the largest producer of polypropylene in the United States and strengthening our position in Europe.

In April 2016, our subsidiary Braskem Idesa, our former joint venture with the Mexican Idesa group, reached an important milestone with the production of the first batch of PE in the Mexico petrochemical complex, strengthening our internationalization strategy and ensuring greater access to competitive gas-based feedstocks.

In September 2020, we successfully started the greenfield Project Delta for the production of PP in La Porte, Texas, with a production capacity of 450 kilotons per year. We believe that this investment reinforces our PP leadership position in the region and strengthens our strategy to diversify the raw materials matrix and geographic expansion in the Americas.

Beginning of our renewables operations

In September 2010, Braskem started up its green ethylene plant in Triunfo, in the state of Rio Grande do Sul, Brazil, with a capacity to produce 200 kilotons per year, becoming the world leader producer in biopolymers and products made from renewable sources.

In February 2021, we announced a new project at the Triunfo petrochemical complex in Rio Grande do Sul to expand our current production capacity of green ethylene. With an estimated investment of US\$87.0 million, this project is expected to add 60 kilotons per year to the production of green ethylene in the Company's portfolio and is expected to be completed in December 2022.

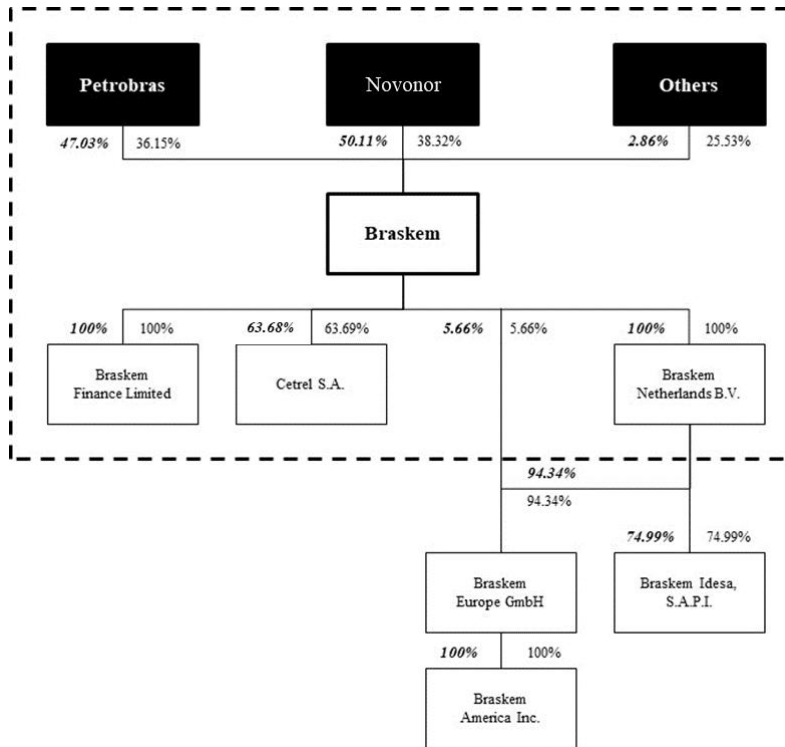
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In September 2021, we entered into a memorandum of understanding to perform feasibility studies to jointly invest with SCG Chemicals in a new bio-ethanol dehydration plant in Thailand to produce green ethylene. SCG Chemicals is one of the largest integrated petrochemical companies in Thailand and an industry leader in Asia. The investment is subject to the conclusion of the studies, mutual agreement of Braskem and SCG Chemicals, and approval by competent governance bodies.

Additionally, in November 2021, Braskem and Lummus Technology, a worldwide leader in ethylene, petrochemical, energy transition and other process technologies, executed a memorandum of understanding to jointly license Braskem’s green ethylene technology to two projects in different regions of the world, displaying a global interest in the technology.

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 and italics represent the direct or indirect percentage of the voting share capital owned by each entity, and the percentages not in bold and italics represent the direct or indirect percentage of the total share capital owned by each entity.



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The SEC maintains an internet website at www.sec.gov that contains reports, proxy and information statements and other information regarding companies that file or furnish documents electronically to the SEC, including us. Our internet website is www.braskem.com.br, and the internet website of our investors relations' department is www.braskem.com.br/ri. 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.

Reportable Segments

Chemicals Operations that are Part of our Brazil Segment

Our chemicals operations that are part of our Brazil Segment are 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 operations that are part of our Brazil Segment produce:

- 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 operations that are part of our Brazil Segment are used primarily in the manufacture of intermediate second generation petrochemical products, including those manufactured by our polyolefins and vinyls operations that are part of our Brazil Segment. Our chemicals operations that are part of our Brazil Segment also supply 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.

Products of Our Chemicals Operations that are Part of our Brazil Segment

Our other business units and third-party petrochemical producers use ethylene and propylene produced by our chemicals operations that are part of our Brazil Segment 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.

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The following table sets forth the sales volume of basic petrochemical products by our chemicals operations that are part of our Brazil Segment (excluding our intra-company sales) for the periods indicated.

	Year Ended December 31,		
	2021	2020	2019
	<i>(in thousands of tons)</i>		
Domestic sales:			
Ethylene	516.8	486.3	464.1
Propylene	370.7	282.1	341.9
Cumene	204.2	186.6	219.0
Butadiene	172.2	122.9	161.0
BTX products ⁽¹⁾	741.9	676.6	618.7
Gasoline	1,058.9	953.9	1,007.3
Others	439.1	430.8	443.8
Total domestic sales of Chemicals	<u>3,503.7</u>	<u>3,139.2</u>	<u>3,255.8</u>
Total export sales of Chemicals	<u>842.0</u>	<u>785.1</u>	<u>1,060.9</u>
Total sales of chemicals	<u>4,345.7</u>	<u>3,924.3</u>	<u>4,316.7</u>

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

Production Facilities of Our Chemicals Operations that are Part of our Brazil Segment

We believe that the technological processes we use at plants in our chemicals operations that are part of our Brazil Segment are among the most advanced in the world. Our chemicals operations that are part of our Brazil Segment currently include owning and operating:

- 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 operations that are part of our Brazil Segment, annual production capacity as of December 31, 2021 and annual production for the years presented.

Primary Products	Annual Production Capacity	Production For the Year Ended December 31,		
		2021	2020	2019
		<i>(in tons)</i>		
Olefins:				
Ethylene	3,952,000	3,026,634	3,027,070	3,185,203
Propylene	1,585,000	1,290,537	1,232,053	1,310,028
Butadiene	480,000	380,927	339,487	397,762
Aromatics:				
BTX products ⁽¹⁾	1,367,000	912,907	893,097	825,253

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

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Raw Materials of Our Chemicals Operations that are Part of our Brazil Segment

The main raw material that we use for chemical production is naphtha, with a total consumption capacity of up to 10 million tons per year. Up to one-and-a-half million tons of naphtha can be substituted by condensate, which in recent years was about one million tons. 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 operations that are part of our Brazil Segment. 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.

	2021	2020	2019
		<i>(in US\$/t)</i>	
Average ⁽¹⁾	US\$633.87	US\$354.68	US\$505.33
Month ended:			
January	500.46	527.23	459.16
February	555.34	465.41	499.83
March	572.95	246.70	533.15
April	557.94	138.41	563.16
May	592.95	228.91	544.57
June	633.61	342.23	472.94
July	673.39	380.85	503.46
August	646.87	381.15	446.86
September	678.81	366.74	479.46
October	763.05	375.07	491.00
November	733.07	370.74	529.99
December	698.05	432.70	540.33

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

Source: Braskem Global Market Intelligence.

Supply Contracts and Pricing of the Chemicals Operations that are Part of our Brazil Segment

Naphtha and Condensate

The following table shows the distribution of the naphtha plus condensate purchases by our chemicals operations that are part of our Brazil Segment for the periods indicated by geographic location of the suppliers.

	Year Ended December 31,		
	2021	2020	2019
Brazil	31%	54%	37%
Europe	23%	14%	20%
South America	2%	5%	10%
North America	30%	16%	16%
Africa	15%	12%	16%
Others	0%	0%	1%
Total	100%	100%	100%

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Supply Contracts with Petrobras

Throughout 2021, Braskem and Petrobras entered into 4 new naphtha supply contracts to provide naphtha for our plants in the Southern Complex, the Northeastern Complex and the São Paulo Complex. All contracts have a term of 5 years until the end of 2025.

Under the terms of these agreements:

- 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 for each of our Complexes;
- we have the option to purchase additional volume for the São Paulo Complex and Petrobras has an option to sell us additional volume for our Northeastern and Southern Complexes;
- 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 based on international price references;
- 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.

In December 2021, ACELEN concluded the acquisition of REFMAT, a refinery previously owned by Petrobras, located in the state of Bahia, and one of the suppliers for our Northeastern Complex. As per the terms and conditions of the sale and purchase agreement, the supply agreement was assigned to ACELEN, which, as of December 2021, replaced Petrobras as Braskem's supplier in connection with such refinery.

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.

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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 operations that are part of our Brazil Segment 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 term of this contract was December 2020 and this agreement could be automatically renewed for one two-year period, unless either party notifies the other party in writing stating that there was no intention to renew the agreement, at least one year prior to the expiration of the contract. In 2019, Petrobras informed us that it would not renew this agreement on the same terms.

In December 2020, we and Petrobras entered into a new ethane and propane supply agreement with a term of five years, from January 1, 2021 to December 31, 2025 as follows:

- 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 prices for ethane and propane are based on international price references; 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 2021 was 30.9 ktons, 2020 was 30.9 ktons, and in 2019 it was 35.3 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, there was no consumption of ethane feedstock in 2021, 1.8% in 2020 and 1.5% in 2019.

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 had validity for 15 years and parties should negotiate extension prior to its expiration in 2020. In the event Petrobras has no intention to renew this agreement, they should notify us at least two years prior to the expiration of this agreement and, in this case, should perform under the terms and conditions of this agreement for 8 years after original expiration date.

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In December 2017, Petrobras informed us that they would not renew this agreement on the same terms. Therefore, the contract will remain valid and under original conditions until 2028.

The impact of the new terms and conditions of a possible future agreement after 2028 and any failure to successfully negotiate such terms with Petrobras could impair our ability to satisfy our refinery off gas needs.

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.

Electricity

To supply our industrial operations in Brazil, which represented 76.7% of our global electric consumption in 2021, we self-generated 23.4% of our electrical energy consumption. 28.2% of our demand in 2021 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 39.7% of the energy consumption, and about 48.0% of the demand is supplied by CHESF. The remaining energy is acquired primarily from several suppliers in the free energy market;
- In the Alagoas plants, 74.6% of the energy consumption is supplied by CHESF. Therefore, the remaining energy from the Alagoas plants is acquired primarily from several suppliers in the free energy market;
- In the Southern Complex, we self-generate 29.9% 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 9.1% 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.

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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 2021 represented 64% of our consolidated consumption.

- In the Bahia Complex, natural gas is supplied by Companhia de Gás da Bahia, or Bahiagás, which represents 42% of our consumption in Brazil.
- In the Alagoas plants, natural gas is supplied by Gás de Alagoas S.A., or Algás, which represents 18% 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 18% 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 16% of our consumption in Brazil.
- In the Rio de Janeiro Complex, natural gas is supplied by Naturgy Brasil, which represents 6% of our consumption in Brazil.

Others

In the Southern Complex until June 2021 we also buy methanol to produce MTBE and ethanol to produce the “green polyethylene.” After June 2021 we purchased ethanol to produce the “green polyethylene” and ETBE. Methanol is imported and its price is based on 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 Operations that are Part of our Brazil Segment

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.

Domestic Sales of Chemicals

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

Export Sales of Chemicals

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

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

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. 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 Operations that are Part of our Brazil Segment

As of December 31, 2021, our polyolefins production facilities had the largest annual production capacity of all second generation producers of polyolefins products in Latin America. Our polyolefins operations that are part of our Brazil Segment 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 Operations that are Part of our Brazil Segment

Our polyolefins operations that are part of our Brazil Segment produce:

- polyethylene, including LDPE, LLDPE, HDPE, 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 operations that are part of our Brazil Segment by product and by market for the years indicated .

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	Year Ended December 31,		
	2021	2020	2019
	<i>(in thousands of tons)</i>		
Domestic sales:			
Polyethylene ⁽¹⁾	1,789.7	1,886.7	1,789.7
Polypropylene	1,208.7	1,250.3	1,142.8
Total domestic sales	2,998.4	3,137.0	2,932.5
Total export sales	822.0	1,051.8	1,391.8
Total polyolefins sales	3,820.4	4,188.8	4,324.3

(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 Operations that are Part of our Brazil Segment

As of December 31, 2021, our polyolefins operations that are part of our Brazil Segment owned 14 production plants. Our polyolefins operations that are part of our Brazil Segment operate 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, 2021 and annual production for the years presented.

Primary Products	Annual Production Capacity	Production For the Year Ended December 31,		
		2021	2020	2019
		<i>(in tons)</i>		
Polyethylene:				
LDPE/EVA ⁽¹⁾	795,000	586,205	644,747	675,075
HDPE/LLDPE/UHMWPE ⁽²⁾	2,260,000	1,858,824	1,927,512	1,935,752
Polypropylene ⁽³⁾	1,850,000	1,511,794	1,568,723	1,638,974

(1) Represents capacity and production at five production facilities, part of them with swing line capacity capable of producing two types of resins.

(2) Represents capacity and production at seven production facilities, part of them 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 Operations that are Part of our Brazil Segment

Ethylene and Propylene

The most significant feedstock of our production of polyethylene and polypropylene are ethylene and propylene that are produced by our chemicals operations that are part of our Brazil Segment. In 2021, our polyolefins operations that are part of our Brazil Segment consumed all of the ethylene and part of the propylene produced by our chemicals operations that are part of our Brazil Segment.

Propylene Contracts with Petrobras and its Subsidiaries

We have entered into multiple propylene agreements, which had initial terms expiring at various dates between May 2021, which was automatically renewed for five additional years, and December 2029, and are priced based on international references to assure competitiveness of feedstock.

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In 2016, Braskem entered into an agreement with Petrobras for a five-year propylene supply contract with Refap S.A., a subsidiary of Petrobras. This supply contract is also priced based on international references. In October 2021, Petrobras and Braskem renewed for one year the propylene supply contract with REFAP. The contract will last between November 2021 and October 2022 and has the same volume and pricing conditions as the previous contract.

In December 2021, Petrobras and Braskem entered into five new propylene contracts, to be supplied by REPLAN, REVAP, REPAR, REDUC and RECAP, which replaced the existing contracts. These contracts expire between 2026 and 2029 and are priced on international references to assure the competitiveness of feedstock.

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 buy ethanol from Brazilian producers to supply our facility that produces ethylene (besides ETBE) using sugar cane ethanol. Some agreements expire in 2024 and others have no specific expiration date. We also purchase ethanol on the spot market from time to time to supplement the contracted volumes. Under the contracts we have, 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 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).

Other Materials and Utilities

Our polyolefins operations that are part of our Brazil Segment use butene and n-hexane as raw materials in the production of HDPE and LLDPE. Butene is consumed from our chemicals operations that are part of our Brazil Segment, and we import n-hexane from suppliers located in 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 Operations that are Part of our Brazil Segment

Through our polyolefins operations that are part of our Brazil Segment, we sell 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 operations that are part of our Brazil Segment generally are third generation petrochemical producers that manufacture a wide variety of plastic-based consumer and industrial goods.

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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. 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, through our polyolefins operations that are part of our Brazil Segment we sell products in Brazil through exclusive independent distributors. Our polyolefins operations that are part of our Brazil Segment 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 operations that are part of our Brazil Segment 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 operations that are part of our Brazil Segment 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, Europe and Asia 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 allows us to further enhance our position in those markets and sell our polyolefins operations that are part of our Brazil Segment's products through our USA and Europe Segment.

The main focus of our polyolefins operations that are part of our Brazil Segment 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.

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In addition, besides our strategic sales to South America, Europe, Mexico and the United States, our polyolefins operations that are part of our Brazil Segment 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 2021, Brazilian polyethylene and polypropylene imports increased by 12.4% and represented 36.0% 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.

Vinyls Operations that are Part of our Brazil Segment

We were the leading producer of PVC in Brazil, based on sales volumes and installed capacity in 2021. As of December 31, 2021, our PVC production facilities had the second largest annual production capacity in Latin America.

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 operations that are part of our Brazil Segment also manufacture caustic soda, which is mainly used by producers of alumina, pulp and paper, and in the soap industry.

In 2021, we had an approximate 43.2% share of the Brazilian PVC market and 23.3% of market 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 operations that are part of our Brazil Segment.

Products of Our Vinyls Operations that are Part of our Brazil Segment

The following table sets forth a breakdown of the sales volume of our vinyls operations that are part of our Brazil Segment by product line for the years indicated.

	For the Year Ended December 31,		
	2021	2020	2019
		<i>(in thousands of tons)</i>	
PVC	495.4	525.7	491.3
Caustic soda	315.7	150.6	243.2
Other ⁽¹⁾	22.4	34.4	72.1
Total domestic sales	833.4	710.7	806.7
Total export sales	8.9	21.7	22.2
Total vinyls sales	842.4	732.4	828.8

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

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Production Facilities of Our Vinyls Operations that are Part of our Brazil Segment

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

In January 2020, Braskem announced the permanent shutdown of its chlor-alkali production facility located in Camaçari, in the State of Bahia, whose operations started in 1979 with annual production capacity of 79,000 tons of caustic soda and 64,000 tons of chlorine. The shutdown is explained by the end of the facility's useful life and started in April 2020, following applicable safety standards and seeking to protect people, local communities and the environment.

The table below sets forth for each of our primary vinyls products, our annual production capacity as of December 31, 2021 and annual production for the years presented.

Primary Products	Annual Production Capacity	Production For the Year Ended December 31,		
		2021	2020	2019
PVC	710.0	465.0	448.5	461.1
Caustic Soda	460.0	187.5	9.0	123.2

Raw Materials of the Vinyls Operations that are Part of our Brazil Segment

Ethylene

The most significant feedstock associated with the production of PVC is ethylene. Our chemicals operations that are part of our Brazil Segment supply all of the ethylene required by our vinyls operations that are part of our Brazil Segment.

Electricity

Electric power is a significant cost component in our production of chlorine and caustic soda. Our vinyls operations that are part of our Brazil Segment obtains its electric power requirements from various generators under long-term power purchase agreements (see "Chemicals Operations that are Part of our Brazil Segment—Supply Contracts and Pricing of the Chemicals Operations that are Part of our Brazil Segment—Electricity").

Salt

We used 365,732.15 tons of salt during 2021.

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 149,864 tons of caustic soda to supply our customers and 202,819 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 was stocked, dissolved in water to make brine and then treated and sent for processing. After concluding the commissioning process in accordance with applicable safety standards, we started production of chlor-alkali and dichloroethane at our unit located in the Pontal da Barra district of Maceió, in the state of Alagoas, which had been idled since May 2019. The cost of the project was R\$67.7 million, of which R\$0.9 million was disbursed in 2021, R\$43.6 million was disbursed in 2020, R\$21.2 million was disbursed in 2019, and the remaining balance will be disbursed in 2022. 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 Operations that are Part of our Brazil Segment

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 operations that are part of our Brazil Segment maintain 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 12 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 operations that are part of our Brazil Segment 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 current customers and potential customers that are considering the installation of manufacturing equipment for PVC downstream products.

In addition, our vinyls operations that are part of our Brazil Segment 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 1.5% of our consolidated sales volume in 2021.

Prices and Sales Terms

The domestic price for PVC resins is based on the import parity of PVC imported by converters in Brazil, which generally reflects the Northeast Asian spot market price, plus exchange rate variation. 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, plus exchange rate variation.

Competition

PVC

Unipar Indupa (formerly Carbochloro 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 41% of Brazilian PVC consumption in 2021. Domestically produced PVC is currently competitively priced with imported PVC, considering that our price is based on the international market.

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

Caustic Soda

According to IHS and Abiclor (Associação Brasileira da Indústria de Álcalis, Cloro e Derivados), the three largest Brazilian producers of caustic soda, including Braskem, accounted for 91% of capacity in Brazil in 2021. 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 38% of Brazil's total caustic soda consumption in 2021, excluding Braskem imports. Due to the mining event in Alagoas, our chlor-alkali plant was idled in 2019 and we have been importing caustic soda from various sources to keep supplying customers in Brazil since then.

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.

USA and Europe Segment

Our USA and Europe Segment includes:

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

As of December 31, 2021, our USA and Europe Segment's facilities had the largest annual polypropylene production capacity in the United States. Our USA and Europe Segment generated net revenue of R\$32,403.6 million during 2021, or 29.9% of the net revenue of all reportable segments.

In June 2014, we announced the construction of an UHMWPE production line in our La Porte, Texas site, which began producing UTEC® in the first quarter of 2017. We believe that the production of specialized UHMWPE at this 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.

In June, 2017, we announced the construction of a Polypropylene Unit ("Delta") at our La Porte, Texas site. Aligned with the strategy to diversify the raw materials matrix and geographic expansion in the Americas, this is a new world-class PP production facility with an annual polypropylene production capacity of 450,000 tons. In September, 2020, we announced that after completing the commissioning phase, we have started commercial production of PP at this new plant. We believe that this investment reinforces our PP leadership position in the region, as it will enable us to replace imported PP volumes in the North American domestic market and also scale up our exports supporting structural global demand with existing global clients.

Products of Our USA and Europe Segment

Our USA and Europe Segment produces polypropylene. The sales volume of polypropylene by this unit was 2,217.1 tons in 2021, 1,968.2 tons in 2020 and 1,920.4 tons in 2019. For a description of the uses of our polypropylene products, see "—Polyolefins Operations that are Part of our Brazil Segment."

[Table of Contents](#)**Production Facilities of our USA and Europe Segment**

The table below sets forth the annual production capacity as of December 31, 2021 of the USA and Europe Segment'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,		
		2021	2020	2019
United States	2,021,000	(in tons) 1,728,567	1,446,066	1,435,298
Germany	625,000	570,211	493,304	494,241

Raw Materials of Our USA and Europe Segment*Propylene*

The most significant direct cost associated with the production of polypropylene by our USA and Europe Segment 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, 2021, we had 14 supply agreements with multiple suppliers. The pricing formulas for propylene under these supply agreements are generally based on international 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 commenced operations in 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 90% of the propylene requirements of these plants. We have two main supply agreements in Germany. One has a five-year agreement effective since October 1, 2021 with a term until September 30, 2026, and thereafter will automatically be renewable for consecutive one-year terms, unless terminated by one of the parties. The other agreement expires in December 2023, and thereafter will also be automatically renewable for consecutive one-year terms, unless terminated by one of the parties. We have entered into a third contract that will expire at the end of 2022, increasing the supply of our plants to 93% 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 Segment

Our USA and Europe Segment sells polypropylene products to approximately 392 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 Segment generally are third generation petrochemical producers that manufacture a wide variety of plastic-based consumer and industrial goods.

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

	For the Year Ended December 31,		
	2021	2020	2019
Net revenue:		(in millions of reais)	
USA and Europe	32,403.6	14,638.7	10,044.3

51% of the sales of polypropylene by the USA and Europe Segment 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 Segment 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 Segment 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 and Europe are other large international petrochemical companies. In general, demand is a function of economic growth in North America, Europe and elsewhere in the world.

Mexico Segment

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 of December 31, 2021, our Mexico Segment had the largest annual polyethylene production capacity in Mexico. Our Mexico Segment generated net revenue of R\$6,506.3 million during 2021, or 6.0% of the net revenue of all of our reportable segments.

Products of Our Mexico Segment

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 628,744 tons in 2021. 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.

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Technologies selected for the Mexico Segment are proven and considered state of the art with excellent track records in the petrochemical market and we believe it 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 Segment

Our Mexico Segment 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;
- a low-density polyethylene plant, with an annual production capacity of 300,000 tons, which commenced operations in June 2016;
- a 150-megawatt power generation plant consisting of one gas turbine and two steam turbines; and
- an effluents treatment plant and a water treatment plant, which return water to the community in a condition that exceeds the applicable regulatory requirements.

Plant	Annual Production Capacity	Production For the Year Ended December 31,		
		2021 (in tons)	2020	2019
Mexico (Polyethylene)	1,050,000	696,142	780,176	800,783

Raw Materials of Our Mexico Segment

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 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 represents 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 ethane, from two main sources. Approximately 50% to 60% of total ethane needs is sourced under the Ethane Supply Agreement with Pemex TRI, a state-owned Mexican entity, while the remaining is complemented with imported ethane coming from the United States and delivered to our Complex through freight trucks that transport cryogenic isocontainers as part of the Fast Track Solution.

Braskem Idesa also intends to develop the Ethane Import Terminal, a long-term alternative source of imported ethane, and a pipeline that will connect the terminal directly to our Complex. The expected ethane capacity of the Ethane Import Terminal would be enough to fulfill the total ethane needs for the Mexico Complex. This terminal would provide the capacity to import more ethane than we currently require. As a result, our Mexico Segment will be able to source its total needs towards increasing our polyethylene production and taking advantage of the forecasted demand for polyethylene products in North America and globally.

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The estimated cost of the Ethane Import Terminal and related infrastructure investment is approximately US\$400.0 million (inclusive of financing costs and VAT). Our Mexico segment expects to subscribe for up to 50% of the shares issued by the company that will develop the Ethane Import Terminal. We intend to fund our investment in the Ethane Import Terminal with a combination of equity and debt, through a joint venture with one or more suitable unaffiliated third parties that will secure equity and debt financing in an unrestricted subsidiary. The Ethane Import Terminal is expected to be completed and to reach full capacity by 2024, but there may be delays. For additional information, see “Item 3. Key Information—Risk Factors—Risks Relating to Us and the Petrochemical Industry—We depend on ethane supplied by Pemex TRI in Mexico,” “Item 3. Key Information—Risk Factors—Risks Relating to Us and the Petrochemical Industry—We rely on limited or sole-source suppliers for our raw materials, inputs and energy, including transportation thereof.”

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 Segment uses natural gas as the main fuel for its production process, which is supplied mainly private suppliers using the pipelines that are the property of the *Centro Nacional de Control del Gas Natural* (“Cenagas”).

In early December 2020, Braskem Idesa received a notification from Cenagas (Centro Nacional de Control del Gas Natural), a Mexican state-owned agency responsible for all-natural gas pipelines and transportation in Mexico, related to the unilateral termination of the natural gas transportation service, an essential energy input for the production of PE in our Mexico Segment. As a result, in compliance with safety protocols, Braskem Idesa initiated procedures for the immediate interruption of its operating activities. Later in January 2021, Braskem Idesa partially resumed its using ethane to replace the lack of natural gas in order to continue producing PE. Braskem Idesa took legal measures under the ethane supply agreement entered into with Pemex. Braskem Netherlands B.V, which is Braskem Idesa’s direct shareholder, also took legal measures under applicable international investment protection standards to protect Braskem Idesa’s interests and its parent company concerning their investment in Mexico. Such measures included a negotiation period to attempt to resolve the dispute between the parties.

In the first quarter of 2021, Braskem Idesa entered into the following agreements under a strict reservation of all rights: (i) a memorandum of understanding with Pemex TRI setting out certain understandings regarding potential amendments to the ethane supply agreement and the development of an ethane import terminal, subject to further negotiation, a definitive agreement and approval by Braskem Idesa’s shareholders and creditors; and (ii) a natural gas transport service agreement with Cenagas for a term of 15 years, which is conditioned upon the execution of the definitive agreement referenced in item (i) above. Following the execution of these agreements by Braskem Idesa, it resumed receiving natural gas transportation services from Cenagas. In addition, Braskem Idesa signed the Amended ESA with PEMEX and the Terminal Agreement, complying with the condition of the natural gas transport service agreement mentioned in item (ii) above.

For additional information, see “Item 3. Key Information—Risk Factors—Risks Relating to Us and the Petrochemical Industry—We depend on ethane supplied by Pemex TRI in Mexico,” “Item 3. Key Information—Risk Factors—Risks Relating to Us and the Petrochemical Industry—We rely on limited or sole-source suppliers for our raw materials, inputs and energy, including transportation thereof” and “Item 3. Key Information—Risk Factors—Risks Relating to Us and the Petrochemical Industry—Political and economic conditions and government policies in Mexico, including political interferences in state-owned companies such as Pemex TRI and Cenagas, and elsewhere may have a material impact on our operations.”

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

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Our Mexico Segment uses catalysts supplied by Ineos Europe Limited.

Supply Contracts of the Mexico Segment

Ethane

The primary feedstock in our polyethylene production process is ethane. Braskem Idesa currently sources ethane from two main sources: (i) locally, pursuant to the Ethane Supply Agreement with Pemex TRI, a state-owned Mexican entity; and (ii) imports from the United States and delivered to our Complex through freight trucks that transport cryogenic isocontainers as part of the Fast Track Solution. As of the year ended December 31, 2020 and 2021, ethane supply from Pemex TRI was 87%, and 65%, respectively and 13%, and 35%, respectively, from the Fast Track Solution.

Ethane Supply Agreement (Pemex TRI)

Braskem Idesa is party to an ethane supply agreement with Pemex TRI, a subsidiary of Pemex, dated February 19, 2010, based on commercial conditions (“BI’s Ethane Supply Agreement”)

On September 27, 2021, we signed the third amendment to the BI’s Ethane Supply Agreement (the “Amended ESA”). Upon effectiveness, the Amended ESA modified certain terms of the BI’s Ethane Supply Agreement, including:

- Our Mexico Segment agreed to reduce the contractual volume to be purchased on a deliver or pay basis from 66,000 to 30,000 barrels of ethane per day (“Contractual Volume”), until February 2025, provided, that if we suffer delays in obtaining licenses and permits to operate the Ethane Import Terminal attributable to Mexican governmental authorities or Pemex, Pemex TRI will deliver the contractual volume after February 2025 for the time caused by these delays, on a day-by-day basis. In the event of any extension concerning the supply period of the Contractual Volume or non-achievement of the commencement of the Ethane Import Terminal (the “Ethane Import Terminal COD”) commercial operations due to the longstop date under the Amended ESA (the “Contractual Volume Longstop Date”), then Pemex TRI will supply, for an additional period of up to 12 months, 15,000 barrels per day of ethane to Braskem Idesa during the period from the Contractual Volume Longstop Date (or such later date) until the Ethane Import Terminal COD (the “Extended Volume”);
- Our Mexico segment has a right of first refusal to acquire ethane that Pemex TRI and its affiliates do not consume for their own processes or for the production of ethylene and derivative products, in a daily volume of up to: (i) for as long as Pemex TRI must supply the Contractual Volume, 1,625,576 cubic meters (approximately 36,000 barrels per day); and (ii) after Pemex TRI no longer should supply the Contractual Volume, 2,980,220 cubic meters (approximately 66,000 barrels per day).
- The ethane purchase price under the Amended ESA is based on commercial conditions at prices that reference the Mont Belvieu purity ethane price, a U.S. dollar-based international reference price, plus logistics and other applicable costs. The conditions set out in the Amended ESA will have retroactive effects until February 26, 2021.
- If Pemex TRI fails to deliver an average daily volume of ethane below the Contractual Volume during any quarterly period, it will compensate us by providing additional volumes of ethane over the following two quarterly periods; provided that we will not have the obligation to take ethane above the contractual maximum daily volume. If Pemex TRI does not compensate for such supply shortfall during mentioned cure period, it will pay us liquidated damages at a rate equal to 50% of the volume that Pemex TRI failed to deliver and did not compensate. The cap on such liquidated damages is R\$1,618.5 million (US\$290.0 million) during any given year. We may terminate the Amended ESA and exercise the put option thereunder if Pemex TRI fails to deliver at least 75% of the Contractual Volume for 180 consecutive days.

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- If Braskem Idesa fails to take an average daily volume of ethane at least equal to the Contractual Volume during any quarterly period, Braskem Idesa will compensate Pemex TRI by purchasing additional volumes of ethane over the succeeding two quarterly periods (not exceeding the contractual maximum daily volume). If our Mexico Segment does not purchase such additional volumes of ethane during such a cure period, Braskem Idesa will pay Pemex TRI liquidated damages at a rate equal to 50% of the average price of the volume that we failed to purchase and did not compensate. The cap on such liquidated damages is R\$1,618.5 million (US\$290.0 million) during any given year.
- As stated under the Amended ESA, the revised term is 20 years starting from the commencement date of supply under the BI's Equity Supply Agreement, which occurred in June 2015, with three periods of extension of ten years each, being the first extension period mandatory for Pemex TRI and Braskem Idesa.

Pemex TRI may terminate the Amended ESA in the event of (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 75% of the 30,000 barrels of ethane per day over six months, (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 Amended ESA, require Pemex TRI to repay certain of our outstanding debt and under termination scenarios provide compensation for equity investments according to an agreed valuation formula.

Ethane Supply Agreement (Fast Track).

On February 25, 2020, Braskem Idesa entered into an open order quantity agreement with Braskem Netherlands for the supply of liquid ethane with a minimum purity level of 95% in effect until 2021, the BNL Ethane Supply Agreement. (the "BI-BNL Ethane Supply Agreement").

On October 9, 2021, we entered into an amendment to the BI-BNL Ethane Supply Agreement (the "BI-BNL Ethane Supply Agreement Amendment") in order to enhance the alternate ethane supply provided to us by the Fast-Track Solution. The purpose of the BI-BNL Ethane Supply Agreement Amendment is the additional acquisition of the volumes supply of liquid ethane above the maximum amount of the BI-BNL Ethane Supply Agreement loaded during February 2021 through January 22, 2022.

Electricity and Water

The Mexico Complex has its own power generation plant consisting of one gas turbine and two steam turbines, which can generate 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 an alternative 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 2029 and is subject to renewal.

The main feedstock used for power generation is natural gas, which is mainly supplied by private suppliers and Pemex through Cenagas. In December 2020, we received a notification from Cenagas (*Centro Nacional de Control del Gas Natural*), a Mexican state-owned agency solely responsible for the natural gas pipelines and transportation in Mexico, related to the unilateral non-renewal of the service of natural gas transportation, an essential energy input for the production of PE in our Mexico Segment. As a result, in compliance with safety protocols, Braskem Idesa initiated procedures for the immediate interruption of its operating activities, which may have a material adverse effect on our operating or financial results, depending on the timing of the stoppage. Later in January 2021, Braskem Idesa partially resumed its operating activities using ethane to replace the lack of natural gas in order to continue producing PE. Braskem Idesa also initiated legal measures to enforce its legal and contractual rights.

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In February 2021, Braskem Idesa entered into a natural gas transport service agreement with Cenagas for a term of 15 years. Following the execution of this agreement by Braskem Idesa, it continued receiving natural gas transportation services from Cenagas. For additional information, see “Risk Factor - Political and economic conditions and government policies in Mexico, including political interferences in state-owned companies such as Pemex TRI and Cenagas, and elsewhere may have a material impact on our operations.”

Sales and Marketing of Our Mexico Segment

Our Mexico Segment sells polyethylene products to over 196 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 Segment generally are third generation petrochemical producers that manufacture a wide variety of plastic-based consumer and industrial goods.

Domestic Mexican Sales

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 and being able to respond faster to 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 Segment sells products in Mexico through independent distributors. Our Mexico Segment 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 Segment 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 and South America, Asia, and Europe, using our existing sales force and complementing our portfolio in those regions, in order to use the already established Braskem sales channels in the United States and Europe, the strategy of exports of the Mexico Segment 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.

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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 Segment's export sales consist of volumes to South America, 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 Segment has been focused on export sales directly to customers in the United States, Europe, Central America and the Caribbean and South America, so the price in the local of the sale, excluding the logistics costs to move the product until that place and the other variable costs, ex-raw material, 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, Latin America and Europe. Our export business is a commodity 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.

Technology, Research and Development

Research and Development

R&D is key to developing differentiated offers for our priority markets and enabling growth through product portfolio upgrade and the development of new technologies in catalysis and process. One of our priorities is to support the recently announced goals towards carbon neutrality and plastic waste reduction by delivering sustainable solutions. To ensure business perpetuity, the Innovation & Technology area also works to leverage disruptive technologies. A close relationship with customers and market amplifies our ability to understand the current needs and anticipate future opportunities.

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. As of December 31, 2021, we had 303 employees dedicated to R&D. Through these centers, we coordinate and conduct our research and development activities that include scale-up (pilot plants operation), analytical testing, catalyst development and testing, advanced materials characterization, process technology development and research capabilities on renewable sources and biotechnology.

We are advancing in the expansion of the Technology and Innovation Centers in Rio Grande do Sul/Brazil, with total investments of around US\$10 million (US\$4.8 million just in 2021). These new laboratories will support research focused on both chemicals and specialties and polyolefins businesses and will support the development of catalysis projects, polymer science and will support the analytical team of the Technological Centers.

A number of recent updates have been made to the new product portfolio, including the development of high performance film grades for packaging, resins to provide soft touch on personal care high-end applications, high performance grades for agrochemicals packaging, new specialty grades with differentiated sealing performance applied to high-speed packaging, new proprietary catalysts for polyolefin production and several process technology upgrades.

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Braskem efforts in Additive Manufacturing evolved towards the consolidation of a new area for the Company, highlighting the expansion of the product portfolio with the new and innovative carbon fiber reinforced polypropylene filament and also by launching new channels to market, such as the Amazon e-commerce store to make our products also accessible to consumers.

Two important components of the Open Innovation strategy are Technology Scouting and Competitive Funding:

By leveraging our internal R&D resources with collaborative projects with R&D institutions, universities and other companies, we are able to explore new technology routes and scale-up processes. In 2021 several projects were approved by funding agencies, including the multinational “InRep: An integrated approach towards recycling of plastics” in Europe, the Engineering Research Center for Plastics in Brazil, and the DOE-funded “Dynamic crosslinking for EVA recycling” in the US.

Technology Scouting has been built up to identify startups and technology providers, capture early-stage technologies, and manage an idea pipeline, evaluating the strategic alignment and the feasibility of hundreds of ideas. This resulted in the launch of more than ten I&T projects, dealing with such relevant subjects as plastic waste recycling, CO₂ capture and utilization, graphene, material substitution, and new bio-based materials.

Furthermore, we continue to invest in Sustainable Innovation. We ended 2021 with 81% of Innovation and Technology Projects (I&T) in the sustainability index. The index covers the following topics: water savings, energy savings, chemical safety (process/product), greenhouse gas emissions and circularity.

As for practical actions in sustainable solutions, we are advancing in internal projects and collaborations and partnerships with several third parties, as follows: (i) advance in biotechnology research with a focus on proof of concept of routes to produce solvents and plastics of renewable origin; (ii) a partnership between the Company and the Danish-based Haldor-Topsoe, which is a world leader in catalysis and surface science; in 2021, continued advancing the technology to produce bio-based monoethylene glycol (bio-MEG) moving towards the final steps of technology development, reinforcing our commitment to expand our portfolio of renewable products.

We increased our efforts with respect to recycling solutions to provide sustainable pathways for plastic waste reduction and strengthen our reputation as a sustainability leader. The portfolio of recycled resins has been upgraded with the launches new PP and PE post-consumer resin (PCR) grades. A dedicated team which we call the recycling platform coordinates all efforts relating to advanced recycling and mechanical recycling of plastic waste and aims to convert post-consumer plastic into high-quality recycled resins. Our focus is to increase the share of certified recycled resins in our portfolio. In this regard, several partnerships have been established last year, for example: (i) Nexus Circular LLC (“Nexus”) and Lummus, companies specializing in advanced plastics **recycling**; and (ii) Fábrica Carioca de Catalisadores – FCC, SENAI/ CETIQT and UFRJ/ EngePol for the development of catalysts for advanced recycling, seeking to increase the energy efficiency of pyrolysis processes.

Maintenance

Most of our maintenance is performed by third-party service providers. For example, we have contracts with Novonor (), formerly called Odebrecht S.A., a subsidiary of our controlling shareholder OSP Investimentos S.A., or OSP Inv), 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 Southern Complex's aromatics and olefins units is schedule to take place in 2022;
- 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 2025.

Plants of Our Brazil, and USA and Europe Segment

We have a regular maintenance program for each of our polyolefin plants. Production at each of our polyolefin plants generally is shut down for 15 to 20 days every 3 to 4 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 polyolefin plants with those of our basic petrochemicals plants. While our chemicals facilities must be shut down for up to 45 days every 6 to 8 years 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 Segment 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 Northeast PVC plants are generally shut down for 15 to 35 days every two or three years to allow for regular inspection and maintenance. Our caustic soda and chlorine plant in Alagoas shuts down once a year for twenty days of maintenance in different parts of the plant.

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, among others. 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\$857.3 million in 2021, R\$537.9 million in 2020 and R\$369.8 million in 2019, 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.

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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, Rio de Janeiro Complex and Alagoas plants 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.

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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 plants, 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 59.1% of the solid waste generated by our facilities and 22.4% 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 8, 2020, our chlor-alkali plant in Bahia shut down following the end of the facility's useful life, and it has been decommissioned. The decommissioning strategy involves equipment's decontamination/dismantling, and the most appropriate waste destination.

Currently, the Company is dismantling the entire Unit (except the areas of demercurization of effluents and solid waste), disposing of its properly decontaminated waste, as well as planning the most appropriate strategies for diagnosis and remediation of potentially contaminated areas, which should be implemented as soon as the disassembly of the Unit and demolition of the Cell House shed are completed.

Compliance with Environmental Laws in the United States

Our operations in the United States are subject to 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 comply with applicable U.S. federal, state and local environmental laws and regulations.

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

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

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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 proposed regulations in this area would not specifically apply to Braskem America's operations.

Additionally, there are various legislative and regulatory measures to address GHG 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 GHG 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 GHG 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 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.

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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 our operations until 2022, 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 in 2018 our global positioning statement titled “Braskem’s Positioning in the Circular Economy.”

In the statement, we announced eight key global initiatives, 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;

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- 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, 2021 by location of facilities, products produced and size of plant.

Type of Product or Service	Location of Facilities	Size of Plant (in hectares) ⁽¹⁾
Chemicals	Triunfo	152.8
Chemicals	Santo André	74.1
Chemicals	Camaçari	65.5
Chemicals	Duque de Caxias	53.0
Chemicals	Mexico	23.6
Polypropylene	Paulínia	39.7
Polyethylene	Triunfo	30.5
Polyethylene	Camaçari	24.5
Polyethylene	Cubatão	17.6
Polyethylene	Santo André	15.8
Polyethylene	Duque de Caxias	15.0
Polyethylene	Mexico	14.9
Polypropylene	La Porte, Texas	87.0
Polypropylene	Neal, West Virginia	27.1
Polypropylene	Mauá	15.8
Polypropylene	Duque de Caxias	15.0
Polypropylene	Camaçari	13.2
Polypropylene	Triunfo	10.0
Polypropylene	Marcus Hook, Pennsylvania	6.9
Polypropylene	Freeport, Texas	8.9
Polypropylene	Seadrift, Texas	2.5
Polypropylene	Schkopau, Germany	3.7
Polypropylene	Wesseling, Germany	26.0
Caustic soda/chlorine	Maceió	15.0
PVC/caustic soda ⁽²⁾ /chlorine ⁽²⁾	Camaçari	12.6
PVC	Marechal Deodoro	186.7
Distribution Center	Vila Prudente/Capuava	3.2

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

(2) In January 2020, Braskem announced the permanent shutdown of its chlor-alkali production facility located in Camaçari, in the State of Bahia. The shutdown is explained by the end of the facility's useful life and started in April 2020, following the applicable safety standards and seeking to protect people, local communities and the environment.

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We believe that all of our operating facilities are in good operating condition. As of December 31, 2021, the consolidated net book value of our property, plant and equipment was R\$37,225.1 million.

The following properties are mortgaged or pledged to secure certain of our financial transactions: (1) our chemicals plant, our polypropylene 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, polypropylene plant and polyethylene plant located in the State of São Paulo; (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, 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.

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 A-), Inbursa (rating S&P AAA). These policies are valid until April 2023.

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

Policy / Region US\$ bn	Value at risk — P D + BI ⁽¹⁾	Indemnity Limit PD + BI ⁽¹⁾
Brazil	24.4	3.25
Mexico ⁽²⁾	5.2	2.4
USA and Germany ⁽²⁾	3.9	0.63

(1) PD = Property Damage; BI = Business Interruption.

(2) 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 34 months, depending on the plant and/or coverage.

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As part of our program, we also contract other insurance policies to cover specific risks, including general civil liability, the civil liability of directors and officers (“D&O”), environmental risks, domestic and international charter operations, charter’s liability, etc.

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 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.

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Compliance

We have adopted a Code of Conduct, a Compliance System Policy and an Anti-corruption Policy, and several internal directives 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 impartially investigated by an independent team. The Ethics Committee and the Statutory Compliance and Audit Committee are notified on the results and outcoming plans.

In addition to the above, the company has normative documents in place that rule and/or establish standards concerning, among others, risk management, purchases, sales, internal controls, internal audit, corporate credit card, delegation of authority, due diligence, conflicts of interest, business courtesies, investigations, sponsorships and donations, travels, interactions with public agents, transactions with related parties.

We have also put into practice specific compliance goals for our leadership and formal engagement with certain initiatives, such as the UN Global Compact and the Business Pact for Integrity and Against Corruption established by the Ethos Institute in Brazil.

In March 2020, based on the certification report issued by the independent monitors who have monitored us for the past three years, Brazil's Federal Prosecutor's Office (*Ministério Público Federal*), or the MPF confirmed the monitoring conclusion, the effectiveness of our compliance program and compliance with the obligations of the MPF Agreement. Later, on May 13, 2020, the DoJ and the SEC confirmed the end of the monitoring provided for in the agreements with such authorities.

In 2021, the Company was granted ISO 37001 - anti-bribery management systems published by International Organization for Standardization (ISO) attesting that Braskem's anti-bribery management system complies with rule's standards developed by ISO.

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, 2021 and 2020 and for the three years ended December 31, 2021, included in this annual report, as well as with the information presented under "Presentation of Financial and Other Information."

The following discussion contains forward-looking statements that involve risks and uncertainties, in particular with respect to the 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, 2021, 2020 and 2019 have been influenced, and our results of operations will continue to be influenced, by a variety of factors, including:

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- GDP growth in the regions where we operate, including as follows:
 - Brazil's GDP, which grew 4.6% in 2021, as compared to a 4.1% contraction in 2020 and a 1.1% expansion in 2019, which affected the demand for our products and, consequently, our sales volume;
 - the U.S. GDP, which grew 7.0% in 2021, as estimated in a report released by BEA on February 24, 2022, as compared to a 3.4% contraction in 2020 and a 2.3% expansion in 2019, which affected the demand for our products and, consequently, our sales volume;
 - Europe's GDP, which grew 5.3% in 2021, as estimated in a report released by Eurostat on March 8, 2022, as compared to a 7.2% contraction in 2020 and a 1.2% expansion in 2019, which affected the demand for our products and, consequently, our sales volume;
 - Mexico's GDP, which grew 5.0% in 2021, as estimated in a report released by INEGI on February 25, 2022, as compared to a 8.5% contraction in 2020 and a 0.1% contraction in 2019, which affected the demand for our products and, consequently, our sales volume; and
 - according to the IMF, despite the adverse effects of the COVID-19 pandemic on the economy of several countries in 2020 and 2021, which led to a global GDP contraction of 3.1%, in 2020 the world's GDP expanded 5.9% in 2021 and is expected to expand 4.4% in 2022, leading to a global economic recovery;
- the expansion or contraction of global production capacity for the products that we sell and the growth rate of the global economy;
- the international market price of propylene in the United States, one of our main raw materials, expressed in U.S. dollars, which has a significant impact on the cost of producing our products and which experienced a high level of volatility during the year ended December 31, 2021, fluctuating in a range between US\$1,235 and US\$1,951 per ton during such period, compared to fluctuation in a range between US\$573 and US\$1,069 per ton during 2020;
- the international market price of naphtha, one of our main raw materials, expressed in U.S. dollars, which has a significant impact on the cost of producing our products and which experienced a high level of volatility during the year ended December 31, 2021, fluctuating in a range between US\$501 and US\$764 per ton during such period, compared to fluctuation in a range between US\$140 and US\$528 per ton during 2020;
- the average Brazilian prices of resins 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 was stable in the year ended December 31, 2021, compared to the corresponding period of 2020, as a result of: the scheduled general maintenance shutdown at the petrochemical complex in ABC, São Paulo, which lasted for 63 days, and also through operational restrictions during restarting after the scheduled general maintenance shutdown and the implementation of the energy efficiency project due to technical faults in one of the four engines replacing the steam turbines of the petrochemical complex. Normal capacity conditions were reestablished in December 2021 by adopting a temporary solution, with the permanent solution currently under construction with the equipment supplier.
- government industrial policies in the countries and regions in which we operate;

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- changes in the real/U.S. dollar exchange rate, including the depreciation of the real against the U.S. dollar by 7.4% in 2021, 28.9% in 2020 and 4.0% in 2019.
- the level of our outstanding indebtedness and 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 17.7% in 2021, as measured by the General Price Index—Internal Availability (Índice Geral de Preços—Disponibilidade Interna, “IGP-DI”), and the effects of inflation on our operating expenses denominated in *reais* and our real-denominated debt that is indexed to consider the effects of inflation or bears interest at rates that are partially adjusted for inflation; and

- tax policies and tax obligations.

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

- our ability to generate cash flows from our operations;
- 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 COVID-19 pandemic 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 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 (calculated as net income for the financial year, after absorption of accumulated losses and for reserves, including legal reserves, pursuant to applicable law), unless our board of directors, in accordance with applicable law, reports to our annual shareholders’ meeting that the distribution would be incompatible with our financial condition at that time, provided that payment of any minimum preferred dividends is not affected. Our fiscal council must opine on any suspension of the mandatory distribution.

Recent Developments

Impact of the Novel Coronavirus (COVID-19) on our Business and Results of Operations

We have been monitoring the impacts from the COVID-19 pandemic on our business and surrounding communities.

In the first and second quarters of 2021, most of our petrochemical plants operated at a capacity utilization rate above 70%. Isolated cases of lower capacity utilization rates were identified in Mexico due to the instability of ethane supply by Pemex, but they were not directly related to the effects of the COVID-19 pandemic on our operations.

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During the year ended December 31, 2021, our petrochemical plants in Brazil operated at a capacity utilization rate of 81%, in line with the same period of 2020, due to the scheduled maintenance turnaround of our petrochemical complex in São Paulo, which was postponed in 2020 as a consequence of the COVID-19 pandemic restrictions. During the year ended December 31, 2021 our PP plants in the United States operated at a capacity utilization rate of 86%, down compared to the same period of 2020, due to the impacts from the winter storm Uri in the U.S. gulf coast. During the year ended December 31, 2021, in Europe, our PP plants operated at a capacity utilization rate of 91%, up compared to the same period of 2020, due to the normalization of operations after the effects of the COVID-19 pandemic impacted demand in 2020. During the year ended December 31, 2021, the capacity utilization rate of our PE plants in Mexico was 66%, down compared to same period of 2020, reflecting the lower supply of ethane supplied by Pemex, which was partially offset by higher imports from the United States under the “Fast Track” import solution.

Pursuant to applicable rules and regulations, our management reviewed the 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 accrual of liabilities in financial information for interim periods given the significant changes to the risks to which we are exposed. The review considered events after the reporting period that occurred up to the reporting date of our audited consolidated financial statements for the year ended December 31, 2021, and no significant effects were identified that should be reflected in the audited consolidated financial statements for the year ended December 31, 2021.

Due to the uncertainties arising from the COVID-19 pandemic with regard to the global economy, we are unable to accurately predict the adverse impacts on our equity and financial position and those of our subsidiaries after the reporting date. Because the demand for resins has increased, we do not expect we will need to constitute a provision for impairment of assets in the near future arising from a scenario of demand constraints.

For further information regarding the effects of the COVID-19 pandemic on our financial condition and results of operations, see “Item 3. Key Information—Risk Factors—Risks Relating to us and the Petrochemical Industry—Global or regional health pandemics or epidemics, including that related to COVID-19 pandemic, may adversely affect our business, financial condition and results of operations.”

CRA Issuance

On January 5, 2022, Eco Securitizadora de Direitos Creditórios do Agronegócio S.A. issued Agribusiness Receivables Certificates (“CRA”) in the Brazilian capital markets backed by debentures issued by Braskem S.A., in two series, maturing in seven years and in 10 years, in the aggregate amount of R\$721.0 million. The CRA accrue interest at a rate equal to the IPCA inflation index plus 5.5386% per year and IPCA plus 5.5684% per year for the series maturing in seven and 10 years, respectively.

Adhesion to the Social Environmental Reparation Agreement

On February 25, 2022, the Municipality of Maceió, in the State of Alagoas, signed the partial Term of Adhesion to the Socio-Environmental Reparation Agreement, which addresses the allocation of resources to urban mobility actions. The Term of Adhesion enables the implementation of adequate and sufficient urban mobility projects to mitigate the impacts arising out of the clearing of affected areas. The actions established in this term were already measured and recorded, not resulting changes to the provision that we previously recorded.

Approval of the Distribution of Dividends

At the general and extraordinary meeting of shareholders held on April 19, 2022, our shareholders approved the distribution of additional dividends, in the aggregate amount of R\$1,350.0 million, corresponding to R\$1.696348838321 per common share and R\$1.696348838321 per class A preferred share. Such additional dividend distribution will be made in addition to the aggregate amount of R\$6.0 billion of interim dividends paid to our shareholders on December 20, 2021, as approved by the Company's board of directors on December 2, 2021.

Voluntary Conversion of Class B Preferred Shares

At the general and extraordinary meeting of shareholders held on April 19, 2022, our shareholders approved the new share capital of the Company amended as a result of the voluntary conversion of 21,440 class B preferred shares into 10,720 class A preferred shares.

Financial Presentation and Accounting Policies

Presentation of Financial Statements

We have prepared our audited consolidated financial statements as of December 31, 2021 and 2020 and for each of the years ended December 31, 2021, 2020 and 2019 in accordance with IFRS, as issued by the IASB.

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Operating Segments and Presentation of Segment Financial Data

As of December 31, 2021, our business operations were organized into three segments, which corresponded to our principal production processes, products and services. Our reportable segments were as follows:

- our Brazil Segment (former Polyolefins, Chemicals and Vinyls segments), which includes:
 - (i) 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;
 - (ii) supply of electricity and other inputs produced in these complexes to second-generation producers located in the petrochemical complexes;
 - (iii) production and sale of PE, including the production of “green PE” from renewable resources, and PP produced by us in Brazil; and
 - (iv) our production and sale of PVC and caustic soda;

The Brazil Segment accounted for net revenue of R\$69,494.9 million, including exports from Brazil, or 64.1% of our consolidated net revenue of all reportable segments;

- our USA and Europe Segment, which includes our production, operations and sale of polypropylene in the United States and Germany. This segment accounted for net revenue of R\$32,403.6 million, or 29.9% of our consolidated net revenue of all reportable segments; and
- our Mexico Segment, 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\$ 6,506.3 million, or 6.0% of our consolidated net revenue of all reportable segments.

In 2021, 2020 and 2019, 52.9%, 55.3% and 54.5% of our net revenue, respectively, related to sales performed in Brazil, and 47.1%, 44.7% and 45.5% of our net revenue in 2021, 2020 and 2019 was derived from our international operations.

New or revised pronouncements

New standards and pronouncements adopted in the current fiscal year:

- Leases affected by COVID-19 (amendment to IFRS 16). This amendment did not have a significant impact on these financial statements.
- Interest Rate Benchmark Reform: Phase 2 (amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16).

The amendments to Pronouncements IAS 39 and IFRS 9 provide temporary exceptions that address the effects of financial statements when an interbank certificate of deposit rate is replaced by an alternative with a nearly risk-free rate. The amendments include the following practical expedients:

- A practical expedient requiring contractual changes or changes in the cash flows directly required by the reform, to be treated as changes in the floating interest rate equivalent to the change in a market rate.

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- When a hedged item in a cash flow hedge is amended to reflect the changes that are required by the reform, the amount accumulated in the other comprehensive income will be deemed to be based on the alternative benchmark rate on which the hedged future cash flows are determined.
- When a group of items is designated as a hedged item and an item in the group is amended to reflect the changes that are required by the reform, the hedged items are allocated to subgroups based on the benchmark rates being hedged.
- If an entity reasonably expects that an alternative benchmark rate will be separately identifiable within a period of 24 months, it is not prohibited from designating the rate as a non-contractually specified risk component if it is not separately identifiable at the designation date.

These amendments to standards do not impact these financial statements. The Company is monitoring the subject and the impacts are being measured (see Note 4.1). The Company intends to use the practical expedients in future periods if they become applicable.

New standards and interpretations not yet in force

The main standards issued by the IASB that have not yet come into force and have not been adopted by the Company are listed below. These new or amended standards are not expected to have a significant impact on Company's financial statements:

- Onerous Contracts: costs of fulfilling a contract (amendments to IAS 37).
- Annual improvements of IFRS Standards 2018-2020.
- Property, Plant and Equipment: proceeds before intended use (amendments to IAS 16).
- Reference to Conceptual Framework (amendments to IFRS 3).
- Classification of Liabilities as Current or Non-Current (amendments to IAS 1).
- Definition of accounting estimates (amendment to IAS 8).
- Definition of materiality for disclosure of accounting policies (amendments to IAS1 and IFRS Practice Statement 2).
- Deferred taxes related to assets and liabilities arising from a single transaction (amendments to IAS 12).

Principal Factors Affecting Our Results of Operations

Macroeconomic Environment in the Countries in which we Operate and Demand for Our Products Globally

Our sales in Brazil and exports from Brazil represented 64.1% of our net revenue in the year ended December 31, 2021. 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 or contraction rates of the GDP of Brazil, the United States, Europe and Mexico, and by global growth or contraction rates.

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

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	December 31,				
	2021	2020	2019	2018	2017
GDP growth / Reduction ⁽¹⁾	4.6%	(4.1%)	1.1%	1.1%	1.0%
Inflation (IGP-M) ⁽²⁾	17.8%	23.1%	7.3%	7.5%	(0.42%)
Inflation (IPCA) ⁽³⁾	10.1%	4.5%	4.3%	3.7%	2.9%
CDI rate ⁽⁴⁾	4.4%	1.9%	4.6%	6.40%	6.99%
Appreciation (depreciation) of the <i>real</i> vs. U.S. dollar	7.4%	28.9%	4.0%	17.1%	1.5%
Period-end exchange rate—US\$1.00	R\$5.5805	R\$5.1967	R\$4.0307	R\$3.8748	R\$3.3080

Sources: Fundação Getúlio Vargas, the Brazilian Central Bank and Bloomberg.

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

⁽²⁾ Inflation measured according to the general market price index (*Índice Geral de Preços-Mercado*) (IGP-M) by Fundação Getúlio Vargas.

⁽³⁾ Inflation measured according to the national broad consumer price index (*Índice Nacional de Preços ao Consumidor Amplo*) (IPCA) by the IBGE.

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

The following table sets forth domestic apparent consumption variation (year over year) for PE, PP and PVC in Brazil for the periods presented.

	December 31,				
	2021	2020	2019	2018	2017
Brazilian apparent consumption of polyethylene	0.9%	9.1%	2.5%	3.2%	4.8%
Brazilian apparent consumption of polypropylene	1.3%	7.5%	2.2%	1.9%	5.9%
Brazilian apparent consumption of PVC	9.5%	3.8%	1.4%	1.4%	(1.9%)

Source: Brazilian government and Braskem.

Brazilian GDP growth has fluctuated significantly, and we believe 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.

According to the IMF, despite the adverse effects of the COVID-19 pandemic on the economy of several countries in 2020 and 2021, which led to a global GDP contraction of 3.1% in 2020, the world's GDP is expected to have expanded 5.9% in 2021 and is expected to expand 4.4% in 2022, leading to a global economic recovery.

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

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- 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 98.6% of our outstanding indebtedness as of December 31, 2021, including the secured debt related to our Mexico Complex. Without the latter, our U.S. dollar-denominated indebtedness represented 98.1% 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 2, 2019, May 2, 2019, November 1, 2019, December 31, 2019, January 2, 2020, and March 31, 2020, as part of our U.S. dollar-denominated liabilities as a hedge for our future exports.

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

Export sales and sales by our USA and Europe Segment, 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. In 2021, the dollar appreciated 7.47% against the *real*. Overall, 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, as of December 31, 2020, the *real*/U.S. dollar exchange rate reported by the Central Bank was R\$5.1967 per US\$1.00, and as of December 31, 2021, the *real*/U.S. dollar exchange rate reported by the Central Bank was R\$5.5805 to 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, 2021, 47.1% of our net revenue was derived from sales of our products outside Brazil as compared to 44.7% during 2020 and 45.5% during 2019. Net revenue derived from sales outside Brazil increased by 90.2% during 2021, compared to 10.0% during 2020, and 9.1% during 2019.

During the year ended December 31, 2021, sales to customers in the Americas (outside Brazil) accounted for 33.7% of our total sales, Sales to customers in Europe accounted for 8.2% of our total sales, and sales to customers in Asia and Other accounted for 5.2% of our total sales.

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.

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

In 2021, the worldwide economy continued to be affected by the adverse effects caused by the COVID-19 pandemic and in the last quarter of 2021, according to the IMF, the Omicron variant led to increased mobility restrictions and greater financial market volatility.

Petrochemical Cycles and Disruptive Scenarios

Historically, the global petrochemical market has experienced alternating periods of limited supply, leading to the increase of global prices and profit margins, followed by periods of capacity additions, which results in declining capacity utilization rates and international selling prices, leading to declining domestic prices and operating margins. This economic scenario is known as a petrochemical cycle.

Sales of petrochemicals and chemical products are linked to the global demand and production levels (supply x demand), which may be affected by macroeconomic factors, such as interest rates, oil prices, shifts to alternative products, innovation, consumer trends, regulatory and legislative oversight requirements, trade agreements, as well as disruptions, pandemics, or other global events. Therefore, our results are influenced not only by our activities but also by the industry and macroeconomic scenario as a whole, which we have no control and may adversely affect our operating results.

The highlight here is that sometimes new opportunities emerge from these externalities, such as the COVID-19 pandemic by forcing workers to move to a home-office environment, a trend that, as a consequence, increased the demand for several segments, such as packaging, healthcare, construction. We believe that this outcome resulted in a less pronounced downward movement in the petrochemical industry.

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.

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.

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During the first months of 2021, demand started to slow down in markets previously boosted by the global effects of the COVID-19 pandemic, and along the year global inflation kept an upward trend mainly pressured by increasing demand, mostly in markets attached to consumer goods and construction. On the other side specific unexpected events end up positively impacting the economic scenario, two of the most relevant being weather events in the USA and supply chain disruptions that followed during 2021.

In the USA winter storms in the first quarter of 2021 and hurricane Ida in the third quarter of that same year immediately impacted the production of chemicals and resins, given the sensitivity that supply and demand have on commodities in a smaller market, resulting in increases on prices and spreads during such periods. Despite the growing vaccination rates, the evolution of the pandemic led to specific and bitter economic and public health measures such as the COVID-zero response run by China by closing some of its ports which resulted in major ships traffic jams and shortage of containers, causing a major disruption in logistics and cost increase in maritime freights. Such events caused a reduction in the availability of products from the biggest worldwide petrochemical exporter. Moreover, a strong dollar globally and a historically weaker Brazilian real was positive to Brazilian exports and products with costs pegged to Brazilian reais in general.

Part of the economic effects mentioned above is expected to be dragged into the first months of 2022 until there is a clearer picture towards when (and if) the pandemic will end vis-à-vis timing on when new capacities will start being implemented to tackle and rebalance the supply scenario as a whole.

The year 2020 was marked by atypical uncertainties and volatilities and impacted mainly by extraordinary external factors, such as the global spread of COVID-19, the lower global demand for fuels, impacting oil prices in the international market and the elections in the United States. Regarding the global petrochemical scenario, the dynamics observed were more positive than initially expected by external consultants in early 2020, with healthier spreads of thermoplastic resins in the international market in all regions where Braskem has productive capacity. In Brazil, the sharp drop in the price of naphtha during the months of March and April, influenced by the fall in the price of oil in the international market, was not accompanied by a similar decrease in resins prices, due to the rapid recovery of demand in the second half of 2020, driven mainly by demand from the packaging, construction, and hygiene and personal care sectors.

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.

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, including the military conflict between Russia and Ukraine, 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.

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The price of ethane and propane in the Mont Belvieu region in Texas and Henry Hub in the United States 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 and Henry Hub 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 operations that are part of our Brazil Segment. Naphtha and condensate accounted for 37.0% of our direct and indirect consolidated cost of products sold during 2021.

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 provide 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.

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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.

	Year Ended December 31,		
	2021	2020	2019
Ethylene	81%	81%	85%
Polyethylene	80%	84%	85%
Polypropylene	82%	85%	89%
PVC	65%	63%	65%
Polypropylene USA and Europe	87%	89%	89%
PE Mexico	66%	74%	76%

In 2021, average ethylene capacity utilization was mainly affected due to a scheduled general maintenance turnaround carried out at our petrochemical complex in ABC, São Paulo In the United States and Europe, the Company continues to operate above the industry average and ended the year with a utilization rate of 87%, considering the average of the two regions. In Mexico, Braskem Idesa ended the year with a utilization rate of 66%, and the main focus was to increase the availability of raw materials through the Fast Track, which represents 35% of the total ethane supply in the year.

In 2020, average ethylene capacity utilization was mainly affected by: (i) lower utilization rate of our cracker in Rio Grande do Sul due to unscheduled turnaround at the PE integrated unit in the first quarter of 2020; and (ii) weaker demand for resins and main chemicals as a result of the COVID-19 pandemic significantly impacting economic activity and markets around the world.

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In 2019, average ethylene capacity utilization was mainly affected by: (i) lower ethylene utilization rate of our 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 our Bahia cracker in the fourth quarter of 2019; (iii) lower ethylene utilization rate at our crackers in Rio Grande do Sul, due to logistical problems; and (iv) a drop in the marginal profitability of our export of resins.

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.

SUDENE – Income Tax Reduction

Since 2015, Braskem obtained favorable decisions in administrative proceedings and lawsuits claiming the reduction of 75% of CIT 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). It benefits legal entities with projects for the implementation, modernization or expansion of industrial enterprises. The realization period is 10 years. In 2021, the operations in Brazil recorded tax profit, therefore it was possible to obtain a deduction in the amount of R\$125.0 million in tax incentives.

PRODESIN – ICMS Tax Incentive

Braskem has ICMS tax incentives in 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 2021, the amount was R\$176.3 million (R\$68.9 million in 2020). As PRODESIN is considered an investment subsidy, it was allocated to our tax incentive reserve, pursuant to the Brazilian Corporate 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 2021 at R\$199.8 billion (US\$37.0 billion).

In March 2021, the Brazilian federal government edited a Bill of Law that would extinguish the REIQ by August. However, with the mobilization of the sector, in July of the same year, the Brazilian federal government, when the bill was converted into Law No. 14,183/21, approved the gradual reduction of the REIQ until 2025. In this sense, as of July, the credit on the PIS/COFINS rates concerning the purchase of petrochemical raw materials had a rebate of 2.92%, reducing annually until 2025.

Additionally, on December 31, 2021, the Federal Government issued Bill of Law No. 1,095, which again aims to end the REIQ, as of April 1, 2022. Pursuant to Brazilian laws, such provisional measure must be approved by the Chamber of Deputies and by the Federal Senate by June 1, 2022 to continue to produce effects.

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 Decree No. 9,393, decreasing the refund rate to 0.1%, effective June 1, 2018, for an undefined term.

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Pricing and Tariffs

We set prices for ethylene, the principal first generation petrochemical product that we sell to third-party second generation producers, by reference to international market prices. See “Item 4. Information on the Company—Chemicals Operations that are Part of our Brazil Segment—Sales and Marketing of Our Chemicals Operations that are Part of our Brazil Segment.” 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.

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. Until November 2021, tariffs on imports of first generation petrochemical products varied between 0% and 4%, and tariffs on polyethylene, polypropylene and PVC resins were 14.0%. In November 2021, the Brazilian government unilaterally reduced by 10%, the import tariff rates of almost 87% of internationally commercialized goods. Accordingly, tariffs on imports of first generation petrochemical products now vary between 0% and 3.6% and tariffs on polyethylene, polypropylene and PVC resins were set at 12.6%. This decision shall remain in force until at least December 31, 2022. The possibility of reducing rates permanently is under discussion within the Brazilian federal government.

Before that, in December 2020, the Brazilian federal government temporarily reduced to 4%, for an initial period of three months, and a quota of 160,000 tons, the import tariffs levied on imports of PVC resins from countries that do not benefit from preferential import rates in Brazil. This reduction was later extended in April 2021 for an additional three-month period and an additional quota of 160,000 tons. In that same month, the Brazilian federal government temporarily reduced to 0% during a three-month period and applied a quota of 77,000 tons of the import tariffs levied on imports of PP resins.

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, Israel, Peru and Venezuela are not subject to tariffs, due to a number of trade agreements. Imports of suspension PVC from Mexico and Egypt are subject to reduced tariffs of 11.2% and 7%, respectively, due to trade agreements.

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 antidumping duties of 21.6%. Such duties had been temporarily suspended on August 2020, but were reinforced in September 2021. Imports of suspension PVC from South Korea were subject to antidumping duties ranging between 0% and 18.9%, depending on the producer, between 2008 and August 2020, when they were terminated. The duties imposed on imports from the United States and Mexico are now under review by the Brazilian federal government, while the duties imposed on imports from China will expire in 2025.

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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 currently under review by the Brazilian federal government. In December 2020, the Brazilian government extended the anti-dumping duties imposed on polypropylene imports from India, reduced the anti-dumping duties for South Africa to a range from 4.6% to 16% and terminated the duties applied against South Korea. The current anti-dumping duties applied on imports from South Africa and India are set to expire in December 2025.

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 2020, 32% of Brazilian polyethylene, polypropylene and PVC resins were imported products, which reflected an 11% annual increase in the volume of resins imported.

In 2021, 36% of Brazilian polyethylene, polypropylene and PVC resins were imported products, which reflected an 17% annual increase in the volume of resins imported.

Effect of Level of Indebtedness and Interest Rates

As of December 31, 2021, our total outstanding consolidated indebtedness was R\$47,405.7 million (US\$8,494.9 million), including R\$12,311.5 million (US\$2,206.2 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 33 to our audited consolidated financial statements. In the year ended December 31, 2021, we recorded total financial expenses, net of R\$8,082.5 million, of which R\$2,923.0 million consisted of interest expenses. In addition, we recorded a loss of R\$4,002.8 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% (including surtax), combined with Social Contribution on Net Income (Contribuição Social Sobre o Lucro Líquido – CSL) 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 (State of Bahia) until 2026; and

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- 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 (State of Bahia and Alagoas) until 2024.

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

Income tax loss carryforwards available for offset in Brazil do not expire. However, the annual offset is limited to 30% of our adjusted net profits. This limit also affects the social contribution on net profit, or CSLL.

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

- Braskem Europe (Germany): 31.11%;
- Braskem America and Braskem America Finance (United States): 24.09%;
- Braskem Argentina (Argentina): 25.00%;
- Braskem Petroquímica Chile (Chile): 35.00%;
- Braskem Netherlands, Braskem Netherlands Finance and Braskem Netherlands Inc (The Netherlands): 25.00%;
- Braskem Idesa, Braskem Idesa Serviços, Braskem México, Braskem México Serviços and Braskem México Sofom (Mexico): 30.00%; and
- Braskem India (India): 30.00%.

Our export sales are currently exempt from (1) PIS - Contribution to the Social Integration Plan, (2) COFINS - Contribution for Social Security Financing, a federal value-added tax, (3) IPI, a federal excise tax on industrialized goods, and (4) ICMS, a state value-added tax on sales and services.

Statement of Profit or Loss

The discussion of the results of our segments 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 Chief Operating Decision Maker 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 as issued by IASB, and reflected in our audited consolidated financial statements.

The discussion summarizing the significant factors affecting the results of operations for the year ended December 31, 2019, can be found in Part I, “Item 5. Operating and Financial Review and Prospects” of our Annual Report on Form 20-F for the year ended December 31, 2020, which was filed with the Securities and Exchange Commission on May 14, 2021, of which Item 5 is incorporated herein by reference.

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	Year Ended December 31, 2021						
	Net revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expense), net	Operating (loss) profit
	<i>(in millions of reais)</i>						
Brazil	69,494.9	(49,309.6)	20,185.4	(1,608.2)	-	(2,210.6)	16,366.6
USA and Europe	32,403.6	(23,343.2)	9,060.4	(900.9)	-	(25.6)	8,134.0
Mexico	6,506.3	(3,413.7)	3,092.6	(471.8)	-	(15.3)	2,605.5
Total segments	108,404.9	(76,066.4)	32,338.4	(2,980.9)	-	(2,251.5)	7,106.1
Other ⁽¹⁾	363.7	(233.1)	130.6	76.8	4.6	(28.7)	183.4
Corporate unit ⁽²⁾	-	-	-	(1,963.1)	-	1,161.5	(801.6)
Reclassifications and eliminations ⁽³⁾	(3,143.3)	2,731.3	(412.1)	(16.1)	-	(16.2)	(444.3)
Consolidated	105,625.2	(73,568.2)	32,057.0	(4,883.3)	4.6	(1,134.8)	26,043.5

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

(2) Includes the amount of R\$(1,031.1) million related to PIS and COFINS tax credits – exclusion of ICMS from the calculation base (note 10b to our audited consolidated financial statements).

(3) Eliminations consist primarily of inter-segment sales.

	Year Ended December 31, 2020						
	Net revenue	Cost of products sold	Gross profit	Selling, general and distribution expenses	Results from equity investments	Other operating income (expense), net	Operating (loss) profit
	<i>(in millions of reais)</i>						
Brazil	40,794.4	(32,498.0)	8,296.4	(1,471.7)	—	(7,082.6)	(257.9)
USA and Europe	14,638.7	(12,337.5)	2,301.2	(721.2)	—	(82.7)	1,497.3
Mexico	4,000.8	(3,075.0)	925.8	(436.9)	—	(364.3)	124.7
Total segments	59,433.9	(47,910.5)	11,523.4	(2,629.8)	—	(7,529.6)	1,364.1
Other segment ⁽¹⁾	302.4	(188.4)	114.0	63.9	(19.4)	(0.3)	158.2
Corporate unit ⁽²⁾	—	—	—	(1,493.5)	—	359.1	(1,134.4)
Reclassifications and eliminations ⁽³⁾	(1,192.7)	767.4	(425.3)	(17.3)	—	(17.1)	(459.7)
Consolidated	58,543.5	(47,331.4)	11,212.1	(4,076.7)	(19.4)	(7,187.9)	(71.9)

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

(2) Includes the amount of R\$0.3 million related to PIS and COFINS tax credits – exclusion of ICMS from the calculation base (note 10a to our audited consolidated financial statements).

(3) Eliminations consist primarily of inter-segment sales.

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, 2021 Compared with Year Ended December 31, 2020

The following table sets forth our audited consolidated financial information for the years ended December 31, 2021 and 2020.

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	2021	2020	% Change
	(in millions of reais)		
Net revenue	105,625.2	58,543.5	80.4%
Cost of products sold	(73,568.2)	(47,331.4)	55.4%
Gross profit	32,057.0	11,212.1	185.9%
Income (expenses):			
Selling and distribution	(2,055.6)	(1,852.1)	11.0%
(Loss) reversals for impairment of trade accounts receivable and other from clients	(8.9)	(55.3)	(83.9%)
General and administrative	(2,522.1)	(1,918.7)	31.4%
Research and development	(296.6)	(250.6)	18.3%
Results from equity investments	4.6	(19.4)	(123.9%)
Other income	1,534.5	750.7	104.4%
Other expenses	(2,669.3)	(7,938.6)	(66.4%)
(Loss) profit before net financial expenses and taxes	26,043.5	(71.9)	-
Financial results:			
Financial expenses	(5,907.2)	(4,913.4)	20.2%
Financial income	(1,827.4)	600.2	(404.5%)
Exchange rate variations, net	(4,002.8)	(5,298.7)	(24.5%)
Financial expenses, net	(8,082.5)	(9,611.9)	(15.9%)
(Loss) profit before income tax and social contribution	17,961.5	(9,683.8)	-
Current and deferred income tax and social contribution	(3,999.4)	2,668.5	(249.9%)
(Loss) profit for the year	13,961.6	(7,015.3)	-

n.m.: Not meaningful.

Net revenue

Net revenue increased by R\$47,081.7 million, or 80.4%, to R\$ 105,625.2 million in 2021, from R\$58,543.5 million in 2020, attributable mainly to (i) main chemicals and resins average price increase of R\$30,255.5 million, or 64.3%, and to main chemicals sales volume increase of R\$1,070.0 million, or 2.3%; (ii) PP in the USA and Europe sales volume increase of R\$971.1 million, or 2.1%, and price increase of R\$11,045.2, or 23.5%; and (iii) PE in Mexico price increase of R\$4,045.2 million, or 8.6%.

Net Revenue of Brazil Segment

Net revenue of our Brazil segment increased by R\$28,700.5 million, or 70.4%, to R\$69,494.9 million in 2021, from R\$40,794.4 million in 2020, attributable mainly to main chemicals and resins average price increase of R\$30,255.5 million or, 64.3% and to main chemicals sales volume increase of R\$1,070.0 million, or 2.3% due to the demand increase and logistics constraints in the global supply chain, which was offset by the lower sales volume of resins due to scheduled maintenance turnaround in the period.

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

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International References¹

	Year Ended December 31,		
	2021	2020	% Change
	<i>(in US\$/ton)</i>		
Main Chemicals ⁽²⁾	1,090.8	617.4	76.7%
Resins ⁽³⁾	1,508.1	880.4	71.3%

(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%).

(3) PE US (54%), PP Asia (33%) and PVC Asia (13%).

Net Revenue of USA and Europe Segment

Net revenue of our USA and Europe segment increased by R\$17,765.9 million, or 121.4%, to R\$32,403.6 million in 2021, from R\$14,638.7 million in 2020, attributable mainly to (i) PP in the USA and Europe sales volume increase of R\$971.1 million, or 2.1%, primarily as a result of the ramp-up of the new PP plant (Delta) in the United States, with commercial production beginning in September 2020; and (ii) average price increase of R\$11,045.2, or 23.5%, which is explained by the increase in demand due to the normalization of the industrial activities and world economy recovery after COVID-19 and logistics constraints in the global supply chain.

International References¹

	Year Ended December 31,		
	2021	2020	% Change
	<i>(in US\$/ton)</i>		
PP US and Europe ²	2,579.8	1,324.4	94.8%

(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 Segment

Net revenue of our Mexico segment increased by R\$2,505.5 million, or 62.6%, to R\$6,506.3 million in 2021, from R\$4,000.8 million in 2020, attributable mainly to PE in Mexico average price increase of R\$4,045.2 million, or 8.6%, as a result of higher polyethylene prices in the international market due to the increase of demand and logistics constraints in the global supply chain, which was offset by lower product amounts available for sale due to the resumption of operations following the unilateral interruption of supply of natural gas transport services by Cenagas in early December 2020 and lower amounts of ethane supplied by Pemex.

International References¹

	Year Ended December 31,		
	2021	2020	% Change
	<i>(in US\$/ton)</i>		
PE US	1,764.5	870.2	102.8%

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

Cost of Products Sold and Gross Profit

Cost of products sold increased by R\$26,236.8 million, or 55.4%, to R\$73,568.2 million in 2021, from R\$47,331.4 million in 2020, primarily as a result of: (i) higher sales volume of main chemicals in Brazil of 10.5%, which was partially offset by lower sales volume of resins in Brazil; (ii) higher sales volume of PP in the United States and Europe of 8.4%; and (iii) an increase of 79.0% in the cost of naphtha international reference in our Brazil segment, and an increase of 97.3% in the cost of propylene in the USA and Europe segment due to higher oil prices in the international market, reflecting a scenario of stronger global demand and supply constraints by OPEC+ countries (which are non-OPEC countries that export crude oil) and allied producers; (iv) an increase of 62.7% in the ethane price in the Mexico segment explained by the increase of natural gas prices on the international market; (v) the impact of the depreciation of the Brazilian *real* against the U.S dollar between periods.

As a result of the above, consolidated gross profit increased by R\$20,844.9 million, or 185.9%, to R\$32,057.0 million in 2021, from R\$11,212.1 million in 2020.

Gross margin (gross profit as a percentage of net revenue) increased to 30.3% in 2021, from 19.2% in 2020.

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Cost of products sold of our Brazil segment increased by R\$16,811.6 million, or 51.7%, to R\$49,309.6 million in 2021, from R\$32,498.0 million in 2020, primarily as a result of: (i) a 79.0% increase in the Amsterdam-Rotterdam-Antwerp (ARA) naphtha price; (ii) a 62.7% increase in the ethane price in the international market, as a result of global supply and demand; and (iii) a 10.5% increase in the main chemicals sales volume in Brazil.

International References ¹	Year Ended December 31,		
	2021	2020	% Change
	<i>(in US\$/ton)</i>		
Naphtha ARA	635.4	355.0	79.0%
Ethane U.S.	229.0	140.7	62.7%
Propane U.S.	545.0	241.5	125.7%
EDC U.S.	726.1	241.2	201.0%

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

Gross profit of our Brazil segment increased by R\$11,889.0 million, or 143.3% to R\$20,185.4 million in 2021, from R\$8,296.4 million in 2020, mainly due to an increase in the international price spreads of resins of 59.4%, to US\$842.1 per ton in 2021, from US\$528.4 per ton in 2020.

Gross margin (gross profit as a percentage of net revenue) of our Brazil segment increased to 29.0% in 2021, from 20.3% in 2020.

Cost of Products Sold of USA and Europe Segment

Cost of products sold of our USA and Europe segment increased/ by R\$11,005.7 million, or 89.2%, to R\$23,343.2 million in 2021, from R\$12,337.5 million in 2020, primarily as a result of higher total sales volume due to the ramp-up of the new PP plant (Delta) in the United States, with commercial production beginning in September 2020, and the increase of 116.3% in the propylene prices in the international market. Additionally, the increase of sales volume in Europe of 11.2% and the increase of 54.1% in the propylene prices in Europe affected the increase of the cost of product sold in the USA and Europe segment.

International References ¹	Year Ended December 31,		
	2021	2020	% Change
	<i>(in US\$/ton)</i>		
Propylene US and Europe ²	1,500.4	760.4	97.3%

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

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

Gross profit of our USA and Europe segment increased by R\$6,759.2 million, or 293.7% to R\$9,060.4 million in 2021, from R\$2,301.2 million in 2020, mainly due to an increase in the PP spreads in the USA and Europe of 91.4%, to US\$1,079.4 per ton in 2021, from US\$564.0 per ton in 2020, mainly due to the continued demand in the United States market and the effects of logistics and supply constraints in the United States and Europe.

Gross margin (gross profit as a percentage of net revenue) of our USA and Europe segment increased to 28.0% in 2021, from 15.7% in 2020, as a result of the aforementioned factors.

Cost of Products Sold by Mexico Segment

Cost of products sold of our Mexico segment increased by R\$338.7 million, or 11.0%, to R\$3,413.7 million in 2021, from R\$3,075.0 million in 2020, as a result of higher international ethane prices of 11.0%, which was partially offset by lower sales volume.

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International References ¹	Year Ended December 31,		
	2021	2020	% Change
Ethane U.S.	(in US\$/ton) 229.0	140.7	62.7%

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

Gross profit of our Mexico segment increased by R\$2,166.8 million, or 234.0% to R\$ 3,092.6 million in 2021, from R\$925.8 million in 2020, as a result of higher spreads in the international market.

Gross margin (gross profit as a percentage of net revenue) of our Mexico segment increased to 47.5% in 2021, compared to 23.1% in 2020, as a result of the aforementioned factors.

Selling and Distribution Expenses

Selling and distribution expenses increased by R\$203.5 million, or 11.0%, to R\$2,055.6 million in 2021, from R\$1,852.1 million in 2020, primarily as a due to: (i) higher sales volume of main chemicals in Brazil segment and PP in the USA and Europe; (ii) higher logistics costs mainly attributed to storage, commercialization, port charges and ship demurrage.

Loss for Impairment of Trade Accounts Receivable and Others from Clients

Impairment of trade accounts receivable and others from clients decreased by R\$46.4 million, or 83.9%, to an impairment expense of R\$8.9 million in 2021, from an impairment expense of R\$55.3 million in 2020, mainly due to the recovery of past amounts in litigation in Brazil and the impairment relating to certain Argentinean customers.

General and Administrative Expenses

General and administrative expenses increased by R\$603.4 million, or 31.4%, to R\$2,522.1 million in 2021, from R\$1,918.7 million in 2020, primarily as a result of higher third-party expenses related to consulting services, communication and marketing, industrials and facilities maintenance services.

Research and Development Expenses

Research and development expenses increased by R\$46.0 million, or 18.3%, to R\$296.6 million in 2021, from R\$250.6 million in 2020, primarily as result of higher expenses related to third parties to conduct market studies for new information and technology strategic projects of the Company.

Results from Equity-Accounted Investees

Results from equity investments increased by R\$24.0 million, or 123.9%, to a profit of R\$4.6 million in 2021, from a loss of R\$19.4 million in 2020, due to higher net income of our affiliate Refinaria de Petróleo Riograndense (RPR) and Borealis Brasil S.A.

Other Income

Other income increased by R\$783.8 million, or 104.5%, to R\$1,534.5 million in 2021, from R\$750.7 million in 2020, primarily due to the increase of the recognition of PIS and COFINS tax credits in the amount of R\$720.5 million, from R\$310.6 million in 2020 to R\$1,031.1 million in 2021.

Other Expenses

Other expenses, which are comprised mainly of provisions related to the geological event in Alagoas and provisions related to the remediation of possible environmental impacts, decreased by R\$5,269.3 million, or - 66.4%, to R\$2,669.3 million in 2021, from R\$7,938.6 million in 2020, primarily due to the decrease in the expenses related to the geological event of R\$5,562.0 million, from R\$6,901.8 million in 2020 to R\$1,339.8 million in 2021.

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Profit (Loss) before Net Financial Expenses and Taxes

As a result of the foregoing:

- operating profit before financial income (expenses) of our Brazil segment increased by R\$ 16,624.5 million, to R\$16,366.6 million in 2021, from an operating loss of R\$257.9 million in 2020. Operating margin, defined as a percentage of operating profit (loss) before net financial expenses and taxes divided by net sales revenue, of our Brazil segment increased to 23.6% in 2021, compared to a negative operating margin of 0.6% in 2020, mainly due to higher spreads in the international market as a consequence of increased demand and logistics constraints limiting product flows globally;
- operating profit before financial income of our USA and Europe segment increased by R\$ 6,636.7 million, or 443.2%, to R\$8,134.0 million in 2021, compared to R\$1,497.3 million in 2020. Operating margin, defined as a percentage of operating profit (loss) before net financial expenses and taxes divided by net sales revenue, of our USA and Europe segment increased to 25.1% in 2021, compared to an operating margin of 12.7% in 2020 due to the production and sales of the new PP plant in the United States, to higher spreads in the international market as a consequence of higher demand and logistics constraints limiting product flows globally; and
- operating profit before financial income (expenses) of our Mexico segment increased by R\$2,480.8 million, or 1,989.4% to R\$2,605.5 million in 2021, from R\$124.7 million in 2020. Operating margin, defined as a percentage of operating profit (loss) before net financial expenses and taxes divided by net sales revenue, of our Mexico segment was 40.0% in 2021, compared to an operating margin of 3.1% in 2020, mainly due to higher spreads in the international market as a consequence of higher demand and logistics constraints limiting product flows globally, which was partially offset by lower sales volume mainly as a consequence of lower ethane supply.

As a result of the above, operating profit before financial income (expenses) on a consolidated basis increased by R\$26,115.4 million, to operating profit of R\$26,043.5 million in 2021, from a loss of R\$71.9 million in 2020, mainly due to higher operating profit before financial income (expenses) from all segments.

Financial Results

Financial Expenses

Financial expenses increased by R\$993.8 million, or 20.2%, to R\$5,907.2 million in 2021, from R\$4,913.4 million in 2020, primarily due to (i) the amortization of transactions costs associated with prepayments made in the year; (ii) the higher expenses with derivatives; and (iii) the accounting recognition of financial expense related to withholding tax on the loan receivable from Braskem Idesa.

Financial Income

Financial income increased by R\$1,227.2 million, or 204.5%, to R\$1,827.4 million in 2021, from R\$600.2 million in 2020, primarily due to (i) higher returns on financial investments in Brazilian real currency given the higher interest rates in the period; (ii) higher recognition of interest on tax assets related to overpayments of PIS and COFINS tax liabilities in prior periods.

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Exchange Variations, Net

Exchange rate variations, net decreased by R\$1,295.9 million, or 24.5%, to an expense of R\$4,002.8 million in 2021, from an expense of R\$5,298.7 million in 2020, primarily as a result of: (i) the effects of the depreciation of the Brazilian real against the U.S. dollar on the net exposure in the amount of US\$2,885.3 million; (ii) the effects of the depreciation of the Mexican peso against the U.S. dollar on the outstanding balance of the loan of Braskem Idesa in the amount of US\$2,404.7 million as of December 31, 2021; and (iii) the effects of the realization of hedge accounting in the amount of R\$1,903.0 million at Braskem and R\$507.2 million at Braskem Idesa.

Current and deferred

Income Tax and Social Contribution

Income tax and social contribution represented an expense of R\$3,999.4 million in 2021, compared to a benefit of R\$2,668.5 million in 2020. The main effects that contributed to a higher income tax for the period are related to higher net revenue due to: (i) an increase in the prices of resins and main chemicals and an increase in sales volume of the main chemicals in the Brazil segment; (ii) an increase in the prices and sales volume for PP in the United States and Europe segment; and (iii) an increase in the PE price in the Mexico segment. Additionally, revenue was also positively impacted by the depreciation of the Brazilian real against the U.S. dollar in the period. During 2021, the increase in income tax and social contribution was partially offset by the: (i) exclusion of Selic interest income (basic interest rate of the Brazilian economy) on taxes recovered in court; and (ii) exemption of IR/CSL on ICMS tax incentives and benefits.

Profit (Loss) For the Year

As a result of the above, we recorded a profit of R\$13,961.6 million, or 13.2% of net revenue, in 2021, compared to a loss of R\$7,015.3 million, or (12.0%) of net revenue, in 2020.

Liquidity and Capital Resources

Our principal cash requirements for 2021 consist of the following:

- servicing our indebtedness;
- working capital requirements;
- capital expenditures related to investments in operations, maintenance and construction of new plant facilities;
- expenditures made in connection with the adoption of measures relating to the geological event in Alagoas; 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;
- sales of trade notes to funds and financial institutions that acquire receivables.

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As of December 31, 2021, our consolidated cash and cash equivalents and financial investments amounted to R\$8,680.7 million and included R\$1,773.3 million held by Braskem Idesa, which was available for its exclusive use.

Projected Sources and Uses of Cash

Considering our short-term financial contractual obligations and commitments as of December 31, 2021 and budgeted capital expenditures for 2022, we expected that we will be required to spend R\$20,732.2 million during 2022 mainly for (1) our operations, 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, and (3) interest payment in the total amount of R\$1,092.0 million (excluding Braskem Idesa) and R\$536.8 million of Braskem Idesa. 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 December 2021, we entered into an international stand-by credit facility with a syndicate of 11 global banks, in the amount of R\$5,580.5 million (US\$1,000.0 million) due in December 2026, to replace the revolving credit facility that we entered into in May 2018 with several international financial institutions for a principal amount of R\$5,580.5 million (US\$1,000.0 million). 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. In April 2020 we drew down the amount of R\$5,580.5 million (US\$1,000.0 million) under this credit line and repaid it fully in July 2020-

Cash Flows

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

	As of December 31,		
	2021	2020	2019
	<i>(in millions of reais)</i>		
Net cash provided by operating activities	14,786.5	6,293.0	2,265.3
Net cash investing activities	(3,380.7)	(2,721.8)	(2,666.4)
Net cash (used in) financing activities	(16,965.5)	2,173.2	1,636.8
Effect of exchange rate changes on cash and cash equivalents	377.5	1,314.6	20.6
Increase (decrease) in cash and cash equivalents	(5,182.2)	7,059.0	1,256.3

Cash Flows generated by Operating Activities

Net cash provided by operating activities was R\$14,786.5 million during 2021, R\$6,293.0 million during 2020 and R\$2,265.3 million during 2019. Net cash provided by operating activities increased by R\$ 8,493.5 million during 2021, as compared to 2020, which was the result of the:

- increase of the Operating Results in the period due to higher spreads in the international market of resins and main chemicals in Brazil, PP in the United States and Europe, and PE in Mexico, and higher sales volume of main chemicals and PP in the United States and Europe.
- offset of R\$2,235.2 million of the PIS/COFINS balance (excluded from the ICMS calculation base).

During 2021, the effects of these factors were partially offset by:

- the negative variation in working capital, mainly due to the higher cost and volume of finished products in inventories;
- the payments related to the geological event of Alagoas;

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- the interest payments of debt securities in the year;
- the payment of IR/CSLL due to the recurring Operating Result; and
- the consumption of our operating and strategic capital expenditures.
- payments under the Global Settlement in the aggregate amount of R\$ 302.6 million to the Brazilian federal government, on February 1, 2021 and CHF16.0 million (R\$86.4 million) to the OAG, on June 28, 2021;

Net cash provided by operating activities increased by R\$4,027.7 million during 2020, as compared to 2019, which was the result of the:

- lower cost of raw material, mainly naphtha, which is the main feedstock of our Brazil Segment, and higher sales volume in the United States, Europe and Mexico Segments;
- positive impact relating to the transfer of the amount of R\$3,746.1 million from 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 to our bank accounts;
- monetization of R\$1,786.4 million of the PIS/COFINS balance (excluded from the ICMS calculation base); and
- lower tax payments during 2020, the total amount paid was R\$257.2 million.

During 2020, the effects of these factors were partially offset by the:

- purchase of larger volumes of naphtha with shorter payment terms;
- the payment under Global Settlement of (i) R\$257.3 million to the Brazilian federal government, on January 30, 2020; and (ii) R\$92.6 million (CHF16.1 million) to the OAG, on June 30, 2020;
- negative impact of R\$1,860.8 million relating to the increase in financial investments during 2020, primarily as a result of the amount increased in restricted funds that is used in the program for relocation of residents in Alagoas.
- negative impact of R\$2,187.8 million relating to the increase in trade accounts receivable during 2020, primarily as a result of the: (i) higher sales volume; (ii) increase in account receivable days; and (iii) depreciation of reais against the U.S. dollar; and
- negative impact of R\$252.5 million relating to the increase in inventories during 2020, primarily as a result of higher prices of resins in the international market.

Cash Flows Used in Investing Activities

Net cash used in investing activities was R\$3,380.7 million during 2021, R\$2,721.8 million during 2020 and R\$2,666.4 million during 2019. During 2021, investing activities for which we used cash on a consolidated basis primarily consisted of: (1) acquisitions to property, plant and equipment of R\$3,055.8 million, in Brazil Segment, 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\$472.1 million in the USA and Europe Segment, allocated both to industrial operations and strategic projects, such as the new polypropylene plant, and (3) acquisitions to property, plant and equipment of R\$175.9 million in Mexico.

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During 2020, investing activities for which we used cash on a consolidated basis primarily consisted of: (1) acquisitions to property, plant and equipment of R\$1,635.7 million, in Brazil Segment, 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\$1,163.0 million in the USA and Europe Segment, allocated both to industrial operations and strategic projects, such as the new polypropylene plant, and (3) acquisitions to property, plant and equipment of R\$103.3 million in Mexico.

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 Brazil Segment, 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 Segment, 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.

Cash Flows Used in Financing Activities

Net cash used in financing activities was R\$16,965.5 million during 2021, as compared to a net cash provided in financing activities of R\$2,173.2 million during 2020 and a net cash provided in financing activities of R\$1,636.8 million during 2019.

During 2021:

- we issued of subordinated resettable fixed rate notes due February 2032 for an aggregate principal amount of R\$6.7 billion (US\$1.2 billion) in the fourth quarter of 2021 related to Braskem Idesa's Project Finance;
- in October 2021, Braskem Idesa entered into a term loan agreement in the aggregate amount of R\$837.1 (US\$150 million). As of December 31, 2021, the aggregate amount outstanding of such loan agreement plus interest was R\$848.3 million (US\$152.0 million).

During 2021, we used cash to pay:

- R\$892.1 million, related to export prepayment facility with local and international financial institutions;
- R\$508.0 million related to promissory note with international financial institutions;
- R\$652.9 million related to the aggregate principal amount under a financing agreement with international governmental entities;
- R\$6.9 billion related to the a full redemption of the outstanding notes maturing in 2022 and of our perpetual bonds, and the partial redemption of outstanding notes maturing in 2023, 2024, 2028 and 2041;
- R\$8.0 billion, related the fully repayment of Braskem Idesa's project finance facility and the partial amortization of the Braskem Idesa project finance facility;
- R\$841.7 million, related to aggregate expenses related to lease agreements;

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- R\$6.0 billion related to dividends payment for the fiscal year ended December 31, 2021 to holders of our common shares, class A preferred shares and class B preferred shares;

During 2020:

- we issued subordinated resettable fixed rate notes maturing in January 2081 for an aggregate principal amount of R\$3,098.8 million (US\$600.0 million) in the third quarter of 2020;
- we drew down in the amount of R\$5,240.4 million under our revolving credit facility and R\$1,603.1 million under others credit facility agreements;
- we entered into certain agreements for advance on exchange contracts (adiantamentos sobre contratos de câmbio), or ACCs, with International Commercial Banks under which we borrowed an aggregate principal amount of R\$2,427.2 million;
- we entered into export prepayment agreements in the aggregate amount of R\$311.1 million;
- we received under a financing agreement with certain governmental entities in the aggregate amount of R\$209.5 million;

During 2020, we used cash to pay:

- R\$138.3 million, representing aggregate interest expenses of our lease agreements;
- R\$2,494.1 million, representing ACCs with commercial banks;
- R\$960.5 related to the partial amortization of the Braskem Idesa project finance facility;
- R\$348.9 million, representing corporate loans (advance exports contracts, credit facilities, promissory notes and others), with local and international institutions;
- R\$415.9 million, representing export prepayments with local and international institutions;
- R\$70.3 million, representing aggregate principal under a financing agreement with BNDES and certain governmental entities; and
- R\$5,203.4 million, representing payments related to a revolving credit line.

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;

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- 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 with 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.

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 Corporate 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, 2021 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.

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In line with our commitment to maintaining our financial liquidity, in December 2021 we renewed the revolving credit facility in the amount of R\$5,580.5 million (US\$1,000.0 billion), which expires in 2026. This line of credit may be used without restrictions to improve our credit quality or in the event of deterioration in the macroeconomic scenario. As of December 31, 2021, this new credit line had not been used.

The Company's liabilities, including the amounts due under the Leniency Agreement, are shown in the table below. These amounts are calculated based on cash flows not discounted and may not be reconciled with the amounts disclosed in the balance sheet.

	Carrying amount	Non-Discounted Cash Flows				Total
		Until one year	Between one and two years	Between two and five years	More than five years	
Trade payables	12,164.7	12,094.5	111.5	-	-	12,206.0
Borrowings	34,897.3	1,455.2	5,872.4	1,519.6	62,653.6	71,500.8
Debentures	196.9	63.9	150.3	34.8	-	249.0
Braskem Idesa borrowings	12,311.5	148.0	276.0	697.8	19,658.8	20,780.6
Derivatives	585.2	260.3	232.7	202.1	-	695.1
Loan to non-controlling shareholder of Braskem Idesa	3,646.5	-	-	-	4,894.8	4,894.8
Leniency agreement	1,123.3	385.1	886.8	218.7	-	1,490.6
Lease	3,156.4	777.4	633.1	1,220.5	746.1	3,377.1
As of December 31, 2021	68,081.8	15,184.4	8,162.8	3,893.5	87,953.3	115,194.0

Indebtedness and Financing Strategy

As of December 31, 2021, our total outstanding consolidated indebtedness was R\$47,405.7 million (US\$8,494.9 million), including R\$12,311.5 million (US\$2,206.2 million) in connection with the secured debt related to our Mexico Complex. As of December 31, 2021, we had R\$3,646.5 million (US\$653.4 million), translated solely for the convenience at the selling rate reported by the Central Bank as of December 31, 2021 of R\$5.5805 to US\$1.00, 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, 2021 was R\$1,489.3 million, including the current portion of long-term indebtedness (3.1% of our total indebtedness) and the amount of R\$86.8 million in connection with the secured debt related to our Mexico Complex.

Our long-term indebtedness outstanding as of December 31, 2021 was R\$45,916.4 million (96.9% of our total indebtedness), including the amount of R\$12,224.8 million in connection with the secured debt related to our Mexico Complex.

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On a consolidated basis, our *real*-denominated indebtedness as of December 31, 2021, was R\$662.2 million (1.4% of our total indebtedness), and our foreign currency-denominated indebtedness was R\$46,743.5 million (98.6% of our total indebtedness).

	2022	2023	2024	2025	2026	2027	Thereafter	Total
	<i>(in millions of reais)</i>							
Indebtedness	781.6	763.1	762.8	729.8	675.7	599.0	1,053.8	5,365.8
Capital Markets	720.8	584.3	3,329.5	-	-	-	25,688.5	30,323.1
Debt related to our Mexico Complex (Braskem Idesa Financing)	145.7	126.4	126.4	126.4	463.6	-	11,800.0	12,788.5
	1,648.1	1,473.8	4,218.7	856.2	1,139.3	599.0	38,542.9	48,477.8

Short-Term Indebtedness

As of December 31, 2021, the amount of our short-term borrowings and debentures, including interest and the current portion of our long-term borrowings and debentures, was R\$1,489.3 million, of which R\$86.8 million was short-term indebtedness of Braskem Idesa. We have short-term lines of credit with a number of international and Brazilian financial institutions. As of December 31, 2021, there was no consolidated outstanding balance under our short-term credit lines.

Long-Term Indebtedness

As of December 31, 2021, the outstanding amount of our long-term borrowings and debentures, net of transaction costs was R\$45,916.4 million, of which R\$12,224.8 million related to Braskem Idesa.

Our principal sources of long-term debt are:

- fixed-rate notes issued in the international market;
- export credit notes;
- credit facilities with the Brazilian National Bank for Economic and Social Development (BNDES);
- bank credit facilities;
- project financing; and
- export prepayment facilities.

As of December 31, 2021, (i) R\$7,221.0 million of our long-term borrowings and debentures denominated in Brazilian *reais* was secured, and (ii) none of our long-term indebtedness denominated in foreign currencies was secured. We have secured such portion of our long-term indebtedness through the pledge of certain of our property and equipment and certain of our accounts receivable. The security arrangements for our secured indebtedness vary by transaction. For a summary of the terms of our material outstanding indebtedness as of December 31, 2021, see “Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources—Indebtedness and Financing Strategy—Long-Term Indebtedness.”

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As of December 31, 2021, all of our indebtedness under the financing agreement for our Mexico complex was secured. In order to secure this debt, we have pledged our shares in Braskem Idesa, certain of our rights to repayment under subordinated loans that Braskem has made to Braskem Idesa, and all of the assets of Braskem Idesa. Braskem is in compliance with the covenants under the underlying instruments.

As of December 31, 2021, R\$539.7 million of our long-term indebtedness was denominated in Brazilian *reais*, and R\$33.147,5 million of our indebtedness was denominated in foreign currencies.

Some of the underlying instruments contain covenants that could restrict, among other things, our and most of our subsidiaries' ability to incur liens or merge or consolidate with any other entity or sell or otherwise dispose of all or substantially all of our or their assets. In addition, the instruments governing a substantial portion of our indebtedness contain cross-default or cross-acceleration clauses among Braskem S.A. and its subsidiaries' indebtedness, 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, 2021, Braskem was in compliance with the covenants under the underlying instruments.

Bonds

We have issued bonds in the international capital markets. 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 bonds issued in the international capital markets, the outstanding principal amount of these securities and their maturity dates :

Security	Outstanding Principal plus Interest Amount as of		Final Maturity
	December 31, 2021		
	<i>(in millions of US\$)</i>		<i>(in millions of reais)⁽⁶⁾</i>
3.50% Notes due 2023 ⁽²⁾	106.4	594.0	January 2023
6.45% Notes due 2024 ⁽¹⁾	612.4	3,417.7	February 2024
4.50% Notes due 2028 ⁽²⁾	1,199.8	6,695.3	February 2028
4.500% Notes due 2030 ⁽²⁾	1,528.1	8,527.7	January 2030
7.125% Notes due 2041 ⁽³⁾	590.8	3,296.9	July 2041
5.875% Notes due 2050 ⁽²⁾	768.4	4,287.8	January 2050
Subordinated Resettable Fixed Rate Notes due 2081 ⁽²⁾	627.8	3,503.6	January 2081

(1) Represents notes issued by Braskem Netherlands Finance B.V. and guaranteed by Braskem.

(2) Represents notes issued by Braskem Finance Limited and guaranteed by Braskem.

(3) Represents notes issued by Braskem America Finance and guaranteed by Braskem.

(*) The U.S. dollar amounts have been translated into Brazilian *real* amounts at the December 31, 2021 selling rate of R\$5.5805 per US\$1.00, as reported by the Brazilian Central Bank. The Brazilian *real* equivalent information presented is provided solely for the convenience of the reader and should not be construed as implying that the amounts in Brazilian *reais* represent, or could have been or could be converted into, U.S. dollars at such rates or any other rate.

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

In September 2017, we entered into a credit facility secured by NEXI, a Japanese export credit agency, in an aggregate principal amount of 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, 2021, the outstanding principal amount plus interest under this facility was R\$462.5 million (US\$82.9 million).

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In July 2018, Braskem America entered into a credit facility with Euler Hermes, a German export credit agency, in the aggregate principal amount of US\$206.0 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 were disbursed in accordance with the progress of the construction project, and the remaining amount is expected to be disbursed in the first half of 2021. As of December 31, 2021, the outstanding principal amount plus interest under this facility was R\$947.9 million (US\$169.9 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, 2021, the outstanding principal plus interest amount under this facility was R\$1,154.2 million (US\$206.8 million).

In December 2019, we entered into a credit facility secured by SACE, in an aggregate principal amount of 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, 2021, the outstanding principal plus interest amount under this facility was R\$670.1 million (US\$120.1 million).

In August 2020, we entered into a credit facility secured by NEXI, a Japanese export credit agency, in an aggregate principal amount of R\$1,169.3 million (US\$225.0 million). This facility bears interest at a rate equivalent to LIBOR plus 1.70% per year and payable semi-annually to maturity in February 2031. The principal amount is amortized semi-annually from August 4, 2021. As of December 31, 2021, the outstanding amount under this facility was R\$1,202 million (US\$215.4 million).

In October 2021, Braskem Idesa entered into a term loan in the aggregate amount of US\$150.0 million. This facility bears interest at a rate equivalent to LIBOR plus 4.00% per year and payable quarterly to maturity in February 2029. As of December 31, 2021, the outstanding amount under this facility was R\$1,849.9 million (US\$152.3 million).

Issue Date	Outstanding Principal plus Interest Amount as of December 31, 2021		Interest Rate	Amortization Schedule	Final Maturity
	(in millions of US\$)	(in millions of reais)			
Sep-17	82.9	462.5	LIBOR + 1.61% p.a.	Semi-annual ⁽¹⁾	March 2027
Jul-18	169.8	947.9	LIBOR + 0.65% p.a.	Semi-annual ⁽²⁾	December 2028
Nov-18	206.8	1,154.2	LIBOR + 0.90% p.a.	Semi-annual ⁽³⁾	November 2028
Dec-19	120.1	670.1	LIBOR + 0.90% p.a.	Semi-annual ⁽⁴⁾	December 2029
Aug-20	215.4	1,202.0	LIBOR + 1.70% p.a.	Semi-annual ⁽⁵⁾	February 2031
Oct-21	152.3	849.9	LIBOR + 4.00% p.a.	Quarterly ⁽⁶⁾	October 2026

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

(2) Amortization on this facility commenced in December 2020.

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

(4) Amortization on this facility commenced in June 2020.

(5) Amortization on this facility commenced in August 2021.

(6) Amortization on this facility commenced in September 2023.

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Credit Facilities with Governmental Agencies Denominated in Brazilian Reais

In June 2014, we entered into a credit facility with FINEP, in the aggregate principal amount of R\$1.2 million, maturing in July 2024, with proceeds used to finance capital expenditures in innovative projects in Brazil. This facility bears interest at a rate equivalent to 4.0% per year and payable monthly to maturity in July 2024. The principal amount is payable in 85 successive monthly installments beginning in July 2017. As of December 31, 2021, the outstanding principal plus interest amount under this facility was R\$0.3 million (US\$0.1 million).

In July 2014, we entered into an indirect credit facility with Fundo de Desenvolvimento do Nordeste (FDNE), in the aggregate principal amount of R\$50.0 million, maturing in May 2026, with proceeds used to finance our capital expenditures in Brazil. This facility bears interest at a rate equivalent to 6.5% per year, payable together with the principal in 22 successive semi-annually installments beginning in November 2015. As of December 31, 2021, the outstanding principal plus interest amount under this facility was R\$22.3 million (US\$4.0 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. On January 30, 2019, we drew the first installment under this facility in the aggregate principal amount of R\$266.0 million. On August 11, 2020 we drew down the remaining available amount under this facility in the aggregate principal amount of R\$210.0 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, 2021, the outstanding principal plus interest amount under this facility was R\$435.8 million (US\$78.9 million).

The table below sets forth selected information with respect to our BNDES credit facilities as of December 31, 2021.

Facility	Outstanding Principal plus Interest Amount as of December 31, 2021		Weighted Average Interest Rate	Expiration of Commitment
	(in millions of US\$)	(in millions of reais)		
January 2019 ⁽¹⁾ — Fixed rate	78.1	435.8	IPCA + 6.04% p.a.	January 2031

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

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 US\$1,000.0 million (R\$5,196.7 million), which matures in May 2023. We had no drawn amounts on this credit facility as of December 31, 2021. In April 2020, we borrowed the amount of R\$5,196.7 million (US\$1,000.0 million), on this credit facility and fully repaid this amount in July 2020.

On December 20, 2021, we entered into a new revolving credit facility with a syndicate of global lenders, in the aggregate amount of up to US\$1,000.0 million, maturing in December 2026. The new agreement replaced our previous revolving credit facility. As of December 31, 2021, we had not drawn any amount under the new revolving credit facility.

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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\$417.8 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, 2021, the outstanding principal plus interest amount under this facility was R\$266.4 million (US\$47.7 million).

In October 2019, we entered in an export pre-payment facility and received a disbursement in an aggregate principal amount of US\$100.0 million (R\$519.7 million). This facility had interest at a rate of LIBOR plus 1.75% per year, payable semi-annually to maturity in October 2024. The principal and outstanding amount were fully repaid in June, 2021.

In January 2020, we entered in a term-loan facility and received a disbursement in an aggregate principal amount of US\$100.0 million (R\$519.7 million). This facility had interest at a rate of LIBOR plus 1.65% per year, payable semi-annually to maturity in January 2025. The principal and outstanding amount were fully repaid in July, 2021.

Issue Date	Outstanding Principal plus Interest Amount as of December 31, 2021		Interest Rate	Amortization Schedule	Final Maturity
	<i>(in millions of US\$)</i>	<i>(in millions of reais)</i>			
April 2019	47.7	266.4	LIBOR – 1.00%	Semi-annual	April 2026

Indebtedness of Braskem Idesa

As of December 31, 2021, the principal amount outstanding under the financing agreements relating to our Mexico complex, net of transaction costs, was R\$12,311.5 million. The Braskem Idesa project finance facility includes certain covenants that require, among other things, the presentation of audited financial statements within a certain timeframe.

On 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 were secured by our shares in Braskem Idesa. 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). Is the final maturity date of these loans was February 15, 2029 with amortizations beginning in May 2016.

On November 25, 2019, Braskem Idesa issued R\$4,667.0 million (US\$900.0 million) in aggregate principal amount of 7.450% senior secured notes due 2029. The 2029 notes are senior secured obligations of Braskem Idesa and rank *pari passu* with the existing Braskem Idesa senior secured obligations due 2032 and the credit facility. After the full amortization of the outstanding amount of the Braskem Idesa 2032 notes and the credit facility, Braskem Idesa's 2029 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 Complex in Mexico. Excess proceeds of the issuance were used to prepay certain other indebtedness of Braskem Idesa.

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On October 11, 2021, Braskem Idesa entered into a senior secured syndicated term loan facility of up to R\$3,338.3 million (US\$600 million) with Morgan Stanley Senior Funding, Inc., Credit Agricole Corporate and Investment Bank, Deutsche Bank AG, London Branch and Itaú Unibanco S.A., Miami Branch, as lenders. The credit facility is secured by first priority security interest in favor of the lenders and all lenders share the collateral equally with the holders of the 2029 and 2032 notes and potential additional secured parties as permitted under the credit facility and the indenture governing the notes. The credit facility has a five-year term and will bear interest at a rate equal to three-month LIBOR plus an applicable margin ranging from 2.25% to 4.25% (depending on Braskem Idesa credit rating), to be paid quarterly. The principal amount will be repaid in semi-annual installments commencing 24 months after the closing date. The loan under the credit facility was partially drawn, R\$837.1 million (US\$ 150 million) on October 20, 2021 in order to fully prepaid the project finance indebtedness incurred in 2012.

On October 20, 2021, Braskem Idesa issued R\$6,696.6 million (US\$1,200 million) in aggregate principal amount of 6.990% senior secured sustainability linked notes due 2032. The notes are senior secured obligations of Braskem Idesa and rank pari passu with the existing Braskem Idesa senior secured notes due 2029 and the credit facility. Interest on the notes is payable semi-annually, and the principal amount becomes due at maturity. The 2032 notes accrue an interest step-up by 37.5 basis points to 7.365% per annum if Braskem Idesa does not satisfy the sustainability performance target to reduce absolute GHG emissions by 15% from a 2017 baseline by year-end 2028. The proceeds of the notes were used (jointly with the credit facility) to fully refinance Braskem Idesa's existing secured project finance indebtedness incurred in 2012 to construct a Complex in Mexico. With this financing, Braskem Idesa concluded its debt refinancing plan, replacing the remaining balance of US\$1,350.0 million from its project finance facility with new debt instruments with a longer maturity, which extended its average debt maturity term from five to nine years. With the repayment of the project finance facility, the financial guarantees granted by Braskem for the benefit of Braskem Idesa, in the total amount of US\$358.0 million, were extinguished.

Security ⁽¹⁾	Outstanding Principal plus Interest Amount as of December 31, 2021		Final Maturity
	(in millions of US\$)	(in millions of reais)	
7.45% Notes due 2029	914.7	5,104.5	November 2029
6.990% Notes due 2032	1,224.8	6,834.8	February 2032

(1) Represents notes issued by Braskem Idesa.

Capital Expenditures

During 2021, investing activities for which we used cash on a consolidated basis primarily consisted of acquisitions to property, plant and equipment of R\$3,055.8 million in our Brazil segment, which was allocated primarily to: (i) industrial operations, including investments related to operating efficiency, health, environmental and safety, and productivity; (ii) the scheduled maintenance shutdown at our PVC plants in Bahia and Maceió; (iii) the general maintenance scheduled turnaround at the plants in São Paulo, which were carried out in the second quarter of 2021; (iv) the continued activity to restart of our chlor-alkali plant in Maceió; and (v) operation of the cracked gas transfer line project for the furnaces of Q3 located in the city of Santo André, São Paulo.

Strategic investments expenditures were allocated mainly as follows: (i) modernization of the electrical system of the petrochemical complex in São Paulo; construction of a recycling line for high-quality post-consumer resins in Brazil; investments in the development of new technologies and processes; and expansion of biopolymer capacity at the Triunfo petrochemical complex in Brazil; (ii) acquisitions to property, plant and equipment of R\$472.1 million in our USA and Europe segment, which were allocated to industrial operations and strategic projects; and (iii) acquisitions to property, plant and equipment of R\$175.9 million in our Mexico segment, which was allocated primarily to industrial operations.

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Capital Expenditure Budget

We plan to invest R\$5,553.9 million in 2022, of which R\$532.5 million is pegged to the U.S. dollar, related to investments in the United States and Europe Segment.

Of the total investment, R\$4,900.9 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 Rio Grande do Sul and preparing for the cracker in Bahia shutdown planned to take place in 2023, and also the expansion of the biopolymer business and the recycled resin production capacity.

The investment projected to be made during 2022 by Braskem Idesa is of R\$1,179.5 million (US\$215.0 million). Operating investments will be allocated mainly to projects related to operating efficiency, such as expanding the ethane import capacity of the Fast Track solution, maintenance, productivity and HES. The strategic investment refers to the strategic project to build an ethane import terminal in a partnership with a potential partner in the amount of R\$642.8 million (US\$117.0 million) in 2022.

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.

Braskem Idesa is a party to an ethane supply agreement with Pemex TRI, a subsidiary of Pemex, dated February 19, 2010 (“BI’s Ethane Supply Agreement”). As per the terms and conditions provided in BI’s Ethane Supply Agreement, ethane supply is assured through a 20-year contract with Pemex TRI at a price pegged to the U.S. gas price.

In early December 2020, Braskem Idesa received a notification from Cenagas (Centro Nacional de Control del Gas Natural), a Mexican state-owned agency responsible for all natural gas pipelines and transportation in Mexico, related to the unilateral termination of the service of natural gas transportation, an essential energy input for the production of PE in our Mexico Segment. As a result, in compliance with safety protocols, Braskem Idesa initiated procedures for the immediate interruption of its operating activities. Later in January 2021, Braskem Idesa manage to partially resume its operations using ethane to replace the lack of natural gas in order to continue producing PE. Braskem Idesa took legal measures pursuant to the ethane supply agreement entered into with Pemex. Braskem Netherlands B.V, which is Braskem Idesa’s direct shareholder, also took legal measures under applicable international investment protection standards to protect Braskem Idesa’s interests and its parent company concerning their investment in Mexico. Such measures included a negotiation period to attempt to resolve the dispute between the parties.

In the first quarter of 2021, Braskem entered into the following agreements under a strict reservation of all rights: (i) a memorandum of understanding with Pemex TRI setting out certain understandings regarding potential amendments to the ethane supply agreement and the development of an ethane import terminal, subject to further negotiation, a definitive agreement and approval by Braskem Idesa’s shareholders and creditors; and (ii) a natural gas transport service agreement with Cenagas for a term of 15 years, which were conditioned upon the execution of the definitive agreement referenced in item (i) above. Following the execution of these agreements by Braskem Idesa, it resumed receiving natural gas transportation services from Cenagas, which had unilaterally terminated gas supply to Braskem Idesa in December 2020.

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On September 27, 2021, Braskem Idesa signed the following documents: (i) Amended ESA with PEMEX, with settlement of any pending contractual amounts; and (ii) Terminal Agreement.

The Amended ESA changes the minimum contractual volume commitment to 30,000 barrels/day until the limit date of February 2025 (subject to extensions in the event of delay in obtaining the licenses for the terminal's construction), with the terminal's startup expected in the second half of 2024.

The Amended ESA further establishes first-refusal rights, which consists of a preemptive right for Braskem Idesa in the acquisition of all ethane that PEMEX has available and does not consume in its own production process through 2045, at prices based on international references. The terminal project is designed to supplement ethane supply in Mexico by gaining access to new feedstock sources.

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, April 2017 and October 2021. 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.

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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.

Our Mexico Complex is operational and Braskem Idesa satisfied its debt service requirements and all other payment obligations under its project finance debt. However, in October 2019, a waiver and consent package was approved by the intercreditor agent on behalf of the lenders, effective until December 31, 2020.

On November 25, 2019, Braskem Idesa issued R\$4,667.0 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 senior secured notes due 2032 and the credit facility. After the full amortization of the outstanding amount of Braskem Idesa's debt, Braskem Idesa's 2029 notes will convert into senior unsecured notes. The notes proceeds were used to partially refinance Braskem Idesa's existing secured project finance indebtedness incurred in 2012 to construct the Mexico Complex.

As of December 31, 2020, the waivers and consent package granted in October 2019 were no longer effective, then the non-current portion of the project finance debt obligations was reclassified as current liabilities, which caused an excess of current liabilities over current assets. In accordance with the aforementioned accounting standards, reclassification is required in situations in which the breach of certain contractual obligations entitles creditors to accelerate indebtedness. None of the project finance lenders requested said repayment of obligations.

On October 2021, in anticipation of issuing the 2032 notes, the intercreditor agent on behalf of the lenders approved consent and waiver conditions, in which the lenders agreed to waive certain events of default not related to payments obligations, thus the current liabilities related to the project finance debt were reclassified from current liabilities to non-current liabilities.

On October 11, 2021, Braskem Idesa entered into a new credit facility, senior secured syndicated term loan facility of up to R\$3,348.3 million (US\$600 million) with Morgan Stanley Senior Funding, Inc., Credit Agricole Corporate and Investment Bank, Deutsche Bank AG, London Branch and Itaú Unibanco S.A., Miami Branch, as lenders. The credit facility is secured by first priority security interest in favor of the lenders and all lenders share the collateral equally with the holders of the 2029 and 2032 notes and potential additional secured parties as permitted under the credit facility and the indenture governing the notes. The credit facility has a five-year term and will bear interest at a rate equal to three-month LIBOR plus an applicable margin ranging from 2.25% to 4.25% (depending on Braskem Idesa credit rating), to be paid quarterly. The principal amount will be repaid in semi-annual installments commencing 24 months after the closing date. The loan under the credit facility was partially drawn, R\$837.1 million (US\$ 150 million) on October 20, 2021, in order to fully prepaid the project finance indebtedness incurred in 2012.

On October 20, 2021, Braskem Idesa issued R\$6,696.6 million (US\$1,200 million) in aggregate principal amount of 6.990% senior secured sustainability linked notes due 2032. The notes are senior secured obligations of Braskem Idesa and rank pari passu with the existing Braskem Idesa senior secured notes due 2029 and the credit facility. Interest on the notes is payable semi-annually, and the principal amount becomes due at maturity. The 2032 notes accrue an interest step-up by 37.5 basis points to 7.365% per annum if Braskem Idesa does not satisfy the sustainability performance target to reduce absolute GHG emissions by 15% from a 2017 baseline by year-end 2028. The proceeds of the notes were used (jointly with the credit facility) to fully refinance Braskem Idesa's existing secured project finance indebtedness incurred in 2012 to construct a Complex in Mexico.

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As of December 31, 2021 Braskem Idesa has satisfied and continues to satisfy its debt service requirements and all other payment obligations in the aggregate amount of R\$12,556.1 million (US\$ 2,250.0 million) under its: (i) R\$5,022.5 million (US\$ 900 million) 2029 senior secured notes; (ii) R\$ 6,696.6 million (US\$ 1,200 million) 2032 sustainability linked senior secured notes; and (iii) R\$837.1 million (US\$ 150 million) credit facility agreement.

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."

Amendments to Braskem Idesa Shareholders' Agreement Relating to Project Ethylene XXI

In February 2010, Braskem and Idesa entered into a shareholders' agreement, which we refer to as the Braskem Idesa shareholders' agreement, to govern our relationship with respect to Braskem Idesa. In November 2012, Braskem and Idesa entered into the first amendment to the Braskem Idesa shareholders' agreement, under which our ownership interest in Braskem Idesa was increased to 75% minus one share of the equity interest in Braskem Idesa and Idesa's ownership interest in Braskem Idesa was reduced to 25% plus one share of the equity interest. In December 2012, we and Idesa entered into the second amendment to the Braskem Idesa shareholders' agreement to include the commitment of both Sponsors to fund certain primary and secondary contingent equity to the project. In April 2015, we and Idesa entered into the third amendment to the Braskem Idesa shareholders' agreement to include additional base equity contribution and reaffirm the new commitments of contingent equity, under which we agreed to fund up to 100% of the contingent equity commitment under the equity support agreement up to start-up date. The primary contingent equity commitment is US\$208 million. In April 2017, we and Idesa amended and restated the Braskem Idesa shareholders' agreement to update the terms to reflect the progress of the company 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. Finally, in October, 2021, we and Idesa executed the second amendment and restatement shareholder agreement of Braskem Idesa in order to update the excess commitment fee regarding the contingent equity funded by us and modifying the fee rate related to it.

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Other Investments

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 450,000 tons at the La Porte site, in the American state of Texas. After completing the commissioning phase in accordance with the applicable safety standards, we have started the commercial production of PP at our new plant in the United States in September 2020. In 2021, the plant completed its first full year of operation with 95.6% of the approved US\$758.0 million investment paid or accrued. The Company is working with Linde Group (EPC Contractor) to close out remaining open invoices.

In July 2018, Braskem America entered into a credit facility secured by Euler Hermes, a German export credit agency, in the aggregate principal amount of up to US\$206.0 million to finance a portion of the investments in our new PP plant in the United States. The facility, which matures on December 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. As of December 31, 2021, US\$206.0 million had been disbursed in principal amount, and the principal outstanding amount plus interest under the credit facility was R\$947.9 million (US\$169.9 million).

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 Siemens will invest approximately R\$600.0 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 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 GHG emissions by 6.3%.

As of December 31, 2021, R\$266.8 million (US\$49.4 million) was already invested and the project was approximately 99% complete.

Project to expand biopolymers production capacity in the Triunfo Petrochemical Complex in Rio Grande do Sul

Expansion of current green ethylene production capacity from 200,000 tons per year to 260,000 tons per year using feedstock made from sugarcane ethanol that is used to make I'm green™ biobased resins, with startup expected at the end of 2022 and investments estimated at R\$485.5 million (US\$87 million). The project is aligned with the Company's goal of reaching net zero carbon by 2050, while also reinforcing its position as the global leader in biopolymers production.

As of December 31, 2021, the Company had disbursed R\$73.4 million (US\$13.6 million), with the investment reaching physical progress of 25.6%.

Project to produce high-quality recycled resin

In partnership with Valoren, a company specializing in developing and operating technologies for transforming solid waste, Braskem will invest R\$67 million in the construction of a recycling line with capacity to transform some 250 million pieces of packaging into 14,000 tons of high-quality, post-consumer resin per year. The project is installed in Indaiatuba, in the Brazilian state of Sao Paulo, and started operating in December 2021.

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As of December 31, 2021, the Company had disbursed R\$58.0 million, representing physical progress of 97% of the investment.

Technology change at our chlor-alkali facility in Alagoas

We are investing R\$67.7 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 were 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 will be initially stored, dissolved into water to produce brine, treated and then sent to be processed in the chlor-alkali facility.

CS 1 AL unit has been operating using the new raw material since December 2020. In 2021, the project activities were performed to close-out the project and to conclude project facilities infrastructure.

As of December 31, 2021, R\$65.1 million (US\$11.7 million) had already been invested.

Solution to import ethane for the Braskem Idesa facility in Mexico

Braskem Idesa has been investing in logistics infrastructure to import ethane from the United States to maintain and increase the capacity utilization rate of its cracker. Concerning to ethane supply, Braskem Idesa has entered into a long-term agreement to acquire ethane and could also import in the sport market.

To ensure the Fast-Track Solution's feasibility, Braskem Idesa executed agreements with Smart Pass, a logistics operator, and with Enestas, a company specialized in cryogenic gas transportation. Smart Pass will be responsible for receiving liquefied ethane at the Port of Coatzacoalcos docks 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\$49.9 million (US\$9.6 million), this complementary solution for acquiring feedstock had made 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 started its operation to import ethane, the "Fast Track" solution, and imported its first shipment of ethane.

The total investment of the Fast Track, considering expansion, is an approximate total investment of R\$67.5 million (US\$12.1 million), with approximately R\$55.2 million (US\$9.9 million) spent by the end of 2020. The expansion of this complementary solution for acquiring feedstock will make it possible to import up to 25,000 barrels per day of ethane to the Petrochemical Complex in Mexico, which represents 40% of its ethane needs. In December 2020, Braskem Idesa concluded the first phase of expansion of the "Fast-Track" to 18 kbpd and, in April 2021 we concluded the second phase of expansion to a total capacity of 25 kbpd. By 2022 Braskem Idesa expects to increase the total capacity up to 35 kbpd as a result of additional investment of approximately R\$86.5 million (US\$15.5 million).

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By 2021, our petrochemical complex had an operating rate of approximately 75% primarily due to the shortfall in ethane supplied under the ESA, which was partially offset by imported ethane supplied by the Fast Track Solution. We diversified our sources of feedstock supply with the Fast-Track Solution and we are planning to further increase its import capacity in the future by adding additional discharge stations, both at the port and at our plant. Once the Ethane Import Terminal is operational, we expect to rely less on the Fast-Track Solution.

In addition, to implement the Fast-Track Solution, we executed the BNL Ethane Supply Agreement, a contract for the purchase of a target volume of ethane per year with Braskem Netherlands in February 2020, which has a term of twenty-four months, extendable for one optional period of six months. The price of ethane is determined by a contractual formula, and penalties would apply for delivery delays or if incorrect quantities are delivered. In addition, we have purchased additional volumes of ethane from Braskem Netherlands by entering into the BNL Ethane Supply Agreement Amendment.

Besides, 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—We source part of our ethane feedstock from Pemex TRI in Mexico, which we expect to be our primary source of ethane until the Ethane Import Terminal is operational."

Braskem Idesa also intends to develop the Ethane Import Terminal, a long-term alternative source of imported ethane and a pipeline that will connect the terminal directly to our Complex. The expected ethane capacity of the Ethane Import Terminal would be enough to fulfill the total ethane needs for the Mexico Complex. This terminal would provide the capacity to import more ethane than we currently require. With this, our Mexico Segment will be able to source the total needs of our Mexico Complex to increase our polyethylene production and take advantage of the forecasted increase in demand for polyethylene products in North America and around the world.

On October 12, 2021, Braskem Idesa and Braskem Idesa Servicios incorporated "Terminal Química Puerto México, S.A.P.I., a *sociedad anónima promotora de inversión*", incorporated under the laws of Mexico, with the main purpose of design, construct and develop the ethane import terminal. In addition, on December 09, 2021, Braskem Idesa's board of directors approved the Final Investment Decision ("FID") in order to invest in the Ethane Import Terminal Project.

The estimated cost of the Ethane Import Terminal and related infrastructure investment is approximately US\$400.0 million (inclusive of financing costs and VAT). Our Mexico segment expects to subscribe for up to 50% of the shares issued by the company that will develop the Ethane Import Terminal. We intend to fund our investment in the Ethane Import Terminal with a combination of equity and debt, through a joint venture with one or more suitable unaffiliated third parties that will secure equity and debt financing in an unrestricted subsidiary. The Ethane Import Terminal is expected to be completed and to reach full capacity by 2024, but there may be delays. Please see "Item 3. Key Information—Risk Factors—Risks Relating to Mexico— We source part of our ethane feedstock from Pemex TRI in Mexico, which we expect to be our primary source of ethane until the Ethane Import Terminal is operational."

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 estatutária*") are responsible for operating our business.

[Table of Contents](#)**Board of Directors of Braskem**

Our by-laws provide for a board of directors of eleven members and its alternate directors. 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, as well as the approval for acquisition of products and material and execution of certain contracts for our business and our wholly owned subsidiaries and controlled companies, when applicable. 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 Corporate 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 a two-year unified term and are eligible for reelection. The terms of all current members will expire at our annual shareholders' meeting to be held in 2024. Members of our board of directors are subject to removal at any time 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 be our shareholder. Our board of directors is presided over by the chairman of the board of directors, and, in his absence or temporary unavailability, by 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 every three months and extraordinarily whenever 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 current directors and are taken by majority vote, other than certain actions which require the consensus of the nominees of Novonor, formerly called Odebrecht S.A., and Petrobras Brasileiro S.A. – 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	72
Eduardo Bacellar Leal Ferreira ⁽¹⁾	April 19, 2022	Vice-Chairman of the Board	69
José Luis Bringel Vidal ⁽¹⁾	April 19, 2022	Board Member	56
Gesner José de Oliveira Filho ⁽¹⁾	June 27, 2017	Board Member	65
-João Pinheiro Nogueira Batista ⁽¹⁾	April 16, 2019	Board Member	65
Roberto Lopes Pontes Simões	May 22, 2019	Board Member	65
Juliana Sá Vieira Baiardi	April 19, 2022	Board Member	48
Héctor Nuñez	November 18, 2021	Board Member	59
Roberto Faldini	May 22, 2019	Board Member	73
Charles Lenzi ⁽¹⁾	April 19, 2022	Board Member	63
Marcelo Klujnsza	August 24, 2020	Board Member	59
André Amaro da Silveira ⁽¹⁾	June 8, 2016	Alternate	58
Rodrigo Tiradentes Montecchiari	April 19, 2022	Alternate	45
Daniel Pereira de Albuquerque Ennes	May 29, 2020	Alternate	42
Laura Maniero Gadelho	April 13, 2021	Alternate	38
Guilherme Simões de Abreu	May 29, 2020	Alternate	70
Marco Antônio Zacarias	April 19, 2022	Alternate	61
Lineu Fachin Leonardo	April 19, 2022	Alternate	40

(1) Independent director.

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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. José Mauro Mettrau Carneiro da Cunha has been appointed as an effective member and Chairman of the Company's Board of Directors as of May 29, 2020, by shareholder Novonor S.A. He was Chief Executive Officer of Novonor S.A. - In Judicial Reorganization from April 2021 to March 2022 and was a member of the Board of Directors of Oi S.A. from September 2018 to September 2020, having previously served as Chairman of the Board of Directors of Oi S.A. since 2009. Mr. José Mauro began his career as an employee of BNDES, where he held several positions and held various executive positions (from 1974 to 1990), having also been appointed Director (from 1991 to 1998) and Vice President, responsible for the Industrial Operations, Legal and Tax Affairs areas (from 1998 to 2002). His main professional experiences include: (i) Full 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) Full Member of the Board of Directors of Vale S.A. (from 2010 to April 2015); (iii) Interim Chief Executive Officer of Oi S.A., in 2013; (iv) Chairman of the Board of Directors of the following companies: Tele Norte Leste Participações S.A. (from 1999 to 2003 and from 2007 to 2012), where he also served as an Alternate Member of the Board of Directors, in 2006; Telemar Norte Leste S.A. (from 2007 to 2012); TNL PCS S.A. (from 2007 to 2012); Tele Norte Celular Participações S.A. (from 2008 to 2012); Coari Participações S.A. (from 2007 to 2012); Dommo Empreendimentos Imobiliários S.A., formerly 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 2016); (viii) Full 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) Politeo 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. José Mauro graduated in mechanical engineering from Universidade Católica de Petrópolis, in Rio de Janeiro, in 1971. He completed an Executive Program in Management at the Anderson School, University of California, in December 2002.

Eduardo Bacellar Leal Ferreira. Mr. Eduardo Bacellar Leal Ferreira has been appointed as an effective member of the Company's Board of Directors by shareholder Petróleo Brasileiro S.A. - Petrobras. Mr. Eduardo Bacellar Leal Ferreira was Chairman of the Board of Directors of Petrobras from 2019 to April 2022. In addition to the Petrobras Board, he participated in the Admiralty (Navy High Command) from 2013 to 2019, having chaired it from 2015 to 2019; the Navy's Financial and Administrative Council, from 2015 to 2019; the Interministerial Commission for the Resources of the Sea (coordinator), from 2015 to 2019; the Management Councils in the various Military Organizations he directed or commanded; and the Officer Promotion Commission, in 2007. He served in the Brazilian Navy from 1971 to 2019, in the positions of Director of Ports and Coasts, from 2010 to 2011; Commander-in-Chief of the Fleet, in 2012; Commander of the War College, from 2013 to 2015; and Commander of the Navy, from 2015 to 2019. Before 2010, he served in numerous positions and functions inherent to his career, including a total of 13 years in command and direction of ships and land-based organizations, including the Port Captaincy of Rio de Janeiro, the Admiral Alexandrino Training Center, the Naval School and the Seventh Naval District Command (Brasília, Goiás and Tocantins). He was an astronomical navigation instructor at the American Naval Academy, in Annapolis (Maryland), for two years. He also served in the Chilean Navy, taking a General Staff course. He is a graduate of the Officer's Graduation Course and of Operations Engineering, mechanical modality, by the Naval School, from 1971 to 1975. He has an Electronics Improvement Course for Officers, at the Admiral Wandenkolk Training Center, from 1976 to 1977; Command and General Staff Course, in 1990, Superior Course, in 1991, Maritime Policy and Strategy Course, in 2000, at the Naval War College; General Staff Course at the Chilean Navy, in 1992; Module of Economic Sciences, from the Faculty of Economic and Administrative Sciences of the Universidad Marítima de Chile, in 1992; Professional Master of Naval Sciences, from the Naval War College, in 1992; and Professional Doctorate in Naval Sciences, Maritime Policy and Strategy at the EGN, in 2000.

José Luis Bringel Vidal (independent member). Mr. José Luis Bringel Vidal has been appointed as an effective member of the Company's Board of Directors by shareholder Petróleo Brasileiro S.A. - Petrobras. Mr. José Luis Bringel Vidal has been a founding member and coordinator of the Infrastructure and Logistics Committee, of RGB - Rede de Governança do Brasil, since April 2021; Senior Government Relations Consultant of Norsk Hydro do Brasil, since February 2021; Member of the Board of Directors of Santos Brasil S.A., since May 2018, and of BEMISA - Brasil Exploração Mineral S.A., since March 2011. He is a Shareholder and Member of the Board of Directors of WV Logistics, since January 2020, and was Founding Partner and C&O from November 2003 until January 2020. He was Director of the Logistics and Transportation Division of the Infrastructure Department of FIESP - Federation of Industries of the State of São Paulo, from February 2020 to January 2022; Member of the Advisory Board of the Port of Angra dos Reis, from March 2020 to May 2021; Member of the Advisory Board of ABPM - Brazilian Association of Mineral Research Companies, from March 2017 until September 2020; Senior Consultant at Rio Tinto Alvan, from December 2017 until July 2018; Founding Partner at TACV - Transport System Development, from August 2013 until July 2017; Senior Consultant at Piauí State Government - BR, from March 2015 until March 2016; Senior Consultant at Zamin Resources Limited, from November 2015 until January 2016; Senior Consultant at Warburg Pincus LLC, from January 2015 until May 2015; Senior Consultant at Itochu Corp & JFE Steel & Posco Group & China Steel, from March 2014 until October 2014; Senior Consultant at Hatch - CODELCO, from July 2014 until September 2014; Senior Consultant at Rio Tinto Alcan, from May 2011 until March 2013; Senior Consultant at SNC - LAVALIN, from February 2012 until May 2012; Senior Consultant at Itochu Corporation & JFE Steel & Nippon Steel & Posco Group & China Steel, from March 2008 until November 2008; Logistics Director at BEMISA - Brasil Exploração Mineral S. A., from June 2007 until September 2008; Senior Advisor of Bahia Mineração S.A. - BAMIN, from March 2005 until April 2006; National Coordinator of the Logistics Council of FECOMÉRCIO - Federação do Comércio do Estado de São Paulo, from June 2001 until March 2005; General Manager of Pasha Brasil, of The Pasha Group - Rio Doce Pasha Terminais L.P., from July 2001 to October 2003; Manager of the São Paulo Business Unit of Ferrovia CentroAtlântica S.A. - FCA, from January 1997 to June 2001. He is an Electrical Engineer from Escola de Engenharia de Mauá, in 1992. He holds a Post-Graduate degree in Market-Oriented Business Administration from Escola Superior de Propaganda e Marketing, in 1994; Board of Directors Program, from Instituto Brasileiro de Governança Corporativa, in 2012; Certification as Experienced Board Member (CCA+), from Instituto Brasileiro de Governança Corporativa, in 2019; Update for Certified Board Members, from Instituto Brasileiro de Governança Corporativa, in 2020; Corporate Risk Management 1st Edition, by the Brazilian Institute of Corporate Governance, in 2020; Advanced Course for Board Members 14th Edition, by the Brazilian Institute of Corporate Governance, in 2020; Professional Education Specialization Leadership in Innovation, by MIT - Massachusetts Institute of Technology, in 2021; Specialization Risk Management and Financial Decision Making, by the University of Chicago, in 2021.

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Gesner José de Oliveira Filho (independent member). Mr. Gesner José de Oliveira Filho has been appointed as an independent director of the Company's Board of Directors by Novonor S.A as of June, 2017. He is certified by IBGC as independent director and as member of Audit Committee CCoAud+; he is member of the Board of Directors of TIM, where he coordinates the Statutory Audit Committee and is also a member of the “ESG” Committee; he is president of the Board of Directors of Estre Ambiental and member of the Self-Regulation Board of FEBRABAN. He was member of the Global Consultive Board of UBER and of the Board of Directors of Iguá, Usiminas, Sabesp, CESP, Banco Nossa Caixa and Varig. He currently participates, as a volunteer, at the Instituto Iguá de Sustentabilidade, Instituto Brasileiro de Ética Concorrencial (ETCO), Centro de Integração Empresa-Escola (CIEE), as a member of the Consultive Council of GRAPE ESG and as a member of the Consultive Council of Climatic Actions and Politics at Secretaria Executiva de Mudanças Climáticas (SECLIMA), of the São Paulo Municipal's Secretary. He is partner at GO Associados, Professor at FGV, where he coordinates the Infrastructure and Environmental Solutions Study Centre. From 2007 to 2011 he was president of Sabesp – Companhia de Saneamento do Estado de São Paulo. From 1996 to 2000 he was president of CADE. He has a PhD degree from California University (Berkeley), a Master's degree from Unicamp and a bachelor's degree from FEA-USP, always in Economics area.

João Pinheiro Nogueira Batista (independent member). Mr. João Pinheiro Nogueira Batista has been appointed as an effective member of the Company's Board of Directors by the shareholder Novonor S.A. - In Judicial Recovery. Mr. João Pinheiro Nogueira Batista has served for more than 10 years on the Board of Directors of companies in Brazil and abroad. Until January 2022 Mr. João Nogueira was CEO of Evoltz Participações S.A. Mr. João Nogueira has been an independent board member at Wiz Soluções e Corretagem de Seguros S.A. since April 2020, as well as at two third sector organizations: Associação Maria Helen Drexel and Instituto de Reciclagem do Adolescente-Recicla. In the Novonor Group, he was an independent member of the Boards of Directors of Odebrecht Engenharia e Construção since June 2017 and of Ocyan since April 2018, in which he remained until January 2019, when he joined the Board of Directors of Novonor S.A. - In Judicial Recovery and remained until April 2021. In his broad executive career built in the public and private sectors, he was CEO of Swiss Re, Bertin S.A. and Suzano Petroquímica, as well as held directorships in companies such as Petrobras, Dresdner Bank, Citibank, Radiobras and Siderbras. Mr. João Nogueira Batista holds a degree in economics from PUC - RJ and an MBA in Economic Engineering from Universidade Gama Filho, Rio de Janeiro.

Roberto Lopes Pontes Simões. Mr. Roberto Simões is the current Chief Executive Officer of the Company, and has been appointed as of January 01, 2020, and has been a sitting member of the Company's Board of Directors since May 29, 2019, as appointed by shareholder Novonor S.A. - under Judicial Reorganization. Mr. Roberto Simões has served on Boards of Directors as Chairman or member in large companies or institutions, such as: IBP (Brazilian Petroleum Institute), ABIQUIM, Odebrecht Engenharia e Construção, Consorcio Baía de Sepetiba, Itaguaí Construções Navais, Petroquímica Paulínia, Ipiranga Química, Ipiranga Petroquímica, Refinaria Ipiranga, COPESUL, Petroflex and CETREL. He was CEO of Ocyan S.A. (2012-2019), of Odebrecht Defesa e Tecnologia (2010-2012), President of Santo Antônio Energia (2008-2010) and Executive Vice President of Braskem (2004-2008). At iG-Internet Group, he was COO and CEO from 2000 to 2004. He was President of Opportrans Concessão Metroviária - Metro Rio from 1999 to 2000. He began working for the Odebrecht Group in 1994 as Contract Director for Tenenge and CNO until 1999. He graduated in Mechanical Engineering from the Federal University of Bahia in 1978 and also took Cement - Petrochemical Projects and Maintenance Engineering Course (Petrobras/UFBA agreement). He is a member of the Assembly of the Social Works of Sister Dulce.

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Juliana Sá Vieira Baiardi. Ms. Juliana Sá Vieira Baiardi has been appointed as an effective member of Braskem's Board of Directors by shareholder Novonor S.A.. Ms. Juliana Baiardi joined Odebrecht in August 2011. Since April 2021 she has been an advisor to Novonor's CEO and is currently also Vice Chairman of the Board of Odebrecht Engenharia e Construção (and a board member of OTP. Before being an advisor, Juliana was President of Atvos from May 2019 to February 2021, CEO of OTP from May 2017 to May 2019, CEO of Odebrecht Ambiental from September 2016 to April 2017, CFO of Odebrecht Ambiental from February 2016 to September 2016 and Director of Logistics of OTP from August 2011 to February 2016. Before joining Odebrecht, Juliana worked 10 years at J P Morgan in the Investment Banking and Private Equity areas. She also worked at Dresdner Bank in Brazil in the Project Finance sector from 1997 to 1999. Juliana has a degree in Civil Engineering from UFBA Universidade Federal da Bahia and an MBA from Columbia University in New York.

Héctor Nuñez. Mr. Héctor Nuñez has been appointed as an effective member of the Company's Board of Directors by its shareholder Novonor S.A. as of November, 2021. Mr. Héctor Nuñez is a senior executive, customer-focused, international business strategist with over 25 years of success managing growth, re-engineering troubled operations and starting up startups throughout the United States and South America. He holds a BA and MBA from Florida International University in Business Administration. He served as CEO of Ri Happy Brinquedos S.A. for 9 years, leading transactions to acquire the largest specialty retailers in Brazil. He also served as CEO of Walmart Stores, Inc. and various leadership positions at The Coca-Cola Company and its group companies. Since March 2022, he holds the position of CEO of Novonor S.A. - In Judicial Recovery, a company where he also held the position of Chairman of the Board of Directors from April 2021 to March 2022. He has also served, since January 2011, as an Independent Board Member of Vulcabrás and, since April 2017, as Chairman of the Board of Directors of Marisa S.A. He is also a board member of the NGO Amigos do Bem.

Roberto Faldini. Mr. Roberto Faldini has been appointed as an effective member of the Company's Board of Directors by the shareholder Novonor S.A.. He is President and partner of Faldini Participações Administração e Investimentos Ltda. and CEO of MBF Administração e Serviços. Besides the Board of Braskem SA, he is currently a member of the Boards of Irani Papel e Embalagens SA, Cia. Habitusul de Participações and Novonor S.A. - In Judicial Recovery. He voluntarily participates as a member of the Board of Trustees of the Dorina Nowill Foundation for the Blind, the Crespi Prado Foundation and the Norberto Odebrecht Foundation. He is the director of Fundação Cultural Ema Gordon Klabin. Mr. Roberto Faldini is a guest professor at Fundação Dom Cabral and an arbitrator at CAM - Câmara de Arbitragem do Mercado of B3. He has participated as a member of the Board of Directors and Advisory Board of several companies in Brazil and abroad, among them BOVESPA, Metal Leve, Marau, Livrarias Siciliano, CPFL, Inpar, Klicknet, Sadia, BRF, Bco. BMG, Vulcabrás and Marfrig. He was a co-founder of IBGC - Brazilian Institute of Corporate Governance in 1995 and is still active in several of its committees. He is an associate member of IBEF - Brazilian Institute of Financial Executives and of FBN - Family Business Network. For over 20 years he was an executive officer, shareholder and member of the Board of Directors of Metal Leve S.A., he was President Professional Experience / Independence Criteria of CVM in 1992. He was coordinator for 5 years (2002 - 2007) in São Paulo of the Núcleo da Empresa Familiar - PDA, of the Dom Cabral Foundation. He graduated in Business Administration from Fundação Getúlio Vargas (1972), and has specialization in (i) Advanced Management from Fundação Dom Cabral and INSEAD (1991); (ii) Entrepreneurship from Babson College (2004) and (iii) Corporate Governance (IFC and IBGC - 2009, 2011, 2013 and 2016). From 2016 to the present he continued and continues to participate in several courses and seminars in Brazil and abroad, as well as, events related to Business Strategy, Business Administration, Corporate and Family Governance aiming his continuous learning.

Charles Lenzi. Mr. Charles Lenzi has been appointed as an effective member of the Company's Board of Directors by shareholder Petróleo Brasileiro S.A. - Petrobras. Mr. Charles Lenzi is Executive Chairman of ABRAGEL, since 2019; Independent Member of the Board of Directors and Member of the Audit Committee of AES Brasil, since 2019; and Independent Member of the Board of Directors, Member of the Audit Committee and Member of the People and Sustainability Committee of BEVAP - Bioenergética Vale do Paracatu, since 2020. He was CEO of Eletropaulo, from 2016 to 2018; COO of AES Brasil, CEO of Eletropaulo and CEO of AES Sul from 2016 to 2017; Executive President of ABMGEL from 2010 to 2016; Managing Director of Grupo Stefani, from 2008 to 2010; Vice-President of Distribution AES Brasil, Eletropaulo and AES Sul, from 2006 to 2008; General Director of AES Sul, from 2004 to 2006; Vice-President of Operations of Eletropaulo, from 2002 to 2003; Regional Director of AES EDC - La Electricidad de Caracas, from 2001 to 2002; President Director of AES CESCO - India, from 2000 to 2001; Business Unit Manager of AES Sul, from 1998 to 1999; General Manager of Gazola S/A from 1988 to 1998; Sales Engineer of Intral S/A from 1982 to 1986. He is an Electrical Engineer from PUCRS, from 1977 to 1981. He holds a Specialization Degree in Industrial Automation from UNICAMP, from 1986 to 1988; MBA in Finance from UCS, from 1996 to 1998; MBA in Strategic Planning and Business Management from FGV, in 1999; Leadership Development Program from Darden Business School, University of Virginia, in 2006; PGA Advanced Management Program, from Dom Cabral INSEAD Foundation, in 2007; Master in Business Administration and Business from PUCRS, in 2015; Board Member Course from IBGC, in 2016; and Global Executive Leadership Retreat, from Georgetown University, in 2017.

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Marcelo Klujnsza. Mr. Marcelo Klujnsza has been appointed as an effective member of the Company's Board of Directors as of August 24, 2020 by shareholder Petróleo Brasileiro - Petrobras and is a member of its Support Committee - Finance and Investment Committee. Mr. Marcelo Klujnsza has served in senior management positions in consulting companies - CEO of Metal Data S.A. and Vice President of Alexander Proudfoot Consultoria - in addition to acting as a consultant through his own company - Metakarp Value Consulting, offering support to the management and board of directors of companies, especially in the mineral and metallurgical industry segment. He has also worked in technical, management and senior management positions at Vale, Rio Paracatu Mineração, Rio Tinto Brasil, IBM Brasil and Grupo Solmucci Entretenimento. At Petrobras, he held the position of Assistant to the Board of Directors from 06/2015 to 11/2015 and Advisor to the Presidency from 12/2018 to 04/2021. He held the position of Chairman of the Board of Directors of Liquegás Distribuidora S.A. from 06/2019 to 12/2020. He holds a degree in mechanical engineering from Pontificia Universidade Católica do Rio de Janeiro, a master's degree in Geosciences/Geology from Universidade Federal do Rio de Janeiro, a specialization in Business Administration from Pontificia Universidade Católica do Rio de Janeiro and has a professional career spanning 37 years.

Alternate Directors

André Amaro da Silveira. Mr. André Amaro is an alternate member of the Company's Board of Directors as a nominee of Novonor S.A. Mr. Amaro worked with Novonor Group from 1988 to 2018. In addition to the aforementioned office at the Company, Mr. Amaro is an effective member of the Board of Directors of the company Ocyan, working also as coordinator of the Culture, Communication, Personnel and Sustainability Committee, he is an effective member of the Board of Directors of the company Odebrecht Transport, and also acts as coordinator of the Personnel and Organization Committee and as member of the Finance and Investment Committee, and is the chairman of the Board of Directors of Redram Construtora de Obras 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 Novonor S.A., President of Odebrecht Properties and of Odebrecht Defesa e Tecnologia. He holds a graduate degree in Civil Engineering from Universidade Federal de Minas Gerais and a Master's degree in Business Administration from IMD.

Rodrigo Tiradentes Montecchiari. Mr. Rodrigo Tiradentes Montecchiari is being nominated as an alternate member of the Company's Board of Directors by the shareholder Petróleo Brasileiro S.A. - Petrobras. Mr. Rodrigo Montecchiari is Fiscal Director of Refinarias de Mucuripe S.A., Manaus S.A., Canoas S.A. and Paraná Xisto S.A. Additionally, he is Alternate Fiscal Director of Logum Logística S.A., since April 2018 and was Chief Financial Officer (CFO) of PB-LOG between April 2017 and December 2021. He was Fiscal Director of PQS and MSGÁS, from April 2013 to March 2018; Alternate Fiscal Director of Petros, from April 2013 to March 2018; Corporate Finance at Petrobras, from December 2012 to March 2017; Chief Financial and Administrative Officer at Petrobras Namibia, from March 2012 to November 2012; Chief Financial and Administrative Officer at Petrobras Angola, from March 2010 until February 2012; Chief Financial and Administrative Officer at Petrobras Nigeria, from May 2007 until February 2010; and Coordinator of Audit and Joint Ventures at Petrobras, from 2003 until April 2007. He holds a degree in economics from Universidade Federal Fluminense, an Executive MBA from Fundação Dom Cabral and a Master's degree in Corporate Finance from the University of Liverpool.

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Daniel Pereira de Albuquerque Ennes. Mr. Daniel Pereira de Albuquerque Ennes is an alternate member of the Company's Board of Directors as a nominee of shareholder Petróleo Brasileiro S.A. – Petrobras. He is currently the Bank and Structured Finance Manager of Petrobras. He was previously an effective member of the Board of Directors of Liquigás Distribuidora S.A. and Bank Market Coordinator, Domestic Capital Market Coordinator and Export Credit Agency Coordinator of Petrobras. Mr. Daniel Pereira holds a graduate degree in Economics from Universidade Federal do Rio de Janeiro (UFRJ), a bachelor's degree in Law from Universidade do Estado do Rio de Janeiro (UERJ) and a Master's degree in Industrial Economics from Universidade Federal do Rio de Janeiro (UFRJ).

Laura Maniero Gadelho. Ms. Laura Maniero Gadelho has been appointed as an alternate member of the Company's Board of Directors by the shareholder Novonor S.A. - under Judicial Reorganization. Ms. Laura Maniero Gadelho is currently a lawyer in the corporate area of Novonor S.A., a position she has held since April/2016, having previously worked at Odebrecht Properties (January/2013 to April/2016) as a lawyer in the corporate and business areas. She also worked as a senior lawyer in the litigation and arbitration department at Lefosse Advogados/Linklaters LLP (October/2007 to January/2013), in São Paulo and New York, as a trainee and lawyer in the litigation and arbitration department at Dourado Fialdini Penna Tilkian Advogados Associados (November/2005 to October/2007) and as a trainee in the administrative law department at Tojal Teixeira Ferreira Serrano e Renault Advogados (May/2005 to November/2005). Ms. Laura Maniero Gadelho has a law degree from Universidade de São Paulo (USP) (2002 to 2006), a Continuing Education Course in Arbitration from Escola de Direito da Fundação Getúlio Vargas - FGV (2008) and an LL.M. (Master of Laws) from Columbia University School of Law (August/2010 to May/2011), having also participated in the International Commercial Arbitration Association and the Latin American Association of Business Law.

Guilherme Simões de Abreu. Mr. Guilherme Simões de Abreu has been appointed as an alternate member of Braskem's Board of Directors by shareholder Novonor S.A. - In Judicial Recovery. He currently holds the position of Responsible for People, Communication and Organization at Novonor S.A., since January 2020. From June 2018 to December 2019, he held the position of Executive Secretary of the Board of Directors of Novonor S.A. From 2013 to March 2017, he was Manager of Novonor S.A. - In Judicial Recovery, for People and Organization matters.

Marco Antonio Zacarias. Mr. Marcos Antonio Zacarias has been appointed as an alternate member of the Company's Board of Directors by the shareholder Petróleo Brasileiro S.A. - Petrobras. Mr. Marcos Antonio has been CEO of Petrobras Uruguay S.A. de Inversión and of Petrobras Uruguay Servicios y Operaciones S.A., since March 1, 2020. He was CEO of Petrobras Uruguay Distribución S.A. and Misurrol S.A., from 03/01/2020 to 02/05/2021; Director of Petrobras Uruguay S.A. de Inversión, Vice President of Petrobras Uruguay Distribución S.A., Vice President of Mirusol S.A., and Vice President of Petrobras Uruguay Servicios y Operaciones S.A., from 01/01/2018 to 02/29/2020; Vice President of Distribuidora de Gas Montevideo S.A. and Director of Conecta S.A., from 01/02/2019 until 09/30/2019; General Manager of Company Management and Benefits, from 2016 until 2017, General Manager of Financial Management, in 2016, Executive Manager of Corporate Finance, from 2015 until 2016, General Manager of Financial Management, from 2006 until 2015, Manager of Subsidiary Coordination, from 2005 until 2006, Accounting Manager of International Business, from 2000 until 2005, at Petrobras - Petróleo Brasileiro S.A.; Financial Control Manager, at Petrobras Internacional S.A. - Braspetro, from 1999 to 2000; and Financial and Administrative Manager, at Petrobras Colombia, from 1995 to 1999. He worked at Amil Assistência Médica Internacional Ltda., at Cobra Computadores S.A., at Banco Mercantil de São Paulo S.A. and at the Ministério da Aeronáutica during his mandatory military service. He graduated in Accountancy from the Universidade do Estado do Rio de Janeiro in 1987. He holds an MBA in Business, Controlling, Auditing and Accounting from Fundação Getúlio Vargas, in 1994; an MBA in Accounting Management from the University of São Paulo, in 2005; an Advanced Management Program from INSEAD Business School, Fontainebleau, France, in 2008; and an Advanced International Program in Oil and Gas Financial Management from the University of Texas at Dallas, USA, in 1997.

Lineu Fachin Leonardo. Mr. Lineu Fachin Leonardo has been appointed as an alternate member of the Company's Board of Directors by the shareholder Petróleo Brasileiro S.A. - Petrobras. Mr. Lineu Fachin has been General Manager of Development, Career and Leadership at Petrobras - Petróleo Brasileiro S.A., since September 2020. He has held several managerial positions at Petrobras in the last 10 years, and has also worked at a company controlled by Petrobras in the Human Resources area. Among the managerial experiences at Petrobras, the highlights are the conduction of Career, Succession and Performance, Development, and Organizational Learning topics, in addition to having acted as International HR manager at Petrobras. At Transpetro (Petrobras Transporte S.A.) he was in charge of Career, Remuneration, Performance, and Labor and Union Relations during his time at the company. Before working for Petrobras, she worked in education, having implemented distance learning courses at Universidade Norte do Paraná. She holds a Bachelor's degree in Business Administration from the State University of Londrina (1999-2003), and a degree in Tourism and Hospitality from the University of Northern Paraná (1999-2003). He holds a Specialization in International Relations from Universidade Candido Mendes (2007-2008); Specialization in People Management from IBMEC (2008-2009). He holds a Master in Administration - Business Management, from Fundação Getúlio Vargas/RJ (2019-2020). He also has executive training abroad at schools such as INSEAD - Institut Européen d'Administration des Affaires, Center for Creative Leadership, Kellogg School of Management, TIAS Business School and Rutgers Business School.

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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, 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, and our chief executive officer and, 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 a three-year terms unified 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 Corporate Law, executive officers must be residents of Brazil, or indicate representatives that must be residents of Brazil, but don't need to be our shareholders. Our board of executive officers holds meetings when called by our chief executive officer.

The following table lists the current members of our board of executive officers as of the date of this annual report:

Name	Year of First Appointment	Position Held	Age
Roberto Lopes Pontes Simões	2019	Chief Executive Officer	65
Pedro van Langendonck Teixeira de Freitas	2016	Chief Financial Officer and Head of Procurement and Institutional Relation	46
Edison Terra Filho	2017	Executive Officer and Head of the Olefins & Polyolefins South America	50
Marcelo Arantes de Carvalho	2015	Executive Officer and Head of People, Communication, Marketing and Sustainable Development	53
Marcelo de Oliveira Cerqueira	2013	Executive Officer and Head of Brazil Manufacturing and Global Industrial Operations	56
Daniel Sales Corrêa	2020	Executive Officer and Head of Investments & Digital Technologies	54

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. Pedro van Langendonck Teixeira de Freitas has been appointed as the Company's Financial and Investors Relations Officer as of April 14, 2021 and he is currently Company's Responsible Person for Finance, Supplies and Institutional Relations. In this office, he globally leads the financial, investors relations, and supplies and strategic planning areas, and coordinates the institutional relations in Brazil. In this context, he is responsible for the Company's management and financial health, for the innovation in the search for efficiency in the management processes and for the motivation of a high-performance team. From 2011 to 2016, he was responsible of Braskem's Corporate Strategy Management, elaborating the business plan and evaluating investments and M&A opportunities. Previously, he worked with strategy advisory, having participated in the definition of business and M&A strategies in various industries, including in the petrochemical, agribusiness, consumer goods and pharmaceutical. Mr. Pedro Freitas holds a Production Engineering degree from the Polytechnic School of Universidade de São Paulo USP, and an MBA from INSEAD.

Edison Terra Filho. Mr. Edison Terra Filho has been elected as a member of the Company's Executive Management as of April 14, 2021 and he is currently responsible for the South America Olefins & Poliolefinas Unit. Mr. Edison Terra joined Braskem in 2002, and he worked in the Marketing, Supply Chain and Exportation areas, as leader of the Polyethylene Business, Europe and Renewable, and of UNIB and quantiQ. Before working for Braskem, he worked nine years for Rhodia. Mr. Edison Terra holds a graduate degree in Production Engineering from the Polytechnic School of Universidade de São Paulo USP and a Master's degree in Business Administration from EAESP-FGV/SP. He has also attended extension courses in Global Leadership in Wharton Business School and in Disruptive Technologies in Singularity University. He is executive president of INP (Instituto Nacional do Plástico) and officer of FIESP (Federação das Indústrias do Estado de São Paulo).

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Marcelo de Oliveira Cerqueira. Mr. Marcelo de Oliveira Cerqueira has been appointed as a member of the Company's Executive Management as of April 14, 2021 and he is currently the Executive Vice-President of Manufatura Brasil e Operações Industriais Globais. Mr. Cerqueira has more than 30 years of experience in the chemical and petrochemical industry. He has started his career in 1987 at Companhia Alcoolquímica Nacional and COPERBO (currently Arlanxeo). In 1989 he joined Companhia Petroquímica Camaçari, where he worked on Production, Logistics, Health, Safety and Environment – SSMA and Supplies areas. At Braskem, he has already worked as Responsible Person for the Vinyls Unit, Industrial Vinyls Officer and Production Manager of the PVC Unit of Alagoas and Bahia and responsible for the Chemicals and Vinyls Unit at Braskem. Mr. Marcelo Cerqueira holds a degree in Chemical Engineering from Universidade de Pernambuco and an MBA in Business Management from FGV, and he has attended the Global Leadership Program at Wharton Business School - University of Pennsylvania.

Marcelo Arantes de Carvalho. Mr. Marcelo Arantes de Carvalho has been elected as a member of the Company's Executive Management as of April 14, 2021 and he is currently the Responsible Person for People, Communication, Marketing and Press Relation of the Company, with 34 years of professional experience. He has acted in various large-sized companies and in several offices related to Human Resources. He started his career as an intern in Fiat Group in 1988, and then he worked at Celite S.A. from 1989 to 1991, in the Remuneration and Union Relations area. From 1991 to 1998, he worked as Human Resources Manager at Asea Brown Boveri Ltda., and then he joined Unilever to work as Human Resources Development Manager. In 2000 he became Human and Organizational Development Officer of Intelig Telecomunicações. Later, in 2005, he joined Reckitt Benckiser, where he remained until 2008 as Human Resources Officer. Between 2008 and 2010 he was the Human Resources Officer for Latin America at Fiat Group, after which he came to Braskem. Mr. Marcelo Arantes holds a degree in Business Administration from Faculdade de Ciências Gerenciais (UNA) and an Executive MBA from Dom Cabral Foundation (Fundação Dom Cabral), and he has attended the Global Leadership Program at Wharton Business School - University of Pennsylvania.

Daniel Sales Corrêa. Mr. Daniel Sales Corrêa has been elected as a member of the Company's Executive Management as of April 14, 2021 and he is currently responsible for Investments and Digital Technologies. During the 26 years he worked for Petrobras in various refineries, and held offices in Engineering, Production, Process Optimization and Commercialization. At the company's headquarters, he has been operational efficiency general manager, including all refineries, and more recently he was the general manager of the company's refining, transport, and commercialization business restructuring programs, where he led initiatives to reposition Petrobras in the "Downstream," focused on the carve out of the refineries and terminals to be disinvested. During the period from 2019 to July 2020, he was also a member of the board of directors of Refinaria de Petróleo Riogranense S.A. – RPR. Mr. Daniel Corrêa holds a graduate degree in Electrical Engineering from Universidade Federal do Amazonas (UFAM), a postgraduate degree in Equipment Engineering and in Oil Refining Engineering from Universidade Petrobras, and in Quality and Productivity Management from FUCAPI/UFRGS, and an Executive MBA in Strategic Business Management from FIA/USP.

Board Committees

On August 8, 2018 our board of directors approved its internal operating rules (which has been recently updated on September 22, 2021), as well as the board committees' internal rules (which have been recently updated on September 22, 2021 and November 09, 2021). 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.com.br/ri. Under these rules, our bylaws and the shareholders' agreement, our board of directors has established four permanent committees and has the power to establish ad-hoc committees. Permanent committees must have at least 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.

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We currently have the following four permanent committees: (1) the Finance and Investment Committee, (2) the Personnel and Organization Committee, (3) the Strategy, Communication and “ESG” Committee and (4) the Statutory Compliance and Audit Committee. The duties of each permanent committee are established in their respective bylaws, all approved by our board of directors. The members of each permanent committee, including external members of the Compliance and Audit Committee, are appointed by the chairman of the board of directors, solely from among its members and alternate members, being the committee’s coordinators appointed by the chairman of the board of directors. 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 to assist in deliberations under the board of directors’ responsibility, except the Statutory Compliance and Audit Committee which has certain specific duties.

Finance and Investment Committee

Our Finance and Investment Committee meets at least quarterly and has its duties fixed at its Internal Rule, such as: (1) to analyze existing policies relating to financial management, investments and guarantees, (2) analyze the constant risks in the Corporate Risk Matrix and the respective mitigation plans related to the topics within its competence, (3) to analyze opportunities related to financing and investment transactions that may improve our capital structure, (4) to analyze guidelines and protocols for our business planning execution cycle. Our Finance and Investment Committee is currently composed of Mr. João Pinheiro Nogueira Batista (coordinator), Mr. Héctor Nuñez, Mr. Marcelo Klujsza, Mr. Rodrigo Montecchiari.

Personnel and Organization Committee

Our Personnel and Organization Committee conducts work meetings at least six 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 the maintenance and strengthening of our corporate culture. Our Personnel and Organization Committee is currently composed of Mr. Eduardo Leal Ferreira (coordinator), Mr. Guilherme Abreu and Mr. Roberto Faldini.

Strategy, Communication and “ESG” Committee

Our Strategy, Communication and “ESG” Committee conducts work meetings at least five times per year 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, Communication and “ESG” Committee is currently composed of Mr. José Mauro da Cunha (coordinator), Mr. José Luis Vidal, Mrs. Juliana Baiardi and Mr. Roberto Lopes Pontes Simões.

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Statutory Compliance and Audit Committee

On July 30, 2021, our shareholders approved, at the Extraordinary General Meeting, the transformation of the Compliance Committee into the Statutory Compliance and Audit Committee, with the consequent amendment of the Bylaws to include this provision.

On November 9, 2021, our board of directors approved the formation of Braskem's Statutory Compliance and Audit Committee (Comitê de Compliance e Auditoria Estatutário, the "CCAÉ"), a permanent advisory body to our board of directors, in compliance with CVM Resolution No. 23/21 and the U.S. Sarbanes-Oxley Act of 2002 (the "SOX"), pursuant to Article 30, XXIX, of CVM Instruction No. 480/09, and accordingly, allows us to rely on the exemption from the audit committee requirements of the SEC contained in paragraph (c)(3) of Rule 10A-3 under the Securities Exchange Act of 1934, as amended, in accordance with our strategy to follow the best corporate governance practices. See "Item 16D. Exemptions from the Listing Standards for Audit Committees."

The Statutory Compliance and Audit Committee is a statutory committee which meets monthly and has five members, chosen by the Board itself pursuant to the nomination made by the chairman of the Board (observed the specificities about external members highlighted below), being one of the nominees indicated as the coordinator of the Statutory Compliance and Audit Committee. The committee must have in its composition (i) three (3) independent members of the Company's Board of Directors, as defined in the Company's policies; and (ii) two (2) members that are not part of the Board of Directors (*external members*), which are independent members, pursuant to CVM Resolution No. 23 of 2021, and shall be chosen by said body among those indicated in a list to be submitted by the Chairman of the Board of Directors, prepared by a specialized company, with evidenced experience, provided that the indication of names by the shareholders not being allowed.

The main duties and objectives are to (1) evaluate internal controls, risk exposure and compliance with applicable laws and regulations, (2) monitor investigations related to ethics complaints, (3) analyze and periodically update the Compliance System Policy, the Anticorruption Policy and the Related Party Transactions Policy, (4) opine about the selection and dismissal of the our independent external auditors, (5) monitor the quality and integrity of the quarterly information, interim statements, and financial statements, (6) develop training programs for board members, senior managers and certain employees, and (7) evaluate, prior to the appreciation by the Board of Directors, the appropriateness of transactions subject to the approval of the Board of Directors between the Company and its related parties, as provided for in the Company's Bylaws and in the Policy of Transactions with Related Parties of the Company, as well as to carry out the monitoring, including the respective evidences, jointly with the Management and the internal audit area. The detailing of the competencies of the Statutory Compliance and Audit Committee can be found in its Internal Rules. Our Statutory Compliance and Audit Committee is currently composed of Mr. Gesner Oliveira (coordinator), Mr. André Amaro, Mr. Charles Lenzi, Mr. José Écio Pereira da Costa Júnior (external member) and Mrs. Maria Helena Pettersson (external member).

NYSE rules require that listed companies have an audit committee that (i) is composed of a minimum of three independent directors who are all financially literate, (ii) meets the SEC rules regarding audit committees for listed companies, (iii) has at least one member who has accounting or financial management expertise and (iv) is governed by a written charter addressing the committee's required purpose and detailing its required responsibilities. However, as a foreign private issuer, we only need to comply with the requirement that our CCAÉ meet the SEC rules regarding audit committees for listed companies.

The SEC has recognized that, for foreign private issuers, local legislation may delegate some of the functions of the audit committee to other advisory bodies. We have established a CCAÉ as approved at the board of directors meeting held on November 9, 2021. Our CCAÉ meets the requirements for the exemption available to foreign private issuers under paragraph (c)(3) of Rule 10A-3 under the Exchange Act. The CCAÉ is not the equivalent of, or wholly comparable to, a U.S. audit committee. Among other differences, it is not required to meet the standards of "independence" established in Rule 10A-3 and is not fully empowered to act on all the matters that are required by Rule 10A-3 to be within the scope of an audit committee's authority.

External Members

José Écio Pereira da Costa Junior. Mr. José Écio Pereira da Costa Junior is member of the Company's Compliance and Audit Statutory Committee since November 09, 2021. He holds a graduate degree in Business Administration and Accounting Sciences. He entered the auditing career in 1974 at Arthur Andersen & Co and was promoted to International Partner in 1986 and later, in June 2002, became a partner at Deloitte Touche Tohmatsu in Brazil, remaining there until May 2007, when he retired. From October 1993 until May 2004 he was the managing partner responsible for the Curitiba office of these auditing and consulting firms. Founding partner of JEPereira Consultoria em Gestão de Negócios S/S, in January 2008, acting with emphasis on consultancies related to: strategic management, consultancy in the preparation of companies and their shareholders to act in the New Capital Market, besides acting as adviser in Audit Committees with the Boards of Public Companies. He was a member of the Board of Directors of GAFISA S.A. from June 2008 to April 2018 and Coordinator of the Audit Committee from June 2008 to April 2016, becoming a member of this Committee from then until April 2018. He also served as a Member of the Statutory Audit Committee of FIBRIA S.A. from April 2013 to March 2018, and was also Chairman of the Fiscal Council from December 2009 to March 2013. He served as Coordinator of the Audit Committee of VOTORANTIM INDUSTRIAL S.A - VID from June 2012 to June 2014 and served as Coordinator of the Audit Committee of VOTORANTIM METAIS S.A (currently NEXA S.A) from June 2014 to December 2017. He served as Member of the Audit Committee of CESP S.A from April 2019 to April 2021. He also served as a member of the Board of Directors of Ouro Verde Locação e Serviço S.A in the period from October 2018 to June 2019. He also served as a member of the Board of Directors of BRMALLS S.A. (shopping center management company registered with the CVM - Novo Mercado) from April 2010 to April 2014. He also served as a member of the Board of Directors of Grupo NOSTER (privately-held company in the area of public transportation in Curitiba, resale of automobiles and power generation) from January 2011 to September 2013. He serves as Coordinator of the Audit Committee of VOTORANTIM CIMENTOS S.A since October 2013. He has served as Coordinator of the Audit Committees of CITROSUCO S.A since December 2014 and at CBA - Companhia Brasileira de Alumínio and VE Votorantim Energia since June 2017. He also serves as a member of the Board of Directors of Princecampos Participações S.A., elected in April 2010 and as Chairman of the Fiscal Council at Demercado Investimentos S.A., elected in November 2020.

Maria Helena Pettersson. Mrs. Maria Helena Pettersson is member of the Company's Compliance and Audit Statutory Committee since November 09, 2021. Mrs. Maria Helena Pettersson has a bachelor's degree in Accounting and Business Administration with several improvement courses in finance, business management, internal controls, business and asset valuation etc. Board member and senior consultant with 40 years of experience in accounting, financial statements, corporate governance, internal and external financial reporting, internal controls, internal policy compliance, compliance with laws and regulations, risk governance and international accounting. She has served as an audit and consulting partner, coordinating services to large multinational companies, large Brazilian business groups, publicly traded companies in Brazil and SEC-listed companies, in various industries, such as media and entertainment, airlines, telecommunications, manufacturing, retail and trade, services, healthcare, among others. She is currently a member of the Advisory Board of CARLAB at Rutgers University, member of the Audit Committee of Tecnisa S.A. and member of the Fiscal Council of Omega Energia S.A. She provides independent consulting services in the areas of corporate governance and compliance for large companies, committee structuring at the Board level, preparation for M&A and IPO due diligence, and professionalization of the management of family-owned companies. She worked for nearly 30 years in independent auditing, led audits of financial statements for local and international purposes, and conducted large and complex consulting engagements, including IPOs, mergers, acquisitions and post-transaction integration, debt restructurings and judicial restructurings. She has experience in the areas of accounting and financial statements, corporate financial reporting, compliance with capital markets laws and regulations, financial planning, business valuation, risk management, internal and external auditing, and masters the Brazilian and international regulatory framework of the auditing profession, in addition to familiarity with global best practices in corporate governance. She has excellent interpersonal relations, leadership, and change management skills. She has an outstanding ability to lead teams and interact with people and multidisciplinary work groups, creating a collaborative and results-oriented work environment with an extensive record of accomplishments, results achieved, meeting deadlines with proven and high client satisfaction.

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Our chief compliance officer, or CCO, has a full-line report directly to the Statutory Compliance and Audit Committee, and dotted-line report to the CEO of the company. Our CCO exercises independent judgment and acts in an impartial manner. Our CCO is responsible for developing a compliance system, assist the CEO in implementing the compliance system and continually monitor developments in this respect. Our CCO is also responsible the global activities: Internal Audit, Corporate Risk Management, Internal Controls, Compliance and Data Protection.

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, data protection 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 Statutory Compliance and Audit Committee with the enforcement of compliance rules and with matters involving the violation of the commitment to ethics, integrity and transparency. Our Ethics Committee is formed by our Chief Compliance Officer, who is also its coordinator, and three additional members: vice-presidents in our Legal, People & Organization and Finance areas. The main objectives of our Ethics Committee are to (1) evaluate the results of internal investigations of ethics complaints, (2) submit to the Statutory Compliance and Audit Committee proposed revisions to the Company's orientation materials, including the Code of Conduct, and (3) provide guidance on questions of ethical conduct and ensure consistent evaluation and treatment of ethical matters.

Fiscal Council

The Brazilian Corporate Law requires us to establish a permanent or non-permanent fiscal council ("*conselho fiscal*"), with a minimum of 3 and up to 5 members, with alternate members. Our by-laws provide for a permanent fiscal council composed of up to five members and their respective alternate members. The fiscal council is a separate corporate body, independent of our management and our independent directors.

The members of our fiscal council and theirs alternate members 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 2021. Under the Brazilian Corporate Law, the fiscal council may not contain members who are members of our board of directors or of our board of executive officers or be employees of the Company or of its controlled companies or of companies from the same group, or spouses or relatives, up to third degree of 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, or with restricted vote, and (2) non-controlling common shareholders that together hold at least 10.0% of our voting share capital are each entitled to elect , in a separate voting, one member and his or her respective alternate to the fiscal council.

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The responsibilities of a fiscal council are established by the Brazilian Corporate Law. In accordance with the Brazilian Corporate 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 the 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 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.
- to attend the Board of Directors' Meetings in which it must give an opinion on the subjects to be resolved upon the council;
- to attend or be represented, by at least one of its members, in the Company's General Meetings, answering the requests for information made by the our Shareholders;
- to request that the Company's Management, upon request of any of its members, provide clarifications or information about specific facts, provided that they are related to its supervisory duty, under the law and the Company's Bylaws,

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	2015
Marcilio José Ribeiro Junior	2021
Carlos Henrique Vieira Candido da Silva	2022
Marcos Aurélio Pamplona da Silva	2022
Ivan Silva Duarte (alternate)	2016
Tatiana Macedo Costa Rego (alternate)	2014
Alexis Kneip Ward (alternate)	2022
Cristiano Gadelha Vidal Campello (alternate)	2022
Fabricao Santos Debortoli (alternate)	2022

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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. Ismael Campos de Abreu has been elected as an effective member of the Company's Fiscal Council as of April 13, 2021 by shareholder Novonor S.A. Mr. Ismael Campos served as an Officer at Kieppe Participações e Administração Ltda. - under Judicial Reorganization from April 2011 to May 2017. Between 1995 and March 2011 he served as Controller of Novonor S.A. - under Judicial Recovery (former Odebrecht S.A.), a company that indirectly holds more than 5% of the same type or class of securities of the Company. He was Manager of the tax consulting division of PricewaterhouseCoopers (1978/1985) and of Arthur Andersen (1989/1991). He was a partner at Performance Auditoria e Consultoria Empresarial (1992/1995). He was a member of the Board of Directors of Hospital Cardio Pulmonar and member of the Fiscal Council of several companies operating in the petrochemical sector. Mr. Ismael holds a degree in Accounting from Fundação Visconde de Cairú and a post-graduate degree in Economic Engineering from the Inter-American Development Center. Mr. Ismael Campos de Abreu does not hold a management position in any third sector organization.

Gilberto Braga. Mr. Gilberto Braga has been appointed as an effective member of the Company's Fiscal Council as of April 13, 2021 by shareholder Novonor S.A.. Mr. Gilberto is a business consultant in the areas of finance, capital markets, corporate, tax, forensics and forensic assistance, besides acting as fiscal, management and audit committee member for publicly-held companies and professional associations. He was a member of the CVM's Investment Funds Accounting Standards Advisory Committee, is a university and post-graduation professor of corporate governance at Fundação Dom Cabral, IBMEC, PUC and FGV, a commentator for Radio CBN, FM 94 in Rio de Janeiro, and an article writer for the newspaper O Dia. He has a degree in Economics from UCAM Ipanema and Accounting from UGF, a post-graduate degree in Financial Administration from IAG-PUC Rio and a Master in Administration (Finance and Capital Markets) from IBMEC-Rio. He is a member of IBGC.

Marcílio José Ribeiro Júnior. Mr. Ribeiro has been appointed as an effective member of the Company's Fiscal Council as of April 13, 2021 by shareholder Petróleo Brasileiro S.A. – Petrobras. Mr. Marcílio is currently a Senior Accountant at PETROBRAS, having previously held other positions at the same company (since October 2, 2006). He is currently a Fiscal Director at METANOR - Metanol do Nordeste S.A. and Alternate Fiscal Director at IBIRITERMO S/A, having previously served as Fiscal Director at Stratara Asfaltos S.A. He has also previously worked at Queiroz Galvão Óleo e Gás S/A, as Controller; at Starfish Oil & Gas S.A., as Accounting Manager; at Gaspart Gás Participações Ltda. (currently MITSUI Gás do Brasil), as an Accountant; at ALTM S.A. Tecnologia e Serviços de Manutenção (Alstom Group), as Accounting Manager; at Terminal Garagem Menezes Côrtes S.A., as Accountant; and at Erco Engenharia S.A., as Accounting Analyst. He holds a Bachelor's degree in Accounting Sciences from Universidade Federal do Rio de Janeiro (February/1993 - August/1997); an MBA in Economic and Financial Engineering from Universidade Federal Fluminense (September/2000 - November/2001); and an LL.M. in Corporate Law from IBMEC (March/2014 - February/2016). Marcílio Jose Ribeiro Jr. does not hold a management position in any third-sector organization.

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Carlos Henrique. Mr. Carlos Henrique has been appointed as an effective member of the Company's Fiscal Council by the shareholder Petróleo Brasileiro S.A. - Petrobras. Mr. Carlos Henrique has held the position of General Manager of Accounting Operations since 2020 at Petrobras, where he joined in 1990 as an accountant, having held various leadership and management positions in the technical accounting area. Also, since 2020 he has held the position of member of the Fiscal Council of Ibritermo S.A., and was a member of the Fiscal Council of Petrobras Logística de Exploração e Produção S.A. (2018-2020); Metanol do Nordeste S.A. (2014-2018); Companhia de Gás do Rio de Janeiro S.A. (2010 -2014), Companhia Paranaense de Gás (2006 - 2010) and Gás de Alagoas S.A. (2003-2006). He holds a bachelor's degree in accounting and a specialization degree in accounting, both from Universidade Federal do Rio de Janeiro, in addition to an Executive MBA in Business Management from PDG - Educational Programs for Executives.

Marcos Aurélio Pamplona da Silva. Mr. Marcos Aurélio Pamplona da Silva has been appointed as an effective member of the Company's Fiscal Council by the minority shareholders. Mr. Marcos Aurélio Pamplona da Silva graduated in Law from UNIVALI (University of Vale do Itajaí) on December, 2004. He was approved in the examination of the Santa Catarina Bar Association (OAB/SC) on January, 2005 and he holds a postgraduate degree in Management Development from ESAG – 1997. He also holds a postgraduate degree in Labor and Social Security Law from the University of the South of Santa Catarina (UNISUL) on December, 2008; a specialization course in Commercial Law from the University of Vale do Itajaí (UNIVALI) – (2010); certificate course for Administrators for Public Companies and Mixed Economy Societies of the State of Santa Catarina, by Fundação Escola de Governo SC – ENA (2021-2022). Mr. Marcos Aurélio Pamplona da Silva was also a regional commercial manager Florianópolis of the distributor Polipetro Comércio de Combustíveis Ltda (currently Alesat) (2003-2006); a director of Citizen Security of the Public Security Department of Santa Catarina (2007-2010); a general coordinator of the First State Conference on Public Security in the State of Santa Catarina – April, 2009 and a natural member of the First National Conference on Public Security (June, 2009). Mr. Marcos Aurélio was the personnel training and management officer at the Santa Catarina Public Security Department from April, 2010 to December, 2010. Mr. Marcos Aurélio Pamplona da Silva also worked as a manager of administrative litigation of the Social Security Institute of the State of Santa Catarina (2011-2018); a substitute legal director of the Social Security Institute of the State of Santa Catarina (2011-2018); a legal advisor of the Social Security Institute of the State of Santa Catarina (2019-2021); a legal consultant of Gaspart S/A; a legal consultant of Grupo TKW Transportes Ltda.. Mr. Marcos Aurélio is the CEO of the Kuerten e Pamplona Consultoria Empresarial Ltda since 1995 and has served as a consultant to several companies in the legal area. Mr. Marcos Aurélio Pamplona da Silva is the CEO of Gaspart Participações S/A, and a board member of Gaspart Participações S/A.

Alternate Members of Fiscal Council

Ivan Duarte. Mr. Ivan Duarte is an alternate member of the Company's Fiscal Council as a nominee of shareholder Novonor S.A. - under Judicial Restructuring Proceedings. Mr. Ivan is being nominated as an alternate member of the Company's Fiscal Council by the shareholder Novonor S.A. - In Judicial Recovery. Mr. Ivan was an officer of Kieppe Participações e Administração Ltda. - under Judicial Reorganization from January 2016 until May 2019, which is part of the same economic group as the issuer and indirectly holds interest exceeding 5% of the capital stock. Previously, Mr. Ivan worked as a manager at KPMG - Auditores Independentes from 1995 to 2001, when he then started to work as a senior manager at PricewaterhouseCoopers Auditores Independentes until 2008. Between 2008 and 2015 Mr. Ivan was an officer at EAO Empreendimentos Agropecuários e Obras S.A., a company belonging to the Novonor Group (formerly Odebrecht Group), which operates in the Agriculture, Food and Beverage segments. Mr. Ivan has a degree in Accounting Sciences from Universidade de Salvador (UNIFACS), and an MBA in Corporate Finance from Fundação Getúlio Vargas and an MBA in Entrepreneurship from Babson College (Boston/USA).

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Tatiana Macedo Costa Rego. Mrs. Tatiana Macedo Costa Rego is an alternate member of the Company's Fiscal Council as a nominee of shareholder Novonor S.A. - under Judicial Restructuring Proceedings. Ms. Tatiana is currently responsible for the controller at OEC (Odebrecht Engenharia e Construção). Previously, Ms. Tatiana worked as Responsible for Tax Planning at Construtora Norberto Odebrecht S.A. ("CNO"). From 2000 to April 2007, Ms. Tatiana worked at the tax area of VIVO S/A, in the telephony sector, as Manager of the Tax Planning Division. Previously, she worked for 2 years at Arthur Andersen. Tatiana has a degree in Public and Private Business Administration from Universidade Federal da Bahia and an MBA in Management from IBMEC.

Alexis Kneip Ward. Mr. Alexis Kneip is an alternate member of the Company's Fiscal Council as a nominee of shareholder Petróleo Brasileiro S.A. - Petrobras. Since August 2020, Mr. Alexis has been working in the finance area supporting the financial processes at Petrobras. Mr. Alexis Kneip has held several positions at Petrobras in different areas: he has worked in the governance area in the scope of corporate optimization (2019 to 2020); Mr. Alexis Kneip was coordinator of the financial area responsible for managing equity investments (2015-2017), Mr. Alexis Kneip has worked in the financial area, in the scope of debt portfolio management (2011-2014) and coordinated the project finance area (2002-2011). From October 1998 to September 2002, Mr. Alexis Kneip Ward worked as a production engineer at the Brazilian Post and Telegraph Company. Mr. Alexis Kneip has a degree in production engineering from Universidade Federal do Rio de Janeiro (UFRJ), a master's degree in business administration with specialization in finance from Instituto Brasileiro de Mercado de Capitais (IBMEC), and a master's degree in clean energy engineering from the University of British Columbia, Canada.

Cristiano Gadelha. Mr. Cristiano Gadelha is an alternate member of the Company's Fiscal Council as a nominee of shareholder Petróleo Brasileiro S.A. - Petrobras. Mr. Cristiano Gadelha holds a Law degree from Fundação Mineira de Educação e Cultura, a post-graduate degree with an MBA in Business Management from Fundação Dom Cabral, and is specialized in Tax Law. Before joining Petrobras, he worked at a law firm focused on tax litigation and consulting. In 2006, Mr. Cristiano Gadelha joined the staff of the Legal Department of Petrobras, where Mr. Cristiano Gadelha participated in several M&A transactions, especially the acquisition of the companies of the Ipiranga Group and Suzano Petroquímica, as well as the consolidation of national petrochemical companies into Braskem S.A. Ten years ago Mr. Cristiano Gadelha joined the tax area of Petrobras, linked to the Financial Board, where Mr. Cristiano Gadelha became the External Relations Manager for the South, Southeast and Midwest regions. Since 2020 Mr. Cristiano Gadelha has been the General Manager of Representation and Negotiation, whose main duties are to promote technical representation and external relations in matters of taxes and government participation, at the strategic level, covering all spheres of government, including engagement with associations and class entities in which the Company participates. Between 2014 and 2015 he was a full member of the Fiscal Council of Companhia Maranhense de Gás - GASMAR, and between 2016 and 2018 he was Chairman of the Fiscal Council of Braskem S.A. Since 2019 he has been Chairman of the Fiscal Council of Transportadora Brasileira Gasoduto Bolívia-Brasil S/A (TBG).

Fabricao Santos Debortoli. Mr. Fabrício Santos Debortoli is an alternate member of the Company's Fiscal Council as a nominee by minority shareholders. Mr. Fabrício Debortoli has graduated as an accountant and has a postgraduate degree in Tax Management from Univali. Mr. Fabrício Debortoli was Director of Administration and Finance of SCPAR Porto de Imbituba (2021/2022), today Mr. Fabrício Debortoli is a Member of the Fiscal Council of USIMINAS (2019/2020/2021), Member of the Board of Directors of Celesc S.A. (2019/2020/2021), Member of the Board of Directors of Casan S.A. (2020). Mr. Fabrício Debortoli acted as Financial Controller of Videolar Innova S.A. (2012 to 2017), Mr. Fabrício Debortoli was a member of the Fiscal and Management Board of Celesc S.A. (2016-2018), and Member of the Fiscal Council of Eternit from (2018 to 2019).

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 refers to the total amount payable by us in the year ended December 31, 2021 to all members of our board of directors, board of executive officers and our fiscal council for services in all capacities was R\$75.5 million net in 2021, R\$67.5 million gross (R\$56.3 million net) in 2020 and R\$63.3 million gross (R\$52.7 million net) in 2019. On April 19, 2022, at our annual general and extraordinary shareholders' meeting, our shareholders approved the compensation to the members of our board of directors, our board of executive officers and the members of our fiscal council for the year 2022 in the aggregate amount of R\$85.5 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 differentiates 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 voucher. 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 non-officers approved by our board of directors, may participate in the Incentive Plan upon execution of an award agreement (such persons, the "participants").

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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 target 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.

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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. 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 (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 executed in the fifth year of the - Plan.

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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 year indicated.

Number of Employees by Geographic Location	2021	2020	2019
State of Bahia	1,611	1,593	1,637
State of Rio Grande do Sul	1,545	1,528	1,537
State of São Paulo	2,114	2,027	1,971
State of Alagoas	646	554	511
State of Rio de Janeiro	390	384	389
Other Brazilian states	2	2	5
Brazil	6,278	6,088	6,050
United States	758	764	759
Germany	155	151	202
Mexico	939	831	830
Other countries	182	159	99
Total	8,312	7,993	7,940

We do not employ a material number of temporary employees.

In 2021, as a result of the extension of the Covid-19 pandemic, we continued to promote actions inside and outside Braskem. We carried out awareness campaigns among team members about the importance of vaccination and we also maintained constant monitoring of Covid-19 cases among our teams. Sanitization and control measures, such as changes of office layouts, remote work and lower occupancy rates on our transportation also remained in 2021.

Employees in Brazil

In Brazil, both employees and employers have the right to organize into unions. Employees belong to a specific “professional category” and employers constitute a specific “economic category” and they may be represented by a single union in a particular geographic area. Individual unions generally belong to statewide union federations, which in turn belong to nationwide union confederations. Braskem is part of the Petrochemicals and Synthetic Resins Industries Union of the States of Bahia, Alagoas, Rio de Janeiro, Rio Grande do Sul and São Paulo, and our employees are organized within the Petrochemicals Industries Workers’ Unions in each of these states. As of December 31, 2021, 25.4% of our employees in Brazil were union members.

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Braskem maintains a good relationship with the employee union. We have not experienced a strike in Brazil since Trikem was privatized in 1995. In general, our current collective bargaining agreements and conventions establish, with each trade union, clauses valid for up to two years, being able to negotiate economic clauses annually. The clauses of collective labor instruments signed with the unions cover all Members, whether they are union members or not.

Post-Employment Benefits

Vexty Defined Contribution Plan

The majority of our employees (92.4%) 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 2021, we paid R\$68.7 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 2021, we spent R\$109.7 million on this benefit.

Employees in the United States

The employees of Braskem America are not represented by any union, other than employees of Braskem America Neal, West Virginia plant. As of December 31, 2021, 56.7% 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 and during 2021 there were 36 active participants, compared to 37 participants in 2020. Additionally, for 2021 there were 141 employees with deferred benefits along with 173 employees receiving benefits as stated within the current year actuarial report. Due to the current funding levels of the pension plan, Braskem America was not required to contribute to the plan since 2020 plan year and, as a consequence, there were no additional cash contributions made in 2021. Additionally, there were no participant contributions in 2021.

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*).

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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 and for that pension plans Braskem has 52 active participants, 46 with deferred benefits and 16 receiving benefits.

In 2013, Braskem Europe implemented a new defined contribution pension plan. As of the date of this annual report, we have 44 active participants in this new pension plan. In total Braskem has 96 active participants in all pension plans of Germany.

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 116 active participants in the plan. In addition, Braskem BV also has 9 participants of pension plans from Germany.

Other Benefits in the 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, 2021, all of the 939 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 2020 we had the participation of 381 employees, and by the end of 2021, we had the participation of 443 out of 939 employees.

Mexican Labor Law Reform

On April 23, 2021, amendments to the Mexican Federal Labor Law and other Mexican statutes were published in the Official Gazette of the Federation (Diario Oficial de la Federación) (the “Subcontracting Amendments”). The Subcontracting Amendments sets a new general rule that prohibits the subcontracting of employees or personnel; that is, for a company (the “operating company”) to contract or engage another company (the “service company”) to provide or make available employees of the service company for the benefit of the operating company.

On July 22, 2021, Braskem Idesa undertook an employer replacement (sustitución patronal) permitted by the Subcontracting Amendments, which requires the mere delivery of individual notices to each of the employees by the Braskem Idesa.

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 2021 and 2020, we recorded expenses of R\$802.7 million and R\$487.0 million, respectively, related to this program with respect to 7,745 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 December 31, 2021, we had a share capital of R\$8,043,222 equal to 797,207,834 total shares (including treasury shares), consisting of 451,668,652 common shares, 345,060,392 class A preferred shares and 478,790 class B preferred shares. As of December 31, 2021, all of our authorized shares were issued, other than 902,166 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 Corporate Law, our by-laws specify that no less than 25% of our adjusted net income 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.

Pursuant to our by-laws, all of our shares are entitled to tag along rights equivalent to 100% of the price paid in the event of a change of control, subject to certain exceptions set forth in article 12 of our by-laws. Notwithstanding the provisions of our by-laws, pursuant to the Brazilian Corporate Law, our common shares are entitled to tag along rights equivalent to at least 80% of the price paid for such common shares in the event of a change of control.

In addition, in the event of our liquidation and following the payment of all of our outstanding liabilities, holders of our shares are entitled to receive their pro rata interest in any remaining assets, in accordance with their respective participation in our capital.

Our shareholders have preemptive rights to subscribe for new shares issued by us, pursuant to the Brazilian Corporate Law, but are not obligated to subscribe for future capital increases. Pursuant to the Brazilian Corporate Law, our by-laws provide that the preemptive right may be excluded in the event of an issuance of shares to be sold on a stock exchange or publicly subscribed, except if involving voting shares or securities convertible into voting shares.

Pursuant to the Brazilian Corporate Law, neither our by-laws nor actions taken at a shareholders' meeting may deprive a shareholder of: (i) the right to participate in the distribution of net income; (ii) the right to participate equally and proportionally in any residual assets in the event of liquidation of the Company; (iii) preemptive rights in the event of issuance of new shares, convertible debentures or subscription warrants, as per Brazilian Corporate Law, except as described in the preceding paragraph; (iv) the right to hold management accountable in accordance with the provisions of the Brazilian Corporate Law; and (v) the right to withdraw from us in the cases specified in the Brazilian Corporate Law, including merger with another company or consolidation in a transaction in which our Company is not the surviving entity.

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The following table sets forth information concerning the ownership of our common shares and class A preferred shares as of February 28, 2021 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	%
Novonor	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
Other	12,907,077	2.9	190,116,155	55.1	203,023,231	25.6
All directors, fiscal council members, their alternates and executive officers as a group (37 persons)	1,560	*	251,548	*	253,108	*

(*) 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.”

On December 15, 2021, our shareholders Novonor S.A. – *Em Recuperação Judicial* (Under Judicial Reorganization) and Petrobras sent us a joint communication, which we made public the following day, on December 16, 2021, regarding the progress of discussions for the potential sale of their equity interest in Braskem. In such communication, they informed us that they entered into an agreement on December 15, 2021 formalizing their commitment to take the measures necessary to: (i) sell the class A preferred shares of Braskem that they hold, directly or indirectly, in a secondary public offering; (ii) migrate the listing of our common shares to the *Novo Mercado* segment of the B3, including necessary corporate governance changes, which are subject to applicable corporate approvals at the appropriate time and the negotiation of a new shareholders’ agreement to conform rights and obligations set forth therein to such amended governance structure; and (iii) sell the remaining common shares that they hold, directly or indirectly, in a subsequent secondary public offering once the migration to the *Novo Mercado* segment is completed.

On January 14, 2022, we launched an offering of up to 154,886,547 class A preferred shares of Braskem S.A. to be sold by NSP Investimentos S.A. – *Em Recuperação Judicial* (Under Judicial Reorganization) and Petróleo Brasileiro S.A. – Petrobras, in a global offering that consisted of an international offering outside Brazil and a concurrent public offering in Brazil. On January 27, 2022, the global offering was suspended. Despite the suspension of the offering, our shareholders Novonor and Petrobras ratified their interest in resuming the offering in the future and taking all necessary measures to enable the migration of Braskem’s common shares to the *Novo Mercado* segment of the B3.

Shareholders’ Agreements

Braskem S.A. Shareholders’ Agreement

Novonor; NSP Inv.; Petrobras; and Petrobras Química S.A. – Petroquisa, or Petroquisa, with Braskem S.A. and BRK Investimentos Petroquímicos S.A., or BRK, as intervening parties, entered into a shareholders’ agreement, or Braskem S.A. Shareholders’ Agreement, effective February 8, 2010, which has a term of 35 years, as amended on September 21, 2018. The Braskem S.A. Shareholders’ Agreement superseded the shareholders’ agreement that formerly governed the relationship between Petrobras, Petroquisa, Novonor and Nordeste Química S.A. regarding our shares.

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Under the Braskem S.A. Shareholders' Agreement, for so long as Petrobras owns a direct or indirect stake in us:

- six members of our board of directors and their alternates shall be designated by Grupo Novonor; and (ii) four members of our board of directors and their alternates shall be designated by Petrobras for so long as Petrobras owns, directly or indirectly, an aggregate of 30% or more of our voting share capital;
- six members of our board of directors and their alternates shall be designated by Grupo Novonor; and (ii) three members of our board of directors and their alternates shall be designated by Petrobras for so long as Petrobras owns, 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 shall each be designated by Grupo Novonor and Petrobras, one of which will serve as president and be designated by Petrobras, for so long as Petrobras owns, directly or indirectly, an aggregate of 30% or more of our voting share capital; and
- two members of our fiscal council and their alternates shall be designated by Petrobras 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 Grupo Novonor has the right to elect more than a majority of the members.

In any of the abovementioned events, for so long as Grupo Novonor owns, directly or indirectly, an aggregate of 50.1% of our voting share capital, the designation of at least the absolute majority of members of our board of directors shall always be secured.

Under the Braskem S.A. Shareholders' Agreement, Grupo Novonor is entitled to elect the chairman of the board of directors, and Petrobras, as long as it holds a direct and indirect stake in excess of 18% of our voting share capital, is entitled to elect the vice president of our board of directors.

Under the Braskem S.A. Shareholders' Agreement, Grupo Novonor is entitled to nominate our chief executive officer, and the parties to it shall make the members of the board of directors appointed by them vote to ratify the appointment made by Grupo Novonor. Our chief executive officer must choose our chief financial officer from among three nominees submitted by Grupo Novonor and the executive officer responsible for our investment and portfolio area from among three nominees submitted by Petrobras, whereas Grupo Novonor and Petrobras shall cause the members of the board of directors appointed by them to vote so as to ratify the choices made by the chief executive officer. Our chief executive officer has the power to nominate the other members of our board of executive officers. After being submitted to the analysis of the people and organization committee and after these nominations, the officers will be elected at a board of directors' meeting.

Under the Braskem S.A. Shareholders' Agreement, the simple majority of the members of the board of directors has the 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 Grupo Novonor 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;

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- 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 financial covenants.

Under the Braskem S.A. Shareholders' Agreement, we have agreed that investments that we make to increase our capacity in petrochemical inputs, resins and other products must be supported by an evaluation demonstrating profitability under standards such as net present value or internal rate of return. Each of the parties to it has granted a right of first refusal to us with respect to the development of any petrochemical project that such parties propose to pursue. In the event that we decide not to participate in any such proposed project, each of such parties has agreed that we will have the right to market the products produced by the proposed project on conditions satisfactory to us and such parties.

On December 15, 2021, Novonor, NSP Inv. and Petrobras entered into a second amendment to the Braskem S.A. Shareholders' Agreement and agreed that, if Braskem's migration to the Novo Mercado segment of the B3 is not implemented, the rights and obligations provided for in the Braskem S.A. Shareholders' Agreement related to the right of first refusal granted to us with respect to the development of any petrochemical project shall lapse by October 31, 2024. The execution of such second amendment by Braskem, as an intervening party, is still subject to the appropriate governance approvals.

Under the Braskem S.A. Shareholders' Agreement, each party to it has the right to sell a pro rata portion of its common shares of us in connection with any direct or indirect sale of our common shares by the other party to a third party.

Under the Braskem S.A. Shareholders' Agreement, each of the parties to it 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, but not the obligation, 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 such parties to the Braskem S.A. Shareholders' Agreement holding the same direct and/or indirect proportion of the common shares of Braskem that such parties held prior to the acquisition of common shares of Braskem from the third party.

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.

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Prior to the appreciation by the board of directors, our Statutory Compliance and Audit Committee is responsible to assess the appropriateness of transactions subject to the approval of the board of directors between the Company and its related parties.

Pursuant to the Brazilian Corporate 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 Corporate 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, 2021.

The Novonor Group (formerly called 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 Especifica), 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.

In 2021, we had no services provided under the Alliance Agreement. The aggregate amount of services we purchased under the Alliance Agreement was R\$0.18 million in 2020.

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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.

Industrial Maintenance, Operation and Loads Machines Maintenance Services

In December 2017, we entered into an industrial maintenance services agreement with CNO, assigned to Tenenge Montagem e Manutenção Ltda on July 2020, 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\$17.1 million in 2021.

Furnaces, Boilers and Tanks Maintenance

In 2019, we conducted a bid process that selected Tenenge Montagem e Manutenção Ltda 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.

The aggregate amount of services purchased under this agreement was R\$221.5 million in 2021 and R\$45.4 million in 2020, an increase of 387.9%, mainly due to the maintenance services scheduled for 2020 that were postponed to 2021 due to COVID-19 pandemic.

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. Such agreement was initially limited to the maximum amount of R\$77.0 million and with a term until December 31, 2019, but it was amended in June 2020 to extend its to September 2020 and increase the maximum amount up to R\$78.5 million. The aggregate amount of services we purchased under this agreement was R\$15.4 million in 2020 and we had no services provided under this agreement. 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 Novonor, formerly called Odebrecht. This agreement expires in March 2043 and has an estimated total value of R\$2,250 million. The aggregate amount we purchased under this agreement was R\$86.8 million in 2021.

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 was R\$21 million in 2020 and R\$13.8 million in 2021.

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 Corporate 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.

Petrobras

Commercial Transactions with Petrobras

We have entered into the following supply contracts with Petrobras:

- 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 Operations that are Part of our Brazil Segment—Refinery Off Gas” 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 Operations that are Part of our Brazil Segment—Propylene Contracts with Petrobras and its Subsidiaries” for more information.
- 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.
- In October 2021, the Company entered into a purchase agreement with Petrobras for 108 kton per year of polymer-grade propylene from the Alberto Pasqualini Refinery (“REFAP”), with delivery to Braskem’s polypropylene industrial units, PP1 and PP2, located in Triunfo, Rio Grande do Sul. This agreement is in force from November 1, 2021 to October 31, 2022. The maximum amount of the agreement is estimated at R\$630.0 million. In the fiscal year ended December 31, 2021, the transactions amounted to R\$116.9 million.
- In December 2021, Petrobras and Braskem entered into five new propylene contracts, to be supplied by REPLAN, REVAP, REPAR, REDUC and RECAP, which replaced the existing contracts. These contracts expire between 2026 and 2029 and are priced on international references to assure the competitiveness of feedstock. See “Item 4—Information on the Company—Raw Materials of Our Polyolefins Operations that are Part of our Brazil Segment—Propylene Contracts with Petrobras and its Subsidiaries” for more information.
- 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 2020 to extend its term until March 2021. The amendment implies an additional amount of R\$16.6 million. The aggregate amount throughout the term of the agreement is R\$325.6 million. The aggregate amount we purchased under this agreement was R\$16.5 million in 2021.
- 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\$18.8 million in 2021.

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- A two-year contract, which a 1st Amendment was signed in June 2020, providing for the renewal of the contract for a further period of 44 months after its original term, i.e. until June 2024, for logistics services related to feedstock discharge, storage and transportation in the TEDUT (Terminal Almirante Dutra), part of Southern Complex, between Braskem and Transpetro, entered into in November 2018. The aggregate amount of services related to this contract was R\$104.8 million in 2021.
- A two-year contract, which a 1st Amendment was signed in November 2020 providing for the renewal of the contract for a further period of 44 months after its original term, i.e. until June 2024, 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 was R\$5.6 million in 2021.
- A two-year contract, which was amended, was signed in June 2020 providing for the renewal of the contract for a further period of 62 months after its original term, i.e. until December 2025, for logistics services related to feedstock storage in the REFAP (Refinaria Alberto Pasqualini), part of the Southern Complex between Braskem and Petrobras, entered into in November 2018. The aggregate amount of services related to this contract was R\$33.2 million in 2021.
- A two-year contract, which was amended, signed in June 2020, providing for the renewal of the present contract for a further period of 44 months after its original term, i.e. until June 2024, 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 2021 for pipeline leasing was R\$14.6 million and storage tanks leasing was R\$5.9 million, for a total amount of R\$20.6 million.
- In December 2020, the Company entered into an agreement with Transpetro involving the provision of logistics services for the water terminals (management and operation) of the port terminals TERG (Rio Grande) and TESC (Santa Clara). This agreement is effective from January 4, 2021 to December 31, 2024. The estimated maximum amount under the agreement is R\$28.8 million. The aggregate amount of services related to this contract was R\$5.5 million in 2021.
- In June 2021, the Company entered into an agreement with Transpetro involving tanker unloading services at Ilha Redonda Waterway Terminal (TAIR), and pipeline transport for tanking via OSRED-8. This agreement is effective from June 30, 2021 to June 30, 2023. The total estimated amount under the agreement is R\$40.0 million. There were no spend in 2021.
- In January 2021, the Company entered into an agreement with Transpetro involving the provision of services to Braskem, namely tanker vessel unloading in the Madre de Deus Waterway Terminal (“TEMADRE”), tank storage, product transportation via the pipeline “ORMADRE” that connects TEMADRE to the Landolfo Alves de Mararipe Refinery (“RLAM”), and the transportation of naphtha via pipeline from TEMADRE to the facilities of the carrier located in the municipality of Camaçari/BA. The duration of the agreement is from February 1, 2021 to December 31, 2025, and the total estimated amount of the agreement is R\$203.3 million. In the fiscal year ended December 31, 2021, the transactions amounted to R\$37.2 million.
- In 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. In December 2020, we signed an amendment to our natural gas purchase agreement with Algás to increase the amount of gas to be supplied (“QDC”) from January to December 2021. The estimated aggregate amount throughout the term of the agreement, as amended, is R\$770.0 million. In December 2021, the Company entered into the third amendment to the agreement governing the supply of natural gas by Algás to Braskem, via local gas pipeline, in force to March 2022. In the fiscal year ended December 31, 2021, the transactions amounted to R\$311.4 million.

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- 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. On December 2020, we signed an amendment to our natural gas purchase agreement with BahiaGás, with a term from January to December 2021 and an additional amount of approximately R\$482.4 million relating to the amendment. The estimated aggregate amount to be paid throughout the term of the agreement, as amended, is R\$3.45 billion. The aggregate amount we purchased under this agreement was R\$759.7 million in 2021.
- 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. The aggregate amount of services we purchased under this contract was R\$125.2 million in 2021.
- In June 2020, the Company entered into two naphtha supply agreements with Petrobras for 200 to 450 kton/y, respectively, from the Landulpho Alves Refinery (“RLAM”), with delivery to our industrial unit in the State of Bahia, and from the Alberto Pasqualini Refinery (“REFAP”), to our unit in the State of Rio Grande do Sul. The term of the agreements is from December 23, 2020 to December 31, 2025. The estimated amounts of the agreements are R\$5.0 billion and R\$2.5 billion, respectively. In the fiscal year ended December 31, 2021, transactions under the agreements amounted to R\$947.3 million from the RLAM and R\$2,408.2 million from the REFAP. In December 2021, the selling process for the Landulpho Alves Refinery (“RLAM”) was concluded and the Refinery was transferred to Acelen, being renamed Mataripe Refinery (“REFMAT”).
- In June 2020, the Company entered into a sales option agreement for up to 2,850 kton/y of petrochemical naphtha to Petrobras with mandatory purchase by Braskem. The term of the agreement is from January 1, 2021 to December 31, 2025. The estimated amount of the agreement is R\$30 billion. In the year ended December 31, 2021, transactions under the agreement amounted to R\$1,770.2 million.
- In December 2020, the Company entered into a sale agreement with Petrobras for up to 2 million tons of petrochemical naphtha per year, for our industrial unit in the State of São Paulo. This term of the agreement is from December 23, 2020 to December 31, 2025. The estimated amount under the agreement is R\$25 billion. In the year ended December 31, 2021, transactions under the agreement amounted to R\$5,074.5 million.
- In December 2020, the Company entered into an agreement with Petrobras to purchase ethane and propane to produce up to 580,000 tons of ethylene equivalent and sell up to 58.4 million Nm³ of hydrogen. The term of the agreement is from January 1, 2021 to December 31, 2025. The estimated amount of the agreement is R\$9.2 billion. In the year ended December 31, 2021, transactions under the agreement amounted to R\$1,981.8 million.

Braskem (i) purchased raw materials, finished goods services and utilities from Petrobras and its subsidiaries in the aggregate amount of R\$12,584.2 million in 2019, R\$14,566.8 million in 2020 and R\$ 19,833.1 million in 2021, and (ii) sold products to Petrobras and its subsidiaries in the aggregate amount of R\$665.4 million in 2019, R\$182.5 million in 2020 and R\$171.6 million in 2021.

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Other Related Party Transactions

Our Jointly Controlled Company

Refinaria de Petróleo Rio-grandense S.A. (“RPR”)

The revenue from the sale of gasoil, gasoline, blendstocks, fuel oil, BTE oil and solvents to RPR and from the purchase of turpentine from RPR was approved in 2020 for a total amount of R\$845.0 million per year. Purchase and sales prices are determined on a spot basis. Additionally, in 2021, Braskem provided an aggregate of R\$100.5 million of gasoline and gasoil to 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 million. Additionally, in 2021, Braskem provided an aggregate of R\$20.1 million of caustic soda to FCC.

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\$175.9 million in 2019, R\$213.8 million in 2020 and R\$436.1 million in 2021. We account for Borealis under the equity method of accounting.

Non-controlling shareholders of Braskem Idesa

As of December 31, 2021, we had R\$3,646.5 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 lays out the procedures for approving transactions with our controlling shareholder and shareholder that has Material Influence over Braskem, 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 and shareholder that has Material Influence over Braskem 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 Proceeding

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.

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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 tax authorities for which we have established provisions in an aggregate amount of R\$715.1 million as of December 31, 2021. 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. The aggregate amount of tax contingency proceedings was R\$17,224.4 million as of December 31, 2021, with respect to which our management believes, based on the opinion of our outside legal counsel, that the risk of loss is possible.

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, from 2007 to 2013, recorded in 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. After definitive reductions at the administrative level, the amount claimed is R\$1.1 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 (the equity interests were acquired with effective payment, business purpose and the participation of independent parties) and that the statute of limitations has expired. We believe that a loss of these claims is possible and our external legal counsel expects that the administrative discussions will end in 2023 and, the only case in the judicial level, 2030. As of December 31, 2021, we had made no provision with respect to these claims and there is no deposit or guarantee related to the administrative proceedings. We offered guarantee in the amount of the judicial litigation.

In 2009 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\$430.4 million, including interest and fines. We challenged these assessment notices because we believe that the 30% limitation is not applicable in the event of the merger of the taxpayer and that the statute of limitations for one of these claims has expired. We believe that the risk of loss is possible and our external legal counsel expects that the judicial discussions will end in 2031. As of December 31, 2021, we had made no provision with respect to these claims and there is no deposit related to the processes. We offered a guarantee that supports the integrality of the amount under discussion.

In 2017, 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 in 2013 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\$142.4 million, including interest and fines. We believe that a loss of this claim is possible and our external legal counsel expects that the administrative discussion will end in 2022. As of December 31, 2021, we had made no provision with respect to this claim and there is no deposit or guarantee related to it.

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In December 2017 and in December 2020, we received tax assessment notices 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 and in 2015, respectively, were not deductible for purposes of calculating income tax and social contribution. In relation to the calendar-year of 2012, the assessment resulted in the recalculation of our tax losses and social contribution negative tax base. With respect to 2015, the tax credit was accompanied by a qualified fine corresponding to 150% of the assessment amount. The notice issued in December 2020 also resulted in partial disallowance of the cost of naphtha imported from its subsidiary abroad, in an amount corresponding to the profit margin earned by the subsidiary in the naphtha resale operations, in the years 2014 and 2015. We challenged this assessment notice in Administrative Court and for the following reasons the chances of loss are possible: (i) regular use of trading companies in import operations; (ii) exchange variation expense is ancillary to the principal and, therefore, deductible; (iii) the fluctuation of exchange rates is not predictable; and (iv) there are mistakes in determining the profit margin of the subsidiary. Our external legal counsel expects the administrative discussion to end by 2026. As of December 31, 2021, we had made no provision with respect to this claim and there is no deposit or guarantee related to it. The adjusted amount as of December 31, 2021 of said uncertain tax treatment was R\$1.1 billion.

We are discussing 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\$173.2 million, including interest and fines. We challenged these debts because we believe that there are reasonable grounds on which we can successfully defend against these charges, based on favorable precedents and considering the documents provided. We believe that the likelihood of loss of this claim is possible and our external legal counsel expects the discussion of the administrative proceedings to end by 2024 and the discussion of judicial proceedings to end by 2023. As of December 31, 2021, we had made no provision with respect to this claim. There is no deposit or guarantee related to the processes that still are in administrative discussion phase. We presented a guarantee in the amount of the judicial litigations.

In July 2020, we received a tax assessment notice from the Federal Brazilian Revenue Service for failing to offer taxation the profit earned abroad by the subsidiary Braskem America Inc. for the year 2015, due to the disregard of tax credits collected by this subsidiary abroad. The assessment also involves the allegation of undue compensation for tax loss from the negative CSLL tax base for 2016, due to the lack of balances, due to disallowances arising from tax assessments and uses in special installments. We challenged this assessment notice in Administrative Court due to the following reasons: (i) there was enough payment to deduct the tax payable on profits obtained abroad; and (ii) the reported lack of tax loss balances arises from other administrative proceedings that are still under discussion. In March 2021, our claim was granted at the first administrative level, which changed the likelihood of loss from possible to remote. As of December 31, 2021, the updated amount of taxes levied and the tax consequences of the disallowance of tax losses and negative basis of calculation of CSLL through said tax assessment notices represents the amount of R\$270.7 million. Our external legal counsel expects the administrative discussion to end by 2025. As of December 31, 2021, we had made no provision with respect to this claim and there is no deposit or guarantee related to it, as it is still under administrative discussion.

In November 2020, we received a notice from the Federal Revenue Service of Brazil related to the disagreement in the application of the Agreement to avoid double taxation signed between Brazil and the Netherlands, which establishes that profits of Dutch companies are not taxed in Brazil. The object of the assessment refers to the profits of the subsidiary in the Netherlands in the years 2015 and 2016. We challenged this assessment notice in Administrative Court considering that the profits earned by its subsidiary abroad are protected from taxation in Brazil under Article 7. of the aforementioned Agreement to avoid double taxation signed between Brazil and the Netherlands. We believe that a loss of this claim is possible and our external legal counsel expects the administrative discussion to end by 2025. As of December 31, 2021, we had made no provision with respect to this claim and there is no deposit or guarantee related to it. The adjusted amount as of December 31, 2021 of such uncertain tax treatment was R\$8.8 billion.

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ICMS Tax Assessment Notice

From 1999 to 2020, 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\$755.5 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; and (8) unpaid ICMS taxes on charges for electricity transmission. 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 2026 and the judicial cases by 2031. There is no deposit or guarantee related to the processes that still are in the administrative discussion phase. We presented guarantees in the amount of the above-mentioned judicial litigations. We believe that a loss of these claims is possible and, as of December 31, 2021, 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) undue use of ICMS tax credits in the amount of R\$58.2 million, due to the recording of credits indicated in the invoices for the sale of “acrylonitrile,” “methyl acrylate” and “methyl methacrylate,” issued by Acrinor Acrilonitrila do Nordeste S.A. and Proquigel Química S.A., since the products were to be exported, and were therefore exempt from payment of ICMS tax;
- (2) 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;
- (3) fine in the amount of 30% on R\$480.4 million, 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
- (4) 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.

The proceedings were closed in the administrative court in 2015, with partial reduction of the contingency, and the remaining debt is under discussion in the judiciary. As of December 31, 2021, we had established related provisions in the amount of R\$21.6 million, due to business combination, and the amount of R\$291.8 million relating to probable likelihood of loss. We offered a guarantee to the debts and our external legal counsel expects the cases to be resolved by 2026.

In July and in December 2020, we received tax assessment notices from the State of Alagoas due to the lack of ICMS payment due to the alleged lack of reversal of the tax credited in operations prior to the departures with deferred tax. The amount claimed is R\$586.6 million. We challenged these assessment notices in Administrative Court based on the favorable precedents at the judicial administrative level, considering that there are some mistakes regarding the debt calculation and because keeping the credits even if with a deferred tax is something authorized by Alagoas legislation.

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We believe that a loss of this claim is possible and our external legal counsel expects that the administrative discussion will end by 2025. As of December 31, 2021, we had made no provision with respect to this claim and there is no deposit or guarantee related to it.

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) charges for electricity transmission; (2) freight related to the storage of finished goods; (3) credits claimed at inappropriate times, relating to various acquisitions; (4) fixed assets; and (5) Prodesin. As of December 31, 2021, the amount in dispute in connection with these claims was R\$1.3 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 expects that the administrative discussions will end in 2026 and the judicial discussion will end in 2031. There is no deposit or guarantee related to the processes that are in administrative discussion phase. We presented a guarantee in the amount under discussion in the judicial level.

The Federal Brazilian Revenue Service did not recognize the compensation of PIS and COFINS credits in the years 2005 to 2010 and in the period from 2012 to 2016 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 2025. As of December 31, 2021, we had established related provisions in the amount of R\$202.7 million. There are no deposits or guarantees related to these claims.

PIS and COFINS Tax Assessment Notice

Braskem is involved in several judicial and administrative proceedings related to the payment of PIS and COFINS, including (1) unpaid COFINS from March 1999 to December 2000, February 2001 to March 2002, May 2002 to July 2002 and during September 2002, (2) inappropriately claimed credits due to the additional 1% in the COFINS rate; (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 expects the cases in the administrative level to be resolved by 2023 and, for those in the judicial level, 2030. As of December 31, 2021, we had established related provisions, due to business combination, in the amount of R\$67.4 million. We offered guarantee in the amount of the judicial litigations.

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In 2014, we received a tax assessment notice from the Federal Brazilian Revenue Service claiming that the fines and interests exonerations 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, especially because exonerations are not taxable income and, even if they were financial income, at the time, they were taxed at zero rate. As of December 31, 2021, the amount claimed was R\$909.7 million. We believe that a loss of this claim is possible and our external legal counsel expects that the administrative discussion will end in 2023. There are no provision, deposit or guarantee related 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; and (4) PIS (Decree-Law Nos. 2,445 and 2,449). As of December 31, 2021, the amount in material disputes relating to PIS and COFINS was R\$131.5 million. We offered guarantee that supports the integrality of the amount of the judicial litigation. We believe that a loss of this claim is possible and our external legal counsel expects that the judicial discussions will end by 2024. As of December 31, 2021, 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, 2021, the aggregate amount of these cases was R\$118.2 million. We believe that a loss of this claim is possible and our external legal counsel expects that the discussion will end in 2030. We constituted a guarantee in the amount under discussion.

Isolated Fine Tax Assessment Notices

From 2016 to 2020, 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, 2021, the amount claimed was R\$309.5 million. We believe that a loss of these claims is possible and our external legal counsel believes that the administrative proceedings will end in 2026. There are no deposits or guarantees related to the processes that still are in administrative discussion phase. As of December 31, 2021, we had made no provision with respect to these claims.

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 Occupational 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); (ii) the collection through tax assessments of the additional RAT due to the exposure of workers to harmful agents (noise and carcinogens) in the period from January 2016 to July 2018; and (iii) 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, 2021, was approximately R\$186.9 million. We believe that a loss of these claims is possible and our external legal counsel expects that the discussions at the administrative level will be concluded in 2024 and in 2028 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 in the entire amount.

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Contingent Assets

Contingent assets are potential assets whose existence will be confirmed by the occurrence or non-occurrence of uncertain future events that are not wholly within the Company's control. Contingent assets are not recognized, but are disclosed when it is more likely than not that an inflow of benefits from such assets will occur. However, when the inflow of benefits is virtually certain, an asset is recognized in the financial position statement because that asset is no longer considered contingent.

Exemption of IR/CSL on inflation adjustment of undue tax payments by using economy basic interest rate.

In July 2010, Braskem and the merged companies in previous years, filed lawsuits claiming exception from the levying of IR/CSL on amounts they received as interest on late payment, since they do not represent any equity increase.

In view of the decision of the Federal Supreme Court ("STF"), on September 24, 2021, regarding Special Appeal 1.603.187, which states that "the levying of IR/CSL on amounts updated by the Selic rate, received due to repetition of undue tax payments, is unconstitutional", Braskem recorded tax credits of R\$501 million (R\$489 million in other operating income and R\$12 million in the financial result) for the calendar years as from 2005. The recognition of this amount in 2021 resulted in an increase of R\$153 million in the balance of income tax recoverable and a decrease of R\$43 million and R\$305 million in the balances of current income tax payable and deferred tax liability, respectively. For the periods marked by a rebuilding of tax losses, Braskem recognized R\$68 million in deferred tax assets.

Exclusion of ICMS from PIS and COFINS calculation base

Our main federal tax liability refers to the exclusion of ICMS from the PIS/COFINS calculation base. We and our merged companies filed various lawsuits claiming recognition of the right to exclude ICMS from the calculation base for PIS and COFINS and the consequent repetition of undue payment. The oldest period of the lawsuit dates back to 1991. In 2021, actions originally by merged companies had final and unappealable decisions, and the amount of R\$2,022.0 million was recognized, referring to the PIS and COFINS contributions calculated in excess, of which R\$1,032.1 million was recorded under other operating income (expenses) and R\$990.9 million under financial revenue

Since 2019, R\$4,302.4 million has been offset of the total liability recorded by the Company concerning this matter, and as of December 31, 2021, R\$789.4 million was accounted for as per our financial statements, of which R\$787.7 million was recorded under current liabilities and R\$1.7 million under non-current liabilities.

With regard to the lawsuits with final and unappealable decisions, certain decisions involve expressly the credit calculation criteria, while others were more generic, only determining the exclusion of this tax. The Company, assisted by specialized third party consulting firm, proceeded with the measurement of these tax liabilities, basically considering the amount of ICMS stipulated on the sales invoices and other tax information on the accessory obligations to ensure the consistency of the calculations, grounded in the legal opinion.

The Company has other lawsuits about the same topic that are still pending a final and unappealable decision. The oldest period of these lawsuits pending decisions dates back to 2001, On December 31 of 2021, the amount involved in this lawsuit is R\$ 1.7 billion, which has been already recognized in non-current assets.

Exclusion of ICMS Tax Incentives and Benefits Applicable to Operations

In October 2021, the Company obtained a temporary injunction in a lawsuit authorizing it to exclude ICMS tax incentives and benefits applicable to its operations, granted by Brazilian states and the Federal District, from the corporate income tax, or IRPJ, and CSLL calculation basis as of 2021, which will result in a reduction in cash disbursement in 2021 of R\$1.1 billion. This decision considers the Company's claim that incentives and benefits are investment subsidies, under article 30 of Law No. 12,973/2014 and Complementary Law No. 160/2017, and, consequently, are not subject to IRPJ and CSLL. The lawsuit is pending a court decision. Given the initial stage of the lawsuit and the diversity of tax incentives and benefits granted by Brazilian states and the Federal District, based on the assessment of our external legal advisors, the Company considered the matter an uncertain tax treatment and, therefore, the amount of R\$1.1 billion will continue to be recorded in our annual financial statements as taxes payable.

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Compulsory loans to Eletrobrás – Centrais Elétricas Brasileiras S.A.

The compulsory loan in favor of Eletrobrás was established by Federal Law No. 4,156/62, to finance the energy industry and remained effective until 1993. It was collected through the energy bills of industrial consumers with monthly consumption equal to or higher than 2000kwh and, after successive amendments to the law, the reimbursement, plus compensatory interest of 6% per year, was extended to 20 years, which can be anticipated through conversion of credits into shares issued by Eletrobrás.

Between 2001 and 2009, the companies that merged into Braskem S.A. filed proceedings seeking the recovery of amounts related to differences in the inflation adjustment of the compulsory loan, interest on arrears and compensatory interest and other related payments.

The Company obtained a favorable final and unappealable decision in the cases of the merged companies Alclor Química de Alagoas Ltda., Companhia Alagoas Industrial – Cinal, Companhia Petroquímica do Sul S.A. – Copesul and Trikem S. A., which are in the execution phase, discussing the amounts to be effectively returned. The cases of the merged companies Ipiranga Petroquímica S.A., Petroquímica Triunfo Ltda. and Quattor Química S.A are in the initial phase.

The term, form and amount to be realized are still uncertain, so it is not possible to determine the amount to be received and, for such reason, the asset does not meet the conditions to be recorded in the financial statements.

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 (R\$31.7 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.

On August 25, 2020, a class action was filed against us and some of our current and former executives in the U.S. District Court for the District of New Jersey, in the United States, on behalf of an alleged class of investors who acquired Braskem's shares. The action is grounded in the U.S. Securities Exchange Act of 1934 and its rules, based on allegations that the defendants made false statements or incurred in omissions related to the geological event in Alagoas. On January 15, 2021, the Court named two plaintiffs to act as lead plaintiffs in the action. On April 28, 2021, one of appointed lead plaintiffs filed a consolidated amended complaint asserting claims on behalf of a putative class of purchasers of the Company's American Depositary Shares from March 21, 2019 to July 8, 2020. We engaged a U.S. law firm to represent us in the class action and filed a motion to dismiss, which is pending analysis by the Court.

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Our management, based on its assessment and that of its external legal advisors, and given the initial phase of the potential class action mentioned above, considers that it is not possible at the moment to reliably estimate the potential amount involved.

Braskem cannot reliably predict the future developments of this matter or the expenses arising from it, including rates and costs in solving the dispute. The Company may be named as a defendant in other legal actions.

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.

On December, 2016, Company entered into a leniency agreement with the MPF (“MPF Agreement”) and the authorities of the United States and Switzerland (“Global Agreement”), in the approximate amount of US\$957 million (approximately R\$3,1 billion at the time), which were duly approved. Furthermore, the Company engaged in a process of cooperation and negotiation with the Ministry of Transparency and Controllershship (“CGU”) and the Attorney General (“AGU”), which culminated in the signing of a leniency agreement with said authorities on May 31, 2019 (“CGU/AGU Agreement”) and, together with the Global Agreement, simply “Agreements”), which deals with the same facts object of the Global Agreement and provides for an additional disbursement of R\$409,877, due to calculations and parameters used by CGU and AGU. Additionally, in 2019, the Public Ministry of Bahia and the Public Ministry of Rio Grande do Sul joined the MPF Agreement, although there is no provision for additional payments by the Company.

AGU, CGU and MPF agreed to allocate most of the amounts received based on the Agreements for the reparation of victims of illicit acts, including other authorities and public entities, and to undertake actions with those third parties with which Braskem will start negotiations in relation to the facts object of the Agreements to avoid double reimbursement.

As of December 31, 2021, we had paid R\$2.7 billion of the total fine established in the Global Settlement, in the following manner:

- R\$559.9 million to the AGU, CGU and MPF;
- R\$296.6 million (US\$94.9 million) to the DoJ;
- R\$407.3 million (CHF94.5 million) to the OAG;
- R\$1,282.5 million to the MPF; and
- R\$206.5 million (US\$65.0 million) to the SEC;

As of December 31, 2021, the outstanding amount of R\$1.1 billion was due under the MPF Agreement and CGU/AGU Agreement, in four annual installments adjusted by the variation in the SELIC rate and due by January 30, 2025. To guarantee payment of these upcoming installments, Braskem gave as collateral assets from its property, plant and equipment corresponding to one annual installment.

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The Global Settlement does not prevent us from responding to any legitimate third party, which may seek indemnification against us from damages for the facts subject to the Global Settlement. Other authorities with jurisdiction over us may seek to impose monetary sanctions or fines on, or to initiate investigative proceedings against the Company.

We do not anticipate the requirement to make additional disbursements but cannot assure 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 continue to cooperating with the governmental authorities and improving our governance and anti-corruption compliance practices. During three years, we were subject to external monitorship. 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 March, 2020, based on the certification emitted by the independent monitors who assessed us by three years, MPF had confirmed the effectiveness of the compliance program and the conclusion of the independent monitorship. 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.

We remain under external monitoring with the AGU/CGU until the end of 2022. All compliance obligations are being met as recommended by the authorities.

We are in compliance with all obligations arising from the agreements mentioned above and we are cooperating with the public authorities from all jurisdictions.

Labor Proceedings

Employment and Occupational Health and Safety Proceedings

We have provisioned R\$268.8 million, as of December 31, 2021, with respect to employment and occupational health and safety proceedings, relating to 515 labor proceedings, including cases of occupational health and safety (in 2020, there were 529 proceedings). Our external legal counsel estimates 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 a result of new decisions of higher courts.

Social Security

The Company withdrew its sponsorship of the pension plans Petros Copesul and Petros PQU in 2012 and in 2009 of Petros Copene, all of them managed by the pension fund Petros. Due to this procedure, it was assumed an outstanding obligation under the sponsorship withdrawal instrument which was to pay the mathematical reserves of beneficiaries pursuant to Complementary Law No. 109/2001, this obligation was met in 2015. However, after the payment, several beneficiaries filed individual and collective lawsuits regarding various claims relating to: (i) differences of the individual withdrawal fund; (ii) change of the base date; (iii) age limit; (iv) 90% supplement; (v) return of contributions; (vii) difference in savings account reserve; (viii) objection against legality of sponsorship withdrawal.

Currently, this portfolio is comprised of 783 active cases that, based on the opinion of our external legal counsel, have a chance of loss classified as possible, representing as of December 31, 2021, an estimated aggregated disbursement of R\$332.4 million.

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Civil Proceedings

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, 2021, the damages claimed in the lawsuit amounted to R\$265.4 million and an award was not rendered by the lower court yet. 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, 2021, the amount involved in this proceeding was R\$98.2 million and an award was not rendered by the Lower Court yet. 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. As a result, no provision has been made by us. No judicial deposit or other form of guarantee was constituted for this lawsuit.

Corporate Related Proceedings

As of December 31, 2021, 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 2021, Braskem established a provision of R\$19 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, 2021, the nominal amount in dispute was R\$ 257.3 million, Braskem established a provision of R\$ 19.3 million for this lawsuit and there is no guarantee related to this claim.

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 inflation-adjusted amount of R\$175.0 million. Braskem filed its defense in December 2020. The defense of the other defendants and the subsequent decision of the judge is pending. Our management, based on its assessment and of that of our outside legal counsel, believes that the lawsuit possibly will be dismissed within a period of eight years.

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Environmental

A public interest civil action was filed in September 2011 by the municipality of Ulianópolis, in the State of Pará, against Braskem and other companies, claiming reparation and/or remediation of environmental damages allegedly resulting from the delivery of waste to the company CBB, which were allegedly not disposed of properly, polluting an area of the municipality Ulianópolis, as well as joint and several liability of these companies for the payment of indemnification for environmental damage in the adjusted amount of R\$325.5 million. The companies filed their reply and a decision is pending. Our management, based on the opinion of our outside legal counsel, believes that the lawsuit will be dismissed within a period of eight years.

Alagoas – Mining Activities

On April 2, 2019, we became aware that the Alagoas State Prosecutors' Office (*Ministério Público do Estado de Alagoas*) and the State of Alagoas Public Defenders' Office (*Defensoria Pública do Estado de Alagoas*) filed a lawsuit (public-interest civil action or civil public action or *ação civil pública*) claiming the payment of compensation for property and personal damages caused to buildings and residents of areas affected in the Pinheiro district and surroundings ("ACP of Residents"), in the minimum amount of R\$ 6,7 billion, with an initial request for provisional measures to freeze Company's assets in the same amount. The case was sent to the Federal Court, when the Federal Prosecutors' Office (*Ministério Público Federal*) and the Federal Public Defenders' Office (*Defensoria Pública da União*) joined as plaintiffs.

Parties to the ACP of Residents entered into a first agreement on January 3, 2020, to establish cooperative actions to vacate properties in risk areas, defined by the Civil Defense of Maceió, State of Alagoas, ("Civil Defense Map"), providing the necessary support to relocate people from those areas and provide financial compensation for them under the Financial Compensation and Support for Relocation Program ("PCF") implemented by Braskem. After updates of the Civil Defense Map, two legal instruments were signed by parties, in July and October 2020, to include properties in the PCF. On December 30, 2020, a second amendment to the agreement was signed to terminate the public-interest civil action ("Agreement for Compensation of Residents"), including the area currently affected by the geological event, according to the Civil Defense, and the areas with potential future impacts indicated in the independent technical and specialized studies engaged by the Company on the potential impact of the geological event on the surface of the region (as of December 31, 2021, the risk area encompasses a total of approximately 15,000 properties).

To implement the Agreement for Compensation of Residents, the Company assumed the obligation to deposit a total of R\$2,7 billion in a checking account, with minimum working capital of R\$100 million, whose transactions will be verified by an external audit company and also agreed to create a technical group to monitor the geological event and study the areas adjacent to the Civil Defense Map for a period of five years and maintain a surety bond in the amount of R\$1.8 billion. The Agreement for Compensation of Residents was ratified by Court on January 6, 2021 which resulted in the termination of ACP of Residents.

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*), indicating that the geological phenomenon observed in the region, could be related to the rock salt exploration activities developed by Braskem. In this context, due to the developments from the report's publication and 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.

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On July 25, 2019, we were informed of a public-interest civil action filed against us by the Labor Prosecutors' Office of the State of Alagoas (*Ministério Público do Trabalho do Estado de Alagoas* or *MPT-AL*), requesting a compensation of R\$3,6 billion for damages that workers affected by the geological event might have suffered and an injunctive relief to freeze the amount of R\$2.5 billion ("ACP Labor"). Parties reached an agreement on February 14, 2020, to terminate the claim, with the commitment from Braskem to invest R\$40.0 million to fund 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. Braskem fulfilled its obligation on March 3, 2020, and the ACP Labor was terminated.

On July 29, 2019, the Company was notified of an individual claim filed by *Construtora Humberto Lobo*, a construction company, seeking the payment of approximately R\$151 million for damages related to the termination of a property purchase contract celebrated with Braskem and allegedly due to the geological event. A previous decision, on July 4, 2019, had issued a freeze order of R\$4.8 million from Braskem's assets. On October 15, 2019, the Court partially decided the claim to determine the immediate payment of R\$4.5 million to the plaintiff. Braskem's appeal against such decisions awaits ruling by the Court of Appeal. The remaining part of the claim proceeds before Court to evidentiary stage (on December 31, 2021, it amounts to R\$264 million).

On August 19, 2019, we became aware of the filing of another public-interest civil action by the Federal Prosecutors' Office (*Ministério Público Federal*) against us and other parties, requesting indemnification for socio-environmental damages and other collectives damages, as well as the adoption of corrective and environmental compliance measures, with preliminary injunction requiring the freezing of assets and profits not yet distributed, 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, the posting of bonds in the amount of R\$20,5 billion, the suspension of government financings and government incentives, as well as acceleration of existing indebtedness with BNDES (a federal development bank), among other obligations ("ACP Socio-environmental"). Parties reached an agreement to terminate the claim against Braskem on December 30, 2020 ("Agreement for Socio-environmental Remediation").

According to the Agreement for Socio-environmental Remediation, the Company commits, primarily, to (i) adopt the necessary measures to stabilize the cavities and monitor the soil; (ii) repair, mitigate or compensate potential environmental impacts and damages resulting from the mining activities (salt extraction) in the city of Maceió, defined after the conclusion of the Environmental Diagnosis, to be conducted by a specialized and independent company; and (iii) repair, mitigate or compensate for potential socio-urbanistic impacts and damages resulting from mining activities (salt extraction) in the city of Maceió, as detailed below.

Under the Agreement for Socio-environmental Remediation, the Company undertook the following measures:

- (i) With respect to the stabilization of the cavities and monitoring of the soil, the Company will continue with the implementation of the measures of the mine closure planning presented by Braskem to ANM and subject to its approval.
- (ii) With respect to potential environmental impacts and damages resulting from the salt extraction activities in the city of Maceió a well-known expert and independent company was engaged to assess and recommend measures for repairment, mitigation or compensation of the environmental impacts that may be identified as a result of the salt extraction activities in the city of Maceió. After the completion of such study, the Company will implement and fund the potential measures recommended by such study with the previous accordance of the Federal Prosecutor's Office (*Ministério Público Federal*).

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(iii) With respect to socio-urbanistic impacts and damages resulting from the salt extraction activities in the city of Maceió, the Company will allocate the total amount of R\$1.28 billion to implement actions and measures in the vacated areas, and actions relating urban mobility and social compensation.

Additionally, the Company agreed under the Agreement for Socio-environmental Remediation: (i) to allocate the additional amount of R\$300 million for social damages and collective moral damages indemnification and for eventual contingencies related to actions in the vacated areas and urban mobility actions; (ii) with the constitution of a secured interest on certain of the Company's assets in the amount of R\$2.8 billion to replace the surety bond previously presented by Braskem to the Court in the amount of R\$1 billion, as Material Fact disclosed on January 3, 2020; and (iii) to engage specialized consultants to support the definition of the measures established in the Agreement for Socio-environmental Remediation and to update the socio-environmental compliance program of the Company.

Furthermore, the Agreement for Socio-environmental Remediation sets forth the potential adherence by other parties, including the municipality of Maceió, which is under negotiation and will continue over the coming months. To date, the Company cannot predict the results of any discussions or any of their associated costs.

On November 14, 2019, as informed to the market, 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, indicating actions based on a study conducted by the Institute of Geomechanics of Leipzig (IFG).

On June 19, 2020, the Company became aware of a public civil inquiry initiated by the State of Alagoas Prosecutor's Office (*Ministério Público do Estado de Alagoas*) into the extent of the urban damage caused by the geological event, seeking solutions for recovery and utilization of the area, and assessing liability for possible reparations for damages caused ("Urban Damage Civil Inquiry"). This public civil inquiry was terminated with the execution of the Agreement for Socio-environmental Reparation.

On February 2, 2021 the Company was notified of a preliminary injunction requested by the Brazilian Company of Urban Trains (*Companhia Brasileira de Trens – CBTU*) to maintain the terms of the cooperation agreement previously entered into by the parties. The request was denied in the first and second instances, given the fulfillment of the obligations undertaken by Braskem. On February 24, CBTU presented an amendment to the preliminary injunction to claim the payment of damages in the amount of R\$222.1 million, as well as the specific performance of certain obligations, including the construction of a new rail line to substitute the stretch that passes through the vacated area. CBTU attributes to the claim the approximate amount of R\$1.3 billion. No judicial deposit or any other type of guarantee has been made. Our management, supported by the opinion of our external legal counsel, classifies the probability of loss in this case as possible.

On February 12, 2021, ANM granted our motion requesting that ANM reconsider its order directing the implementation of additional measures for the mine closure plan proposed by the Company. ANM's decision maintained the implementation of the measures contemplated in the mine closure plan originally proposed by the Company, for which the amount of R\$1.7 billion had already been provisioned. Lastly, considering that the mine closure plan is a dynamic process with complex execution, ANM will continue to oversee the results of the measures that are being taken by the Company for closing and monitoring the mine and, accordingly, further evaluations, requirements and provisions may be necessary in the future.

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On November 9, 2021 the Company was notified of a Public-interest Civil Action filed by Federal Public Defenders' Office (*Defensoria Pública da União*) against insurers linked to SFH, financial agents, the regulatory agency and Braskem, questioning the denial of necessary insurance for contracts under the SFH to acquire properties located within a radius of 1 km outside the risk area defined by the version 4 map of Civil Defense authorities, which is the subject matter of the Residents PCA agreement. The main claim is only against the insurers, financial agents and the regulatory agency on the grounds that the refusal to contract the insurance is abusive and has no technical or legal grounds. There is a secondary and eventual claim to sentence Braskem to pay indemnification in an amount to be settled in the future, if the judge understands that the refusal somehow has grounds due to in the subsidence phenomenon. It is not possible to estimate the indemnification amount, which will depend on the evidence of damages submitted by people whose insurance was denied.

As of December 31, 2021, Braskem was a defendant in several individual claims, that, in aggregate, involve the amount of approximately R\$895 million (2020: R\$573 million), filed by individuals in Brazil and abroad, seeking the payment of indemnifications directly or indirectly related to the geological event in Maceió.

Dividends and Dividend Policy

Payment of Dividends

When we pay dividends on an annual basis, they are declared at our annual shareholders' meeting, which we are required by the Brazilian Corporate 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. 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, unless another record date is approved. Our payment of annual dividends is based on our audited financial statements prepared for our preceding fiscal year. Pursuant to Brazilian Corporate Law, our by-laws and our dividend distribution policy, we have historically distributed annual dividends (except in years in which we have not had adjusted net income or our management has informed the annual shareholders' meeting that such payment is incompatible with our financial situation).

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 interim financial statements. In addition, we may pay dividends approved by our board of directors from net income based on our unaudited interim financial statements. We may pay dividends based on quarterly interim financial statements, provided that the sum of the dividends paid in each semester does 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, 2019 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
2021	December 20, 2021	7.54	7.54	0.61	1.32	1.32	0.11
2018	December 30, 2019	0.84	0.84	0.61	0.21	0.21	0.15

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Before any allocation of dividends is made, 5% of adjusted net income is allocated in accordance with Brazilian Corporate Law and our by-laws to the legal reserve, subject to the limits established in Brazilian Corporate Law. Our shareholders will be entitled to receive as mandatory dividend 25% of the adjusted net income for the fiscal year, in accordance with Article 202 of Brazilian Corporate Law, except in a year in which our management has informed the annual shareholders' meeting that such payment is incompatible with our financial situation, in which case such retained amount shall be allocated to a special reserve and distributed as soon as our financial situation permits unless it is absorbed by subsequent losses.

Dividends are allocated to preferred shares as follows: (i) class A and class B preferred shares have the same priority in the distribution, in each fiscal year, of non-cumulative dividends corresponding to 6% of their unit value (as defined below); (ii) common shares are entitled to dividends only after payment of the priority dividend referred to in item (i) above; (iii) only common shares and class A preferred shares participate in the distribution of shares resulting from the incorporation of reserves into capital; and (iv) the "unit value" of shares is calculated by dividing the capital by the total outstanding shares (considering, for such effect, the total shares issued by the Company, including shares held in treasury).

The value of the priority dividend is calculated for the purposes of the mandatory dividend, but it is not limited by it, in accordance with Article 203 of Brazilian Corporate Law. Therefore, the priority dividend must be paid in full even if it is greater than the mandatory dividend, being limited only by the amount of net profit eligible for distribution.

After payment of the priority dividend, if there is any remaining dividend to be distributed (mandatory and/or complementary), the remaining amount of the dividend will be allocated successively as follows: (i) upon payment to the common shares of a dividend up to the limit of the priority dividend, i.e., upon payment to each common share of up to 6% of the unit value (as defined above) of the shares; and (ii) if there is still an amount remaining, upon payment to the common shares and class A preferred shares, under equal condition, so that each common share or class A preferred share receives the same dividend. Class B preferred shares do not participate in the distribution of remaining amounts after payment of the priority dividend.

The annual shareholders meeting is responsible for considering and voting on the allocation of the Company's net profit for the year, determined annually based on the audited financial statements, which must be held within the four months following the end of the fiscal year, based on proposal of our management. The Company may, as decided by the board of directors, declare interim dividends, as described above, subject to certain conditions established in section 5.2 of our dividend policy, as referred to above, including the requirement that a proposal for complementary dividend distribution must take into account the impact of such distribution on the Net Debt/EBITDA ratio of the Company measured in U.S. dollars and that such ratio, after any distribution, may not be greater than 2.5 times in the year of the distribution and in the two subsequent years, based on long-term projections of the Company, considering the risks of these projection being lower. Without prejudice to the aforementioned, the Net Debt/EBITDA ratio may remain temporarily above 2.5 times during a period in which the Company is making strategic investments that create value for shareholders and there is an expectation of generating future cash flow that contributes to this leverage ratio returning to a level not greater than 2.5 times. In this scenario, the management of the Company will not make a proposal for complementary distributions.

The Company also may, by decision of the board of directors, pay interest on capital payable to its shareholders, in accordance with Article 9, paragraph 7, of Brazilian Law No. 9,249/95 and the pertinent legislation.

Unless decided otherwise at the shareholders' meeting, the interim dividends and interest on capital payable (the latter based on the amount net of withholding income tax) are calculated towards the priority dividend and the mandatory dividend.

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Pursuant to the Brazilian Corporate Law, dividend entitlements lapse after three years from the date their payment was due.

Calculation of Adjusted Net Income

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 Corporate Law defines "net profits" for any fiscal year as our net income 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 Corporate Law, our adjusted net income available for distribution is 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.

Dividend Preference of Preferred Shares

Under our by-laws, our preferred shareholders are entitled to a Minimum Preferred Dividend, equal to 6% of the unit value (as defined above) 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 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 until the Minimum Preferred Dividend is paid.

Mandatory Distributions

As permitted by the Brazilian Corporate Law, our by-laws specify that no less than 25% of our adjusted net income 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 Corporate 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, and if not absorbed by subsequent losses, such amounts must be added to the dividend payment relating to the year of realization.

The Brazilian Corporate 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 Corporate Law, exceed our share capital, the excess must be credited to shareholders' equity or used for the payment of distributions.

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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 their 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 long-term interest rate (*Taxa de Juros de Longo Prazo – TJLP*) 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 (i) that does not impose income tax or whose income tax rate is lower than 20% or (ii) which does not permit disclosure of the identity of shareholders of entities organized under its jurisdiction. 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 .

Public Tender Offer upon Sale of Control

Pursuant to our by-laws, all of our shares are entitled to tag along rights equivalent to 100% of the price paid in the event of a change of control, subject to certain exceptions set forth in article 12 of our by-laws. Notwithstanding the provisions of our by-laws, pursuant to the Brazilian Corporate Law, our common shares are entitled to tag along rights equivalent to at least 80% of the price paid for such common shares in the event of a change of control.

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, 2021, there were 17,738,197 ADSs outstanding, representing 35,476,394 class A preferred shares, or 10.3% of our outstanding class A preferred shares. Each ADS represents two class A preferred shares.

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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 Corporate 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 (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 Brazilian 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 Brazilian 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.

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 Corporate 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 Law No. 6,404/1976 (the "Brazilian Corporate Law"), as a holder of quotas or shares;
- the manufacture, distribution, trading, import and export of gasoline, diesel oil, liquefied petroleum gas, 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 Corporate 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 Novonor 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 Corporate 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 Corporate Law nor our by-laws establish any mandatory retirement age for our directors or executive officers.

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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, has a full-line report directly to the Compliance Committee and a dotted-line report to the CEO of our Company. See “Item 6—Directors, Senior Management and Employees—Directors and Senior Management—Board Committees—Compliance Committee.”

Share Capital

Under the Brazilian Corporate 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 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 Corporate Law and our by-laws, we must hold an annual shareholders’ meeting by April 30 of each year in order to:

- approve or reject the management financial plan (prestação de contas) and financial statements approved by our board of directors and prepared by the board of executive officers;
- approve or reject the allocation of net profits and distribution of dividends;
- 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; and
- approve or reject the annual aggregate compensation of our executive officers and directors, as well as the compensation of the members of the Company’s fiscal council.

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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 Corporate 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 Corporate Law);
- approve the aggregate compensation payable to our directors and executive officers;
- authorize management to declare us insolvent or bankrupt and to request judicial reorganization (recuperação judicial) (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.

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We convene our shareholders' meetings, including our annual shareholders' meeting, by publishing a notice in the Official Gazette of the State of Bahia, or *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. Recently enacted rules have made publication requirements more flexible and less onerous. As a general rule, on the first call of any meeting, the notice must be published no fewer than three times, beginning at least 21 calendar days prior to the scheduled meeting date. Due to certain remove voting requirements, we convene our annual shareholders' meetings 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 Corporate 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 under certain limited circumstances. Whenever the shares of any class of share capital are entitled to vote, each share is entitled to one vote.

Holders of our preferred shares are not entitled to vote on any matter, except (i) with respect to the election of one member of our board of directors by (1) preferred shareholders holding at least 10% of our total share capital, or, (2) if no group of common or preferred shareholders meets the thresholds described above, shareholders holding at least 10% of our total share capital, and (ii) in the limited circumstances described above and as provided below. Preferred shareholders are also entitled to appoint one member of the fiscal council and the respective alternate.

The Brazilian Corporate Law and our by-laws provide that our preferred shares will acquire unrestricted voting rights after the third consecutive fiscal year that we fail to pay the minimum dividends to which our preferred shares are entitled. This voting right will continue until the Minimum Preferred Dividend is paid in full. Our preferred shareholders will also obtain unrestricted voting rights if we enter into a liquidation process.

Liquidation

We may be liquidated in accordance with the provisions of Brazilian law. In the event of our extrajudicial liquidation, a shareholders' meeting will determine the manner of our liquidation, appoint our liquidator and our fiscal council that will function during the liquidation period.

Upon our liquidation, our preferred shares have a liquidation preference over our common shares in respect of the distribution of our net assets. In the event of our liquidation, the assets available for distribution to our shareholders would be distributed first to our preferred shareholders in an amount equal to their pro rata share of our legal capital, prior to making any distributions to our common shareholders. If the assets to be so distributed are insufficient to fully compensate our preferred shareholders for their legal capital, each of our preferred shareholders would receive a pro rata amount (based on their *pro rata* share of our legal capital, excluding our common shares in such calculation) of any assets available for distribution.

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Preemptive Rights

Under the Brazilian Corporate 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 holders of class B preferred shares (which are special shares paid up with resources provided for in certain tax incentive legislation) do not have preemptive rights in case of capital increases resulting from capitalization of profits or reserves (bonus shares). 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 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 and the securities to which the rights relate 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 and Tender Offers

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 Corporate 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 Corporate Law defines "amortization" (*amortização*) as the distribution to 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 Corporate Law authorizes us, by means of a decision made at our shareholders' meeting, to redeem shares not held by our controlling shareholder, if, after a tender offer effected as a consequence of delisting, our controlling shareholder increases its 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 Corporate 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.

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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 in exchange for their or our shares (“incorporação de ações”);
- to participate in a centralized group of companies as defined under the Brazilian Corporate 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 a minimum level of 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.

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Disclosures of Share Ownership

Brazilian regulations require that (i) our controlling shareholder, directly or indirectly, (ii) shareholders who have elected members of our board of directors or fiscal council, and (iii) 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 any class or type of shares of our capital stock to disclose its or their share ownership or divestment to the CVM and to the São Paulo Stock Exchange (*Brasil, Bolsa, Balcão – B3*).

Form and Transfer

Our preferred shares and common shares are held 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 Corporate 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 Brazilian 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 Brazilian 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 procedures under foreign investment legislation and foreign exchange regulations, which generally require, among other things, the registration of the relevant investment with the Brazilian Central Bank and/or the CVM, as the case may be.

Investments in our class A preferred shares by (i) a holder not deemed to be domiciled in Brazil for Brazilian tax purposes, (ii) a non-Brazilian holder who is registered with the CVM under Annex I of Resolution No. 4,373 or (iii) the Depositary (as defined herein), are eligible for registration with the Brazilian 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 depository 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 ADRs into foreign currency and remit the proceeds outside Brazil to the depository so that the depository 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;

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- 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 Corporate 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 certain U.S. federal income and Brazilian tax consequences of the acquisition, ownership and disposition of Class A preferred shares and ADSs, but it does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase Class A preferred shares or ADSs. This summary is not applicable to all categories of investors, some of which may be subject to special rules, and does not address all of the U.S. federal income and Brazilian tax considerations applicable to any particular holder. The summary is based upon the tax laws of the United States and Brazil and regulations thereunder, all as of the date hereof, and all of which are subject to change.

Prospective purchasers of Class A preferred shares and ADSs should consult their own tax advisors about the particular U.S. federal income and Brazilian tax consequences to them of the acquisition, ownership and disposition of Class A preferred shares and ADSs, as well as any state, local and other tax consequences that may apply to them.

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.

Pursuant to Brazilian law, a non-resident holder may invest in class A preferred under Resolution No. 4,373, of September 2014, of the National Monetary Council (a “4,373 Holder”).

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 with Respect to Class A Preferred Shares” 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.

In this context, it should be noted that Law No. 11,638, dated December 28, 2007, significantly altered the Brazilian corporate law in order to align the generally accepted Brazilian accounting standards to the International Financial Reporting Standards (“IFRS”). Nonetheless, Law No. 11,941, dated May 27, 2009, introduced the Transitory Tax Regime (“RTT”) in order to render neutral, from a tax perspective, all of the changes provided by Law No. 11,638. Under the RTT, for tax purposes, legal entities should observe the accounting methods and criteria as in force on December 31, 2007.

Profits determined pursuant to Law No. 11,638 (“IFRS Profits”) may differ from the profits calculated pursuant to the accounting methods and criteria as in force on December 31, 2007 (“2007 Profits”).

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While it was a general market practice to distribute exempted dividends with reference to the IFRS Profits, Normative Ruling No. 1,397, issued by the Brazilian tax authorities on September 16, 2013, has established that legal entities should observe the 2007 Profits, in order to determine the amount of profits that could be distributed as exempted income to their beneficiaries.

Any profits paid in excess of said 2007 Profits (“Excess Dividends”) should, in the tax authorities’ view and in the specific case of non-resident beneficiaries, be subject to the following rules of taxation: (i) 15% withholding tax, in case of case of beneficiaries domiciled abroad, but not in a Low or Nil Tax Jurisdiction (as defined below), and (ii) 25% withholding tax, in case of beneficiaries domiciled in a Low or Nil Tax Jurisdiction (as defined below).

In order to mitigate potential disputes on the subject, Law No. 12,973, dated May 13, 2014, in addition to revoking the RTT, introduced a new set of tax rules, or the New Tax Regime, including new provisions with respect to Excess Dividends. Under these new provisions: (i) Excess Dividends related to profits assessed from 2008 to 2013 will be exempt; (ii) potential disputes remain concerning the Excess Dividends related to 2014 profits, unless a company voluntarily elected to apply the New Tax Regime in 2014; and (iii) as of 2015, once the New Tax Regime became mandatory and completely replaced the RTT, dividends calculated based on IFRS standards should be considered fully exempt.

There are proposed bills currently under discussion by the Brazilian federal government regarding a potential amendment to the tax legislation aiming at taxing dividends. Therefore, the mentioned dividend exemption may be revoked with prospective effects.

Interest on Shareholders’ Equity

Law No. 9,249/95, as amended, allows a Brazilian corporation to make distributions to shareholders characterized as distributions of interest on shareholders’ equity on top of or as an alternative to dividend distributions. Such interest is calculated by multiplying the long-term interest rate (TJLP), as determined by the Brazilian Central Bank from time to time, by the sum of determined Brazilian company’s net equity accounts.

Distributions of interest on 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 if the non-resident holder is domiciled in a Low or Nil Tax Jurisdiction (as defined below).

Interest on shareholders’ equity is deductible for purposes of calculating the Brazilian social contribution on net profit (CSLL) and the corporate income tax, provided that such distribution is approved by our shareholders in a general meeting and complies with the limits established by Brazilian tax legislation. The amount of such deduction cannot exceed the greater of:

- 50% of net profits (after social contribution on net profits and before taking into account such distribution and any deduction for corporate income tax) related to the period in respect of which the payment is made; or
- 50% of the sum of retained profits and profit reserves as of the date of the beginning of the period in respect of which the payment is made.

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.

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No assurance can be given that our board of directors will not recommend that future distributions of income should be made by means of interest on shareholders' equity instead of dividends.

Distributions of interest on shareholders' equity to a non-resident holder may be converted into U.S. dollars and remitted outside Brazil, subject to applicable exchange controls, to the extent that the investment is registered with the Central Bank.

Taxation of Gains with Respect to ADSs

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.

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 (i.e., ADSs are issued and registered abroad). However, considering that ADSs derive their value from underlying shares in Brazil and the lack of case law on the matter, we are unable to predict whether such understanding will ultimately prevail in Brazilian courts.

As a result, in case the ADSs are deemed to be assets located in Brazil, gains recognized by a non-resident holder from their sale or other disposition to either a non-resident of Brazil or a resident of Brazil may be subject to income tax in Brazil at progressive rates as follows: (1) 15% for the portion of the gain that does not exceed R\$5 million, (2) 17.5% for the portion of the gain that exceeds R\$5 million but does not exceed R\$10 million, (3) 20% for the portion of the gain that exceeds R\$10 million but does not exceed R\$30 million, and (4) 22.5% for the portion of the gain that exceeds R\$30 million, or at a flat tax rate of 25% if such non-resident holder is located in a Low or Nil Tax Jurisdiction (as defined below), unless, in each case, a lower rate is provided for in an applicable tax treaty between Brazil and the country where the non-resident holder has its domicile. In the event of any such income tax, the person responsible for the withholding and collection of the income tax will be: (i) the ADSs acquirer (if resident in Brazil); or (ii) the attorney in fact or legal representative of the non-resident acquirer, according to Section 26 of Law No. 10,833/03.

Under certain circumstances, if income tax is not paid, the amount of tax charged could be subject to an upward adjustment, as if the amount received by the non-resident holder were net of taxes in Brazil (gross-up).

Taxation of Gains with Respect to Class A Preferred Shares

The sale or other disposition of class A preferred shares or the receipt of the underlying class A preferred shares in exchange for ADSs abroad may be subject to the provisions of Brazilian Law No. 10,833/03. In addition to the case where from the outset an investor holds class A preferred shares, 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 in Brazil under Law No. 4,131/62.

As a general rule, gains realized as a result of a disposition or sale transaction of class A preferred shares are determined by the positive difference between the amount realized on the disposition or sale of the relevant class A preferred shares and their acquisition cost.

Under Brazilian law, income tax rules on such gains can vary depending on the domicile of the non-resident holder, the type of registration of the investment held by the non-resident holder with the Central Bank and how the disposition is carried out, as described below.

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Gains realized by a non-resident holder on a sale or disposition of class A preferred shares carried out on a Brazilian stock exchange, which includes the transactions carried out on the organized over-the-counter market, are:

- exempt from income tax when realized by a non-resident holder that (i) is a 4,373 Holder and (ii) is not resident or domiciled in a Low or Nil Tax Jurisdiction (as defined below); or
- subject to income tax at a rate of up to 25% in any other case, including the gains realized by a non-resident holder that (i) is not a 4,373 Holder and/or (ii) is a 4,373 Holder resident or domiciled in a Low or Nil Tax Jurisdiction (as defined below). In these cases, a withholding income tax of 0.005% of the sale value shall be applicable and can be later used to offset the eventual income tax due on the capital gain. Day trade transactions are subject to the rate of 1%.

Any other gains realized on a disposition of class A preferred shares that is not carried out on Brazilian stock exchanges are subject to income tax at rates of up to 22.5%, except for a non-resident holder that is not a 4,373 Holder and is resident or domiciled in a Low or Nil Tax Jurisdiction (as defined below), which, in this case, is subject to income tax at a rate of up to 25%. In case the gains are related to transactions conducted on the Brazilian non-organized over-the-counter market with intermediation of a financial institution, the withholding income tax of 0.005% will apply and can be later used to offset the eventual income tax due on the capital gain.

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 Low or Nil Tax 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 realized by a non-resident holder on the sale or assignment of preemptive rights relating to our class A preferred shares will be subject to Brazilian taxation according to the same rules applicable to the sale or disposition of such class A preferred shares.

Discussion on Low or Nil Tax Jurisdictions

The concept of Low or Nil Tax Jurisdiction encompasses those countries that do not tax income or tax it at a maximum rate lower than 20%, or where the local legislation does not allow access to information related to the shareholding composition of legal entities, to their ownership or to the identity of the effective beneficiary of the income attributed to non-residents ("Low or Nil Tax Jurisdictions").

The statutory definition of a Low or Nil Tax Jurisdiction for the purpose of income taxation on gains should differ depending on whether or not the holder is a 4,373 Holder. In the case of a 4,373 Holder, the definition of Low or Nil Tax Jurisdiction should not comprise jurisdictions where the local legislation imposes restrictions on disclosing the shareholding composition or ownership of the investment. However, the list provided for in Normative Ruling No. 1,037/10 does not seem to differ the Low or Nil Tax Jurisdiction definition for the purposes of 4,373 Holders.

On June 23, 2008, Law No. 11,727 introduced the concept of "Privileged Tax Regime," which encompasses the countries and jurisdictions that (i) do not tax income or tax income at a maximum rate lower than 20%, or 17% in certain cases as detailed below; (ii) grant tax advantages to a non-resident entity or individual (a) with no requirement to carry out a substantial economic activity within the country or dependency, or (b) on the condition that they do not carry out a substantial economic activity within the country or dependency; (iii) do not tax income generated outside the jurisdiction, or that tax such income at a maximum rate lower than 20%, or 17% in certain cases as detailed below; or (iv) do not provide access to information on the ownership and beneficial ownership of assets or on transactions within its territory, or impose restrictions on disclosure of that information.

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In addition, on June 4, 2010, the Brazilian tax authorities enacted Normative Ruling No. 1,037, as amended, listing (i) the countries and jurisdictions considered as Low or Nil Tax Jurisdictions, and (ii) the Privileged Tax Regimes.

On its turn, Ordinance No. 488, of November 28, 2014, issued by the Brazilian Ministry of Finance, reduced the rate for purposes of the definition of Low or Nil Tax Jurisdiction and Privileged Tax Regime from 20% to 17%, but only to countries and regimes aligned with international standards of fiscal transparency, in accordance with the rules established by Normative Ruling n. 1,530, issued on December 19, 2014. Under Brazilian law, the aforementioned commitment is present if the relevant jurisdiction (i) has entered into (or concluded the negotiation of) an agreement or convention authorizing the exchange of information for tax purposes with Brazil and (ii) is committed to the actions discussed in international forums on tax evasion in which Brazil has been participating, such as the Global Forum on Transparency and Exchange of Information.

In the past, it was not clear whether the concept of Privileged Tax Regime was also applicable to interest payments made to residents outside Brazil. Notwithstanding, in December 2017, the Brazilian Federal Revenue Service (“RFB”) published Answer to Tax Ruling Cosit Ruling No. 575/2017, stating that only payments to countries deemed as a Low or Nil Tax Jurisdiction by Normative Ruling No. 1,037 would be subject to withholding tax at a 25% rate.

Therefore, under the RFB’s current interpretation, we believe that the best interpretation of the current tax legislation leads to the conclusion that the concept of Privileged Tax Regime should apply solely for purposes of Brazilian transfer pricing and thin capitalization/cross-border interest deductibility rules. Nevertheless, we cannot assure you that subsequent legislation or interpretations by the Brazilian tax authorities regarding the definition of a Privileged Tax Regime provided by Law No. 11,727, will not also apply to a non-resident holder on payments of interest on shareholders’ equity.

Regardless of the above, potential investors should consult with their own tax advisors regarding the consequences of the implementation of Law No. 11,727, Normative Ruling No. 1,037 and of any related Brazilian tax law or regulation concerning Low or Nil Tax Jurisdictions.

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.

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Tax on Foreign Exchange and on Bonds and Securities Transactions

Foreign Exchange Transactions

IOF/Exchange Tax

Pursuant to Decree No. 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%. However, foreign currency exchange transactions carried out for the inflow of funds into Brazil for investment in the Brazilian financial and capital market made by a foreign investor, including a non-resident holder who registers his/her investment under Resolution No. 4,373/14, are subject to IOF/Exchange at a current rate of zero.

The IOF/Exchange rate will be also zero for the outflow of resources from Brazil related to the return of the investments mentioned above, including payments of dividends and interest on shareholders’ equity and the repatriation of funds invested in the Brazilian market.

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 class A preferred shares on the NYSE and the B3.

IOF/Bonds Tax

Pursuant to Decree No. 6,306/07, the “IOF/Bonds” tax may be imposed on any transactions involving bonds and securities, including those carried out on Brazilian stock, futures and commodities exchanges. The rate of IOF/ Bonds applicable to most transactions involving common or preferred shares is currently zero percent, including transactions related to transfers of shares traded on the stock exchange with the purpose of enabling the issuance of ADSs to be traded outside Brazil. The Brazilian government may increase the rate of the IOF/Bonds up to 1.5% per day, but only in respect of future transactions.

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.”

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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 the ADSs, which are evidenced by ADRs. This discussion addresses only the U.S. federal income tax considerations of U.S. holders (as defined below) that will hold our class A preferred shares or the ADSs as capital assets. This discussion does not address tax considerations applicable to holders that may be subject to special tax rules, such as banks and other 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 the 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 the 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 the 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 the 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 discussion does not contain a detailed description of all the U.S. federal income tax consequences to U.S. holders in light of their particular circumstances and 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 the ADSs. In addition, this discussion does not address the Medicare tax on net investment income or 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 discussion 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) 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 our class A preferred shares or the 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 or arrangement treated as a partnership for U.S. federal income tax purposes) holds our class A preferred shares or the 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. If you are a partnership or a partner of a partnership holding our class A preferred shares or the ADSs, you should consult your tax advisor.

This discussion is not intended to constitute a complete analysis of all tax consequences relating to the acquisition, ownership and disposition of our class A preferred shares or the ADSs. You should consult your own tax advisors concerning the particular U.S. federal income tax consequences to you of the acquisition, ownership and disposition of our class A preferred shares or the ADSs, as well as the consequences to you arising under other U.S. federal tax laws and the laws of any other taxing jurisdiction.

Except as specifically noted below under “—Passive Foreign Investment Company Rules,” the following discussion assumes we are not, and will not be, a passive foreign investment company (“PFIC”) for U.S. federal income tax purposes.

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Class A Preferred Shares

The class A preferred shares will be treated as equity for U.S. federal income tax purposes.

ADSs

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.

Taxation of Dividends

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 any amounts withheld in respect of Brazilian taxes and any distribution of interest on shareholders' equity, as described above under "—Brazilian Tax Considerations") 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. 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 (and in reduction of) the U.S. holder's tax basis in the class A preferred share or ADS on which it is paid, and thereafter will be treated as capital gain recognized on a sale or exchange (as discussed below under "—Sale, Exchange or Other Disposition of Class A Preferred Shares or ADSs"). 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 reported as dividends for U.S. federal income tax purposes.

Subject to applicable limitations (including a minimum holding period requirement), 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, we believe that any dividends that we pay on the ADSs, but not on our class A preferred shares, to non-corporate U.S. holders will be potentially eligible for these reduced tax rates. However, non-corporate U.S. holders will not be eligible for reduced tax rates on any dividends received from us if we are a PFIC (as discussed below under "—Passive Foreign Investment Company Rules") in the taxable year in which such dividends are paid or in the preceding taxable year. There also can be no assurance that the ADSs will be considered readily tradable on an established securities market in the United States in later years. Dividends from our Company will not be eligible for the dividends received deduction generally allowed to corporate U.S. holders.

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.

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Sale, Exchange or Other Disposition of Class A Preferred Shares or ADSs

A deposit or withdrawal of class A preferred shares by a holder in exchange for an ADS that represents such shares will not result in the realization of gain or loss for U.S. federal income tax purposes. A U.S. holder generally will recognize capital gain or loss upon a sale, exchange or other disposition of a class A preferred share or ADS in an amount equal to the difference between the amount realized on the sale, exchange or other disposition and the U.S. holder's adjusted basis in the class A preferred share or ADS, both determined in U.S. dollars. 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 eligible for a 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. However, pursuant to recently issued U.S. Treasury Regulations that apply to taxes paid or accrued in taxable years beginning on or after December 28, 2021, any such Brazilian tax would generally not be a foreign income tax eligible for a foreign tax credit (regardless of any other income that a U.S. holder may have that is derived from foreign sources). U.S. holders are urged to consult their own tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

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.

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Passive Foreign Investment Company Rules

Based on the past and projected composition of our income and assets, and the valuation of our assets, including goodwill, we do not believe we were a PFIC for our most recent taxable year, and we do not expect to become a PFIC in the current taxable year or the foreseeable future, although there can be no assurance in this regard.

In general, we will be a PFIC for any taxable year in which (1) at least 75% of our gross income is passive income, or (2) at least 50% of the value (generally determined based on a quarterly average) of our assets is attributable to assets that produce or are held for the production of passive income. For this purpose, passive income generally includes dividends, interest, royalties and rents (other than royalties and rents derived in the active conduct of a trade or business and not derived from a related person). In addition, cash and other assets readily convertible into cash are generally considered passive assets. If we own at least 25% (by value) of the stock of another corporation, for purposes of determining whether we are a PFIC, we will be treated as owning our proportionate share of the other corporation's assets and receiving our proportionate share of the other corporation's income.

The determination of whether we are a PFIC is made annually. Accordingly, it is possible that we may become a PFIC in the current or any future taxable year due to changes in our asset or income composition. If we are a PFIC for any taxable year during which a U.S. holder holds our class A preferred shares or the ADSs, such holder will be subject to special tax rules discussed below.

If we are a PFIC for any taxable year during which a U.S. holder holds our class A preferred shares or the ADSs, such holder will be subject to special tax rules with respect to any "excess distribution" received and any gain realized from a sale or other disposition, including a pledge, of the class A preferred shares or ADSs. Distributions received in a taxable year will be treated as excess distributions to the extent that they are greater than 125% of the average annual distributions received during the shorter of the three preceding taxable years or the U.S. holder's holding period for the class A preferred shares or ADSs. Under these special tax rules:

- the excess distribution or gain will be allocated ratably over the U.S. holder's holding period for the class A preferred shares or ADSs,
- the amount allocated to the current taxable year, and any taxable year prior to the first taxable year in which we were a PFIC, will be treated as ordinary income, and
- the amount allocated to each other year will be subject to tax at the highest tax rate in effect for that year for individuals or corporations, as applicable, and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

Although the determination of whether we are a PFIC is made annually, if we are a PFIC for any taxable year in which a U.S. holder holds our class A preferred shares or the ADSs, such holder will generally be subject to the special tax rules described above for that year and for each subsequent year in which such holder holds the class A preferred shares or ADSs (even if we do not qualify as a PFIC in such subsequent years). However, if we cease to be a PFIC, a U.S. holder can avoid the continuing impact of the PFIC rules by making a special election to recognize gain as if the class A preferred shares or ADSs had been sold on the last day of the last taxable year during which we were a PFIC. U.S. holders are urged to consult their own tax advisor about this election.

If we are a PFIC for any taxable year during which a U.S. holder holds our class A preferred shares or the ADSs and any of our non-U.S. subsidiaries is also a PFIC, such holder will be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of the PFIC rules. U.S. holders are urged to consult their tax advisor about the application of the PFIC rules to any of our subsidiaries.

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A U.S. holder will generally be required to file U.S. Internal Revenue Service Form 8621 if such holder holds our class A preferred shares or the ADSs in any year in which we are classified as a PFIC. U.S. holders are urged to consult their tax advisor concerning the U.S. federal income tax consequences of holding class A preferred shares or ADSs if we are considered a PFIC in any taxable year, including the potential availability and effect of any elections which would provide for alternative treatment.

Foreign Asset Reporting

Certain U.S. holders are required to report information relating to an interest in our class A preferred shares or the ADSs, subject to certain exceptions (including an exception for class A preferred shares or ADSs held in custodial accounts maintained with certain financial institutions). U.S. holders 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 the ADSs.

Information Reporting and Backup Withholding

In general, information reporting will apply to dividends in respect of our class A preferred shares or the ADSs and the proceeds from the sale, exchange or other disposition of our class A preferred shares or the ADSs that are paid to a U.S. holder within the United States (and in certain cases, outside the United States), unless such holder is an exempt recipient. A backup withholding tax may apply to such payments if a U.S. holder fails to provide a taxpayer identification number or certification of exempt status or fails to report in full dividend and interest income.

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.

Documents on Display

Statements contained in this annual report regarding the contents of any contract or other document filed as an exhibit to this annual report summarize their material terms, but are not necessarily complete, and each of these statements is qualified in all respects by reference to the full text of such contract or other document.

We are subject to the periodic reporting and other informational requirements of the Exchange Act applicable to a foreign private issuer. Accordingly, we are required to file with or furnish to the SEC, reports and other information, including annual reports on Form 20-F and reports on Form 6-K.

As a foreign private issuer, we are exempt under the Exchange Act from, among other things, the rules prescribing the furnishing and content of proxy statements, and members of our board of directors and board of executive officers and our principal shareholders are exempt from reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, as a foreign private issuer, we will not be required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act.

You may inspect and copy reports and other information that we file with or furnish to the SEC at the SEC's Public Reference Room located at 100 F Street, N.E., Washington D.C. 20549. Copies of these materials may be obtained by mail from the SEC's Public Reference Room at prescribed rates. The public may obtain information on the operation of the SEC's Public Reference Room by calling the SEC in the United States at 1-800-SEC-0330. In addition, the SEC maintains an internet website at www.sec.gov from which you can electronically access these materials.

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We also file financial statements and other periodic reports with the CVM, which are available for investor inspection at the CVM's offices located at Rua Sete de Setembro, 111, 2nd floor, Rio de Janeiro, RJ, and Rua Cincinato Braga, 340, 2nd, 3rd and 4th floors, São Paulo, SP. The telephone numbers of the CVM in Rio de Janeiro and São Paulo are +55-21-3554-8686 and +55-11-2146-2097, respectively.

Copies of our annual report on Form 20-F and documents referred to in this annual report and our by-laws, as well as certain other documents that we are required to file with, or make available to, the SEC and the CVM, are available for inspection upon request at our headquarters at Rua Lemos Monteiro, 120 – 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. 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 have exposure to market risks arising from our day-to-day 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, 2021, we had currency options with an aggregate notional amount of R\$9,654.3 million (US\$1,730 million) in puts and of R\$6,752.4 million (US\$1,210 million) in calls.

We assess the potential and consolidated impact of market risks and seek to mitigate those risks following 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, 2021, we had R\$8,680.7 million (US\$1,555.5 million) in foreign currency-denominated cash and cash equivalents, including the aggregate amount of R\$1,773.3 million (US\$317.8 million) of Braskem Idesa's cash and cash equivalents.

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 CDI rate and IPCA rate.

With respect to Brazilian interest rates:

- the short-term domestic CDI rate increase to 4.4% per annum as of December 31, 2021, from 1.9% per annum as of December 31, 2020 and from 4.5% per annum as of December 31, 2019; and

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- IPCA recorded in 2021 was 10.06%, increasing from 4.52% in 2020 and 4.31% in 2019.

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

Payment Schedule—Breakdown by Type of Interest Rate								
As of December 31, 2021							Total	Fair Value⁽¹⁾
Expected Maturity Date								
2022	2023	2024	2025	2026	Thereafter	Total	Fair Value⁽¹⁾	
(in millions of reais, unless otherwise indicated)								
Liabilities:								
Loans and financings (excluding debentures):								
Fixed rate, denominated in U.S. dollars	720.8	584.3	3,329.5	-	-	25,688.5	30,323.0	33,690.9
Average interest rate	6.1%	3.5%	6.5%	-	-	5.7%		
Variable rate, denominated in U.S. dollars	663.3	651.2	652.1	653.1	625.1	1,458.2	4,703.1	4,697.0
Bond Idesa fixed rate, denominated in U.S. dollars	138.7	-	-	-	-	11,800.5	11,939.3	12,197.5
Average interest rate	7.1%	-	-	-	-	7.2%		
Variable rate, denominated in U.S. dollars (Braskem Idesa)	7.0	126.4	126.4	126.4	463.6	-	849.9	931.1
Average interest rate	4.0%	4.0%	4.0%	4.0%	4.0%			
Fixed rate, denominated in reais	6.4	6.2	5.0	4.9	2.4	-	24.9	22.4
Average interest rate	5.9%	5.9%	6.5%	6.5%	6.5%			
Variable rate, denominated in reais	12.7	12.5	12.5	9.4	-	-	47.1	39.1
Average interest rate (CDI)	10.7%	10.7%	10.7%	10.7%				
Variable rate, denominated in reais	99.2	93.3	93.2	62.4	48.1	194.6	590.7	670.4
Average interest rate (over IPCA)	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%		
Total Loan and financings	1,648.1	1,473.9	4,218.7	856.2	1,139.3	39,141.8	48,477.9	52,248.3
Assets:								
Cash and cash equivalents and other instruments:								
Fixed rate, denominated in foreign currency	4,480.6	-	-	-	-	-	4,480.6	4,480.6
Variable rate, denominated in reais	7,709.6	-	-	-	-	-	7,709.6	7,709.6
Total cash and cash equivalents and other investments	12,190.2	-	-	-	-	-	12,190.2	12,190.2

(1) represents the net present value of the future cash flows from the obligations converted into reais at fair market value as of December 31, 2021

In the event that the average interest rate applicable to our financial assets and debt in 2022 is one percentage point higher than the average interest rate in 2021, our financial income would increase by R\$121.9 million and our financial expenses would increase by R\$484.8 million.

Foreign Currency Exchange Rate Risk

Our liabilities with exposure to foreign currency exchange rate risk are mainly U.S. dollar-denominated. To partially offset the risk of a devaluation of the real against the U.S. dollar, we currently maintain liquid assets denominated in U.S. dollars available 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 since May 1, 2013. We borrow in the international markets to support our operations and investments; we have exposure to market risks from changes in foreign exchange rates and interest rates.

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The table below provides information about our significant foreign currency exposures:

	Payment Schedule—Breakdown by Currency							Total	Fair Value ⁽¹⁾
	As of December 31, 2021 Expected Maturity Date								
	2022	2023	2024	2025	2026	Thereafter			
	(in millions of reais)								
Liabilities:									
Loans, financings and trade payables:									
Loans and financings denominated in U.S. dollars	1,529.7	1,361.9	4,108.0	779.6	1,088.7	38,947.2	47,815.2	50,585.4	
Accounts payable denominated in U.S. dollars	6,524.5	-	-	-	-	-	6,524.5	6,524.5	
Total loans, financings and trade payables	8,054.3	1,361.9	4,108.0	779.6	1,088.7	38,947.2	54,339.7	57,109.9	
Assets:									
Cash and cash equivalents and other investments Denominated in foreign currency	4,480.6	-	-	-	-	-	4,480.6	4,480.6	
Total cash and cash equivalents and other investments	4,480.6	-	-	-	-	-	4,480.6	4,480.6	
Hedge Accounting:									
Hedge Accounting designated Exports/Sales	-	125.6	1,737.5	4,590.0	460.4	32,087.9	39,001.3	39,001.3	

(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, 2021

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, 2021 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\$47,815.2 million (US\$8,568.3 million) and R\$53,353.8 million (US\$10,266.7 million) as of December 31, 2020. 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 20 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 2020 as compared to the *real*/U.S. dollar exchange rate as of December 31, 2021, our financial expenses indexed to the dollar in 2022 would have increased by R\$4,781.5 million, and our financial income would have increased by R\$448.1 million.

Commodity Prices

We do not hedge the exposure to the price of naphtha, our principal raw material. This is, 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.”

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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 services subject to the payment of fees until its fees for those services are paid.

Fees and Expenses

Persons depositing or withdrawing shares or ADS holders must pay:

For:

\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	<ul style="list-style-type: none">• Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property
\$.05 (or less) per ADS	<ul style="list-style-type: none">• Cancellation of ADSs for the purpose of withdrawal, including if the Deposit Agreement terminates• Any cash distribution to ADS holders
A fee equivalent to the fee that would be payable if securities distributed to you had been shares and the shares had been deposited for issuance of ADSs	<ul style="list-style-type: none">• Distribution of securities distributed to holders of deposited securities (including rights) that are distributed by the Depository to ADS holders
\$.05 (or less) per ADS per calendar year	<ul style="list-style-type: none">• Depository services
Registration or transfer fees	<ul style="list-style-type: none">• Transfer and registration of shares on our share register to or from the name of the Depository or its agent when you deposit or withdraw shares
Expenses of the Depository	<ul style="list-style-type: none">• Cable (including SWIFT) and facsimile transmissions (when expressly provided in the Deposit Agreement)• Converting foreign currency to U.S. dollars
Taxes and other governmental charges the Depository or the custodian has to pay on any ADSs or shares underlying ADSs, such as stock transfer taxes, stamp duty or withholding taxes	<ul style="list-style-type: none">• As necessary
Any charges incurred by the Depository or its agents for servicing the deposited securities	<ul style="list-style-type: none">• As necessary

During the year ended December 31, 2021, we received from the depository of our ADSs US\$976.9 thousands, which was used for general corporate purposes such as the payment of costs and expenses associated with (1) the preparation and distribution of proxy materials, (2) the preparation and distribution of marketing materials and (3) consulting and other services related to investor relations.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

Not applicable.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Not applicable.

ITEM 15. CONTROLS AND PROCEDURES]

Disclosure Controls and Procedures

Our management, including our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) as of December 31, 2021. Based on our evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as a result of the material weakness in our internal control over financial reporting described below, as of December 31, 2021, 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.

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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, 2021 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, 2021, our internal control over financial reporting was not effective.

Material Weakness in Internal Control over Financial Reporting

As part of the Internal Control over Financial Reporting assessment, we identified ineffective controls over the realization of the hedged items for certain debt at Braskem Idesa, a Mexican subsidiary.

The ineffective controls were due to (i) failure over the hedge accounting control execution that was not executed with the proper precision to capture the failure and was not designed to facilitate its understanding and execution, (ii) lack of robustness of the supporting documentation of the hedge accounting controls to identify the issue and (iii) improper training of the people involved in operating the control, regarding the understanding of unusual transactions, such as prepayment of the hedge accounting instrument.

There was a misstatement identified that was not material as of December 31, 2021 and was corrected in the current consolidated financial statements but resulted in more than a remote chance of a material misstatement and as such was determined to be a material weakness.

Our independent registered public accounting firm, KPMG Auditores Independientes Ltda. has issued an adverse audit opinion on the effectiveness of our internal control over financial reporting as of December 31, 2021, which is included in this annual report.

Remediation Actions Addressing Material Weakness Reported in 2021

Our management is taking several actions to improve controls and continues to monitor the maturity and operating effectiveness of controls designed and implemented. In order to remediate the material weakness described above, we, led by our Chief Executive Officer and the Chief Financial Officer, are implementing and monitoring the following specific actions:

The Braskem Idesa financial team has revised the review attributes that surround the accounting of hedged items. The following actions will be executed going forward to enhance the risk coverage:

- Improve the hedge accounting control description to facilitate the activity understanding and execution by the control operator;
- Provide training sessions to people involved in the transactional activities to deal with unusual transactions (such as prepayments) related to the hedge accounting process;
- Enhance the level of the documentation that supports the accounting reconciliation process.

Remediation Actions Addressing Material Weakness Reported in 2020

As part of management commitment to improve its internal control environment, diligent actions were taken to remediate the material weakness identified as part of the 2020 annual report as described below:

Information technology controls (GITCs) over the scale systems

The IT team, in partnership with the logistics team, have worked on the evaluation of the technology environment of scales systems and have developed actions to include and maintain IT General Controls. These actions focused on access, changes and operation aiming to provide reasonable assurance in order to rely upon the reports extracted from the systems.

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The European Logistics team has also improved the internal control environment over polymers shipping to ensure that the quantities shipped are in accordance with the quantities invoiced to our clients. New controls were adopted and were part of the management assessment of internal control over financial reporting.

Management was able to evaluate the remediation actions and the controls implemented during 2021 and conclude that this material weakness was remediated for the 2021 annual report.

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, 2021 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 Statutory Compliance and Audit Committee currently includes two “audit committee financial experts” within the meaning of this Item 16A and as such term is defined in the SEC rules. See “Item 6. – A. Directors, Senior Management and Employees— Statutory Compliance and Audit Committee” for information regarding the experience of Mr. José Écio Pereira da Costa Júnior and Mrs. Maria Helena Pettersson. They meet the standards of independence for external members of an audit committee under the Company’s policy and of Comissão de Valores Mobiliários Resolution No. 23, of 2021.

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 June 2020. A copy of our code of conduct may be found on our website at www.braskem.com.br. The information included on our website or that might be accessed through our website is not included in this annual report and is not incorporated into this annual report by reference.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Audit and Non-Audit Fees

The following table sets forth the fees billed to us by our independent registered public accounting firm KPMG Auditores Independentes during the fiscal years ended December 31, 2021 and December 31, 2020.

	Year Ended December 31,	
	2021	2020
	<i>(in millions of reais)</i>	
Audit fees ⁽¹⁾	25.7	25.6
Audit-related fees ⁽²⁾	5.8	2.1
Tax fees ⁽³⁾		0.3
All other fees		
Total fees	31.5	27.9

(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.

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Pre-Approval Policies and Procedures

The Company has an Audit and Non-Audit Services Pre-Approval Policy, initially approved by the Company's Board of Directors on June 22, 2005 and amended on December 8, 2021, with prior analysis by the CCAE, which is now in effect under the name "Policy for hiring Independent Auditors". The purpose of the Policy for hiring Independent Auditors is to regulate the process and the conditions for hiring the Company's Independent Auditors, including the services that can be provided by them to the Company or its Subsidiaries, the services that are not allowed and the annual list of pre-approved external audit and non-audit services. Our Management should, whenever requested by the CCAE's Coordinator, present an update on the progress of the External Audit and Non-Audit Services previously approved by the CCAE and respective compensation, to enable the CCAE to ascertain full compliance with the Policy.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Our CCAE meets the requirements for the exemption available to foreign private issuers under paragraph (c)(3) of Rule 10A-3 under the Exchange Act. The CCAE is not the equivalent of, or wholly comparable to, a U.S. audit committee. Among other differences, it is not required to meet the standards of "independence" established in Rule 10A-3 and is not fully empowered to act on all the matters that are required by Rule 10A-3 to be within the scope of an audit committee's authority. Nonetheless, with the attributes provided to the CCAE under our bylaws and CCAE's chart to the extent permitted by Brazilian law, we believe that its corporate governance system, taken as a whole, is materially equivalent to a system having an audit committee functioning as a committee of its board of directors. Accordingly, the Company does not believe that its reliance on the exemption in paragraph (c)(3) of Rule 10A-3 materially adversely affects the ability of the CCAE to act independently and to satisfy the other requirements of Rule 10A-3 to the extent permitted by Brazilian Corporate Law.

We also have a permanent fiscal council. However, as of November 9, 2021, we no longer rely on the fiscal council to avail ourselves of the exemption contained in paragraph (c)(3) of Rule 10A-3 under the Exchange Act.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Period:	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet be Purchased Under the Plans or Programs
From Aug 29, 2012 to Aug 28, 2013	262,300	R\$13.30	1.961000%	13,376,161
From Feb 19, 2015 to Feb 18, 2016	80,000	R\$11.58	0.030096%	3,500,000

On August 13, 2012, our board of directors authorized a share repurchase program under which we are authorized to repurchase up to 13,376,161 "class A" preferred shares at market prices over the B3 at any time and from time to time prior to August 28, 2013. In 2012, we repurchased 262,300 shares under this program. In 2013 and 2014, we did not repurchase any shares.

On February 11, 2015, our board of directors approved the fifth program for the repurchase of shares effective for the period between February 19, 2015 and February 18, 2016, through which we may acquire up 3,500,000 "class A" preferred shares at market price.

On 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 Corporate Law, the rules of the CVM and the applicable rules of the B3, as well as those set forth in Braskem’s bylaws.

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 don’t need to have a nominating/corporate governance committee composed of independent directors with Internal Rules that comply with the NYSE corporate governance rules; and
- A controlled company don’t need to have a compensation committee composed of independent directors with Internal Rules that comply with the NYSE corporate governance rules.

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Because a majority of the voting power of Braskem's capital stock is directly controlled by Novonor S.A (former Odebrecht S.A.), Braskem is a controlled company, and would therefore not be required to have a majority of independent directors.

Although Brazilian Corporate Law and Braskem's bylaws establish rules in relation to certain qualification requirements of its directors, neither Brazilian Corporate Law nor Braskem's bylaws require that Braskem has 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. However, according to our policies, at least 20% of the members of our board of directors must be independent. Currently Braskem has six (6) independent members, from a total of eleven (11) members.

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 Corporate Law, up to one-third of the members of Braskem's board of directors can be elected to board of executive officer's positions. Apart from the CEO of the Company, currently all 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 Internal Rules that address 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 Corporate Law to have, and accordingly does not have, a nominating/corporate governance committee or a compensation committee. Currently, all Braskem's directors are nominated by certain of its shareholders, including Novonor S.A., pursuant to shareholders agreements and Braskem's bylaws. However, Braskem has the Personnel and Organization Committee, which is a committee of its board of directors that is responsible for, among other things:

- contributes to the preparation and oversight of the effective compliance regarding rules that govern the nomination of members of the board of directors, of its supporting committees and statutory executive Board;
- evaluate, prior to board of directors' analysis, the CEO's proposal regarding the statutory executive board's composition, as well as its possible alternate; and
- analyze, prior to board of directors' analysis, market references regarding the parameters and criteria presented by the Company's management for administrators' compensation and to submit a proposal for board of directors' approval; and
- contribute with the board of directors in the annual performance assessment of the CEO based on the targets defined in its action plan and approved by the board of directors, and to analyze the results of the annual performance assessment held by the CEO of members of the statutory executive board, which results shall be presented to the board of directors.

Under Brazilian Corporate Law, Braskem's shareholders establish the global or the individual 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. Under Braskem's Bylaws, the shareholders establish the global compensation and the board of directors establishes the individual compensation.

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Audit Committee and Audit Committee Additional Requirements

The NYSE corporate governance standards require that a listed company have an audit committee with a written Internal Rules that address certain specified duties and that is composed of at least three independent 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."

The SEC has recognized that, for foreign private issuers, local legislation may delegate some of the functions of the audit committee to other bodies. We established the CCAE upon approval at the board of directors meeting held on November 9, 2021. Our CCAE meets the requirements for the exemption available to foreign private issuers under paragraph (c)(3) of Rule 10A-3 under the Exchange Act. The CCAE is not the equivalent of, or wholly comparable to, a U.S. audit committee. Among other differences, it is not required to meet the standards of "independence" established in Rule 10A-3 and is not fully empowered to act on all the matters that are required by Rule 10A-3 to be within the scope of an audit committee's authority.

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 the Instruction No. 567/2009 of the Brazilian Securities Commission (Comissão de Valores Mobiliários – "CVM"), shareholder pre-approval is required for the adoption and revision of any equity compensation plans. On March 21st, 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 Brazilian Stock Exchange (B3 S.A. - Brasil, Bolsa e Balcão) corporate governance rules for Level 1 companies and must also comply with certain corporate governance standards set forth under Brazilian Corporate 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 Corporate Law that are applicable to Braskem address certain aspects of director qualifications standards and director responsibilities.

Code of Conduct

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:

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(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 Conduct applicable to its directors, officers and employees, which addresses each of the items listed above. Braskem's Code of Conduct is available on our investor relations website at www.braskem.com.br. No waivers of the provisions of the Code of Conduct are permitted, except if the restrictions on outside activities do not apply to Braskem's directors and members of its fiscal council.

The main purpose of Braskem's Code of Conduct is to establish the principles, values and standards that guide the business conduct of Team Members in their internal and external relations. Braskem also has a Code of Conduct for Contractors, which focuses on its relations with suppliers and partners.

ITEM 16H. MINE SAFETY DISCLOSURE

The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and this Item is included in exhibit 99.01.

PART III

ITEM 17. FINANCIAL STATEMENTS

We have responded to Item 18 in lieu of responding to this item.

ITEM 18. FINANCIAL STATEMENTS

Reference is made to Item 19 for a list of all financial statements filed as part of this annual report.

ITEM 19. EXHIBITS

(a) Financial Statements

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Consolidated Statement of Comprehensive Income as of December 31, 2021, 2020 and 2019	F-8
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(b) List of Exhibits

Exhibit NumberExhibit

1.01	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 August 2, 2021).
2.01	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).
2.02	Description of Securities.
3.01	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).
3.02	Second Amendment to the Shareholders' Agreement of BRK Investimentos Petroquímicos S.A. and Braskem S.A., entered into by Novonor S.A. – Em Recuperação Judicial, NSP Investimentos S.A. – Em Recuperação Judicial, and Petróleo Brasileiro S.A. – Petrobras, on December 15, 2021 (English translation) (incorporated by reference to Exhibit 1 to Report on Form 6-K of Braskem S.A. filed on December 16, 2021).
4.03	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).

⁴ Note to draft: Exhibits to be updated.

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4.04	English Summary of Petrochemical Naphtha Purchase and Sale Agreement by and Between Petróleo Brasileiro S.A. – Petrobras and Braskem S.A. dated June 8, 2020 (incorporated by reference to Exhibit 4.04 to Form 20-F of Braskem S.A. filed on May 14, 2021).
4.05	English Summary of Petrochemical Naphtha Purchase and Sale Agreement by and Between Petróleo Brasileiro S.A. – Petrobras and Braskem S.A. dated June 8, 2020 (incorporated by reference to Exhibit 4.05 to Form 20-F of Braskem S.A. filed on May 14, 2021).
4.06	English Summary of Petrochemical Naphtha Purchase and Sale Agreement by and Between Petróleo Brasileiro S.A. – Petrobras and Braskem S.A. dated June 8, 2020 (incorporated by reference to Exhibit 4.06 to Form 20-F of Braskem S.A. filed on May 14, 2021).
4.07	English Summary of Petrochemical Naphtha Purchase and Sale Agreement by and Between Petróleo Brasileiro S.A. – Petrobras and Braskem S.A. dated December 22, 2020 (incorporated by reference to Exhibit 4.07 to Form 20-F of Braskem S.A. filed on May 14, 2021).
4.08	English Summary of Ethane, Propane and Hydrogen Purchase and Sale Agreement by and Between Petróleo Brasileiro S.A. – Petrobras and Braskem S.A. dated December 22, 2020 (incorporated by reference to Exhibit 4.08 to Form 20-F of Braskem S.A. filed on May 14, 2021).
8.01	List of subsidiaries (incorporated by reference to note 2.3 to our audited consolidated financial statements included elsewhere in this annual report).
11.01	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 April 20, 2021).
12.01	Certification of Principal Executive Officer dated April 27, 2022 pursuant to Exchange Act Rules 13a-15(e) and 15d-15(e).
12.02	Certification of Principal Financial Officer dated April 27, 2022 pursuant to Rules 13a-15(e) and 15d-15(e).
13.01	Certifications of Principal Executive Officer and Principal Financial Officer dated April 27, 2022 pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
99.01	Disclosure of Mine Safety and Health Administration Safety Data.

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: April 27, 2022

BRASKEM S.A.

By: /s/ Roberto Lopes Pontes Simões

Name: Roberto Lopes Pontes Simões

Title: Chief Executive Officer

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Exhibit Number	Exhibit
2.02	Description of Securities.
12.01	Certification of Principal Executive Officer dated April 27, 2022 pursuant to Exchange Act Rules 13a-15(e) and 15d-15(e).
12.02	Certification of Principal Financial Officer dated April 27, 2022 pursuant to Rules 13a-15(e) and 15d-15(e).
13.01	Certifications of Principal Executive Officer and Principal Financial Officer dated April 27, 2022 pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
99.01	Disclosure of Mine Safety and Health Administration Safety Data.

Braskem 



Process 6 A



Braskem S.A.

Consolidated financial statements
at December 31, 2021
and independent registered accounting firm

KPMG Auditores Independentes
Rua Arquiteto Olavo Redig de Campos, 105, 6º andar - Torre A
04711-904 - São Paulo/SP - Brasil
Caixa Postal 79518 - CEP 04707-970 - São Paulo/SP - Brasil
Telefone +55 (11) 3940-1500
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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, 2021, 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 weakness, 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, 2021, 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 statements of financial position of the Company as of December 31, 2021 and 2020, the related consolidated statements of profit and loss, comprehensive income (loss), changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes (collectively, the consolidated financial statements), and our report dated April 27, 2022 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. A material weakness has been identified and included in management's assessment related to ineffective controls over the realization of the hedged items for certain debt at Braskem Idesa, a Mexican subsidiary due to failure over the hedge accounting control execution that was not executed with the proper precision to capture the failure and was not designed to facilitate its understanding and execution, lack of robustness of the supporting documentation of the hedge accounting controls to identify the issue and improper training, of the people involved in operating the control, regarding the understanding of unusual transactions, such as prepayment of the hedge accounting instrument. This material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2021 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 Ltda.

São Paulo, Brazil
April 27, 2022

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, 2021 and 2020, the related consolidated statements of profit or loss, comprehensive income (loss), changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, 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, 2021, 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 April 27, 2022, expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

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 audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was 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 matter 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 matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which they relate.

Evaluation of the provision and disclosures related to geological phenomenon in Alagoas State

As discussed in note 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\$ 7,661,259 thousand as of December 31, 2021. The provision is for the estimated future outflows of resources required to settle 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, relocating and compensating residents and businesses in the region and adopting actions and measures in vacated areas, urban mobility and social compensation.

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 professionals with specialized skills and knowledge.

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, the other costs to relocate and compensate the residents and business owners, and the costs of the social and urban actions.

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

We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's estimation process, including controls related to assumptions used in the estimation process and evaluation of information from external and internal experts, as well as controls over the financial statement disclosures.

We involved 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 cost 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 size and, contracts with third party service providers; 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 other costs to relocate and compensate the residents and business owners impacted by the geological phenomenon.

We assessed the adequacy of the disclosures related to the geological phenomenon in Alagoas State.

KPMG Auditores Independentes Ltda.

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

São Paulo, Brazil
April 27, 2022

Braskem S.A.**Statement of consolidated financial position at December 31**

All amounts in thousands of Reals

Assets	Note	2021	2020
Current assets			
Cash and cash equivalents	5	8,680,686	13,862,852
Financial investments	6	3,492,710	3,627,227
Trade accounts receivable	7	7,153,565	4,731,979
Inventories	8	16,335,101	8,383,650
Taxes recoverable	10	1,428,658	1,192,665
Recoverable income taxes	22.1	1,189,812	1,547,916
Prepaid expenses		435,441	344,867
Derivatives	20.5	33,816	33,769
Other receivables		543,656	465,319
		39,293,445	34,190,244
Non-current assets			
Financial investments	6	16,845	15,564
Trade accounts receivable	7	13,395	23,229
Inventories	8		18,036
Taxes recoverable	10	1,252,058	1,072,737
Recoverable income taxes	22.1	230,069	72,267
Deferred tax assets	22.2	8,257,252	8,529,972
Judicial deposits		194,212	196,911
Derivatives	20.5	51	34,091
Other receivables		365,652	227,480
Investments	11	58,923	43,153
Property, plant and equipment	12	37,225,130	35,929,149
Intangible assets	13	2,877,299	2,828,691
Right of use of assets	14.1	2,780,037	2,902,395
		53,270,923	51,893,675
Total assets		92,564,368	86,083,919

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

Braskem S.A.

Statement of consolidated financial position at December 31

All amounts in thousands of Reals

Liabilities and shareholders' equity	Note	2021	2020
Current liabilities			
Trade payables	15	12,053,266	9,946,315
Borrowings	16	1,343,494	1,318,931
Braskem Idesa borrowings	17	86,765	7,660,128
Debentures	18	59,088	54,436
Derivatives	20.5	256,131	592,251
Payroll and related charges		1,170,346	814,566
Taxes payable	21	1,012,116	952,689
Income taxes payable		1,672,844	284,129
Dividends		10,538	5,456
Advances from customers		204,666	287,449
Leniency agreement	25	353,385	397,036
Sundry provisions	23	465,051	362,407
Other payables		1,452,396	466,341
Provision - geological event in Alagoas	26	4,378,071	4,349,931
Lease	14.2	675,366	895,109
		25,193,523	28,387,174
Non-current liabilities			
Trade payables	15	111,464	7,233
Borrowings	16	33,553,766	40,413,192
Braskem Idesa borrowings	17	12,224,770	4,399,110
Debentures	18	137,830	181,679
Derivatives	20.5	362,915	558,913
Taxes payable	21	260,497	1,370
Loan to non-controlling shareholders of Braskem Idesa	9	3,646,538	3,222,493
Income taxes payable			576,174
Deferred tax liabilities	22.2	1,407,434	1,234,398
Post-employment benefits	27.3(a)	487,697	472,074
Advances from customers		257,858	382,478
Contingencies	24.1	1,153,830	1,151,087
Leniency agreement	25	769,911	1,077,314
Sundry provisions	23	824,212	511,801
Provision - geological event in Alagoas	26	3,283,188	4,825,846
Other payables		204,059	235,324
Lease	14.2	2,481,048	2,312,777
		61,167,017	61,563,263
Shareholders' equity			
Capital	28	8,043,222	8,043,222
Capital reserve		3,473	
Profit reserves		3,483,935	
Additional paid in capital		(488,388)	(488,388)
Long-term incentive plans		31,932	31,609
Other comprehensive income		(3,170,158)	(5,209,498)
Treasury shares		(38,197)	(49,704)
Accumulated losses			(4,529,547)
Total attributable to the Company's shareholders		7,865,819	(2,202,306)
Non-controlling interest in subsidiaries		(1,661,991)	(1,664,212)
		6,203,828	(3,866,518)
Total liabilities and shareholders' equity		92,564,368	86,083,919

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

Braskem S.A.**Statement of consolidated profit or loss****Years ended December 31**

All amounts in thousands of Reais, except earnings (loss) per share

	Note	2021	2020	2019
Net revenue	30	105,625,201	58,543,494	52,323,525
Cost of products sold	34	(73,568,231)	(47,331,414)	(45,879,118)
Gross profit		32,056,970	11,212,080	6,444,407
Income (expenses)				
Selling and distribution	34	(2,055,640)	(1,852,055)	(1,783,455)
Loss for impairment of trade accounts receivable and others from clients	34	(8,914)	(55,252)	(7,069)
General and administrative	34	(2,522,127)	(1,918,747)	(2,224,180)
Research and development	34	(296,583)	(250,648)	(247,730)
Results from equity-accounted investees	11(b)	4,644	(19,398)	10,218
Other income	32	1,534,487	750,749	2,408,434
Other expenses	32	(2,669,290)	(7,938,621)	(4,446,942)
Profit (loss) before net financial expenses and taxes		26,043,547	(71,892)	153,683
Financial results	33			
Financial expenses		(5,907,155)	(4,913,365)	(3,882,785)
Financial income		1,827,438	600,184	850,554
Exchange rate variations, net		(4,002,807)	(5,298,711)	(1,724,520)
		(8,082,524)	(9,611,892)	(4,756,751)
Profit (loss) before income tax		17,961,023	(9,683,784)	(4,603,068)
Income taxes	22.1(c)	(3,999,403)	2,668,478	1,962,670
Net profit (loss) for the year		13,961,620	(7,015,306)	(2,640,398)
Attributable to:				
Company's shareholders		13,984,946	(6,691,720)	(2,540,995)
Non-controlling interest in subsidiaries		(23,326)	(323,586)	(99,403)
Profit (loss) for the year		13,961,620	(7,015,306)	(2,640,398)
Earnings (loss) per share - R\$	29			
Basic				
Common		17.5747	(8.4068)	(3.1922)
Preferred shares class "A"		17.5749	(8.4068)	(3.1922)
Preferred shares class "B"		0.5798	(8.4068)	(3.1922)
Diluted				
Common		17.5747	(8.4068)	(3.1922)
Preferred shares class "A"		17.5242	(8.3769)	(3.1809)
Preferred shares class "B"		0.5798	(8.4068)	(3.1922)

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

Braskem S.A.**Statement of consolidated comprehensive income**

Years ended December 31

All amounts in thousands of Reais

	<u>Note</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>
Net profit (loss) for the year		13,961,620	(7,015,306)	(2,640,398)
Other comprehensive income:				
Items that will be reclassified subsequently to profit or loss				
Fair value of cash flow hedge		470,461	(600,390)	55,274
Deferred income taxes: cash flow hedge		(146,087)	202,832	(19,805)
Fair value of cash flow hedge from jointly-controlled, net of taxes		(968)	1,260	(978)
		<u>323,406</u>	<u>(396,298)</u>	<u>34,491</u>
Exchange variation of foreign sales hedge	20.6(a)	(1,910,274)	(6,881,183)	(856,068)
Sales Hedge - transfer to profit or loss	20.6(a)	1,903,004	2,194,059	1,385,121
Deferred income taxes: exchange variation		2,472	1,593,622	(179,878)
Exchange variation of foreign sales hedge - Braskem Idesa	20.6(b)	(204,604)	(445,427)	464,806
Sales Hedge - transfer to profit or loss - Braskem Idesa	20.6(b)	507,228	471,728	267,146
Deferred income taxes: exchange variation - Braskem Idesa		(90,787)	(7,886)	(219,586)
		<u>207,039</u>	<u>(3,075,087)</u>	<u>861,541</u>
Foreign subsidiaries currency translation adjustment		<u>1,503,148</u>	<u>2,658,042</u>	<u>136,722</u>
Total		<u>2,033,593</u>	<u>(813,343)</u>	<u>1,032,754</u>
Items that will not be reclassified to profit or loss				
Actuarial gain (loss) on defined benefit and health plan, net of taxes		23,014	(647)	(109,628)
Loss on investments				(84)
Total		<u>23,014</u>	<u>(647)</u>	<u>(109,712)</u>
Total comprehensive income for the year		<u>16,018,227</u>	<u>(7,829,296)</u>	<u>(1,717,356)</u>
Attributable to:				
Company's shareholders		16,015,874	(7,108,541)	(1,657,941)
Non-controlling interest in subsidiaries		<u>2,353</u>	<u>(720,755)</u>	<u>(59,415)</u>
Total comprehensive income for the year		<u>16,018,227</u>	<u>(7,829,296)</u>	<u>(1,717,356)</u>

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

Braskem S.A.

Statement of consolidated changes in equity

Years ended December 31

All amounts in thousands of Reais

Note	Attributed to shareholders' interest												Total Braskem shareholders' interest	Non- controlling interest in subsidiaries	Total shareholders' equity
	Profit reserves						Long- term Incentive Plans	Other comprehensive income	Treasury shares	Retained earnings / Accumulated losses	Total				
	Capital reserve	Legal reserve	Tax incentive	Retention of profits	Additional proposed dividends	Additional paid in capital									
As of December 31, 2018	8,043,222	232,430	577,476	153,478	1,940,011	2,002,255	(488,388)	6,407	(5,629,427)	(49,819)	(256,575)	6,531,070	(876,400)	5,654,670	
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	
Actuarial loss with post-employment benefits, net of taxes									(109,492)			(109,492)	(136)	(109,628)	
Loss on interest in subsidiary									(50)			(50)	(34)	(84)	
Foreign currency translation adjustment									220,228			220,228	(83,506)	136,722	
Total Comprehensive income for the period									883,054		(2,540,995)	(1,657,941)	(59,415)	(1,717,356)	
Comprehensive income (loss)	-														
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									(883)		883				
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)	
Long term incentive plan, net of taxes								13,573				13,573	348	13,921	
								13,573	(31,146)		27,600	10,027	348	10,375	
Contributions to shareholders															
Incentive long term plan payments with treasury shares										95		95		95	
Retention of profits - non-approval of additional dividends					2,002,255	(2,002,255)									
Dividends-lapse of statute of limitation											2,005	2,005		2,005	
Additional dividends of subsidiary													(5,125)	(5,125)	
Absorption of losses					(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)	-	-	-	95	2,769,970	2,142	(5,125)	(2,983)	
As of December 31, 2019	8,043,222	232,472	577,476	153,478	1,174,301	-	(488,388)	19,980	(4,777,519)	(49,724)	-	4,885,298	(940,592)	3,944,706	
Comprehensive income for the year	-														
Loss for the year	-										(6,691,720)	(6,691,720)	(323,586)	(7,015,306)	
Exchange variation of foreign sales hedge, net of taxes									(3,079,691)			(3,079,691)	4,604	(3,075,087)	
Fair value of cash flow hedge, net of taxes									(390,608)			(390,608)	(5,690)	(396,298)	
Actuarial loss with post-employment benefits, net of taxes									(648)			(648)	1	(647)	
Foreign subsidiaries currency translation adjustment									3,054,126			3,054,126	(396,084)	2,658,042	
	-								(416,821)		(6,691,720)	(7,108,541)	(720,755)	(7,829,296)	
Comprehensive income (loss)	-														
Realization of additional property, plant and equipment price-level restatement, net of taxes									(26,302)		26,302				
Realization of deemed cost of jointly-controlled investment, net of taxes									(741)		741				
Fair value adjustments of trade accounts receivable, net of taxes									113			113		113	
Exchange variation in hyperinflationary economy, net of taxes									8,077			8,077		8,077	
Long term incentive plan, net of taxes								11,629				11,629	(415)	11,214	
Other									3,695		(3,695)				
	-							11,629	(15,158)		23,348	19,819	(415)	19,404	
Contributions and distributions to shareholders															
Incentive long term plan payments with treasury shares															
Retention of profits - non-approval of additional dividends															
Dividends-lapse of statute of limitation											1,110	1,110		1,110	
Additional dividends of subsidiary													(2,450)	(2,450)	

Absorption of losses	(232,460)	(577,476)	(153,478)	(1,174,301)					2,137,715					
Gain on transfer of shares in custody long term incentive plan	(12)								20		8		8	
	--	(232,472)	(577,476)	(153,478)	(1,174,301)	-	-	-	20	2,138,825	1,118	(2,450)	(1,332)	
As of December 31, 2020	8,043,222	-	-	-	-	-	(488,388)	31,609	(5,209,498)	(49,704)	(4,529,547)	(2,202,306)	(1,664,212)	(3,866,518)

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

Braskem S.A.

Statement of consolidated comprehensive income
Years ended December 31
All amounts in thousands of Reais

	Attributed to shareholders' interest											Total Braskem shareholders' interest	Non- controlling interest in subsidiaries	Total shareholders' equity
	Profit reserves						Long- term Incentive Plans	Other comprehensive income	Treasury shares	Retained earnings / Accumulated losses				
	Capital	Capital reserve	Legal reserve	Tax incentive	Retention of profits	Additional proposed dividends					Additional paid in capital			
Note	Capital	Capital reserve	Legal reserve	Tax incentive	Retention of profits	Additional proposed dividends	Additional paid in capital	Incentive Plans	Other comprehensive income	Treasury shares	Retained earnings / Accumulated losses	shareholders' interest	Non- controlling interest in subsidiaries	Total shareholders' equity
As of December 31, 2020	8,043,222						(488,388)	31,609	(5,209,498)	(49,704)	(4,529,547)	(2,202,306)	(1,664,212)	(3,866,518)
Comprehensive income for the year												-		
Net profit for the year											13,984,946	13,984,946	(23,326)	13,961,620
Exchange variation of foreign sales hedge, net of taxes									154,080			154,080	52,959	207,039
Fair value of cash flow hedge, net of taxes									262,726			262,726	60,680	323,406
Actuarial loss with post-employment benefits, net of taxes									23,028			23,028	(14)	23,014
Foreign currency translation adjustment									1,591,094			1,591,094	(87,946)	1,503,148
									2,030,928		13,984,946	16,015,874	2,353	16,018,227
Comprehensive income (loss)												-		
Realization of additional property, plant and equipment price-level restatement, net of taxes									(26,164)		26,164	-		
Realization of deemed cost of jointly-controlled investment, net of taxes									(719)		719	-		
Long term incentive plan								323				323	(132)	191
Fair value adjustments of trade accounts receivable, net of taxes									(130)			(130)		(130)
Exchange variation in hyperinflationary economy, net of taxes									35,425			35,425		35,425
								323	8,412		26,883	35,618	(132)	35,486
Contributions to shareholders														
Dividends-lapse of statute of limitation											1,653	1,653		1,653
Prepaid dividends approved by the Board	28.5										(6,000,000)	(6,000,000)		(6,000,000)
Gain on transfer of shares in custody long term incentive plan		3,473								11,507		14,980		14,980
Legal reserve	28.6		472,770								(472,770)			
Tax incentive reserve	28.6			1,017,546							(1,017,546)			
Retention of profits	28.6				643,619						(643,619)			
Additional proposed dividends	28.6					1,350,000					(1,350,000)			
		3,473	472,770	1,017,546	643,619	1,350,000				11,507	(9,482,282)	(5,983,367)		(5,983,367)
As of December 31, 2021	8,043,222	3,473	472,770	1,017,546	643,619	1,350,000	(488,388)	31,932	(3,170,158)	(38,197)	-	7,865,819	(1,661,991)	6,203,828

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

Braskem S.A.

Statement of consolidated cash flow

Years ended December 31

All amounts in thousands of Reais

	Note	2021	2020	2019
Profit (loss) before income taxes		17,961,023	(9,683,784)	(4,603,068)
Adjustments for reconciliation of profit				
Depreciation and amortization	34	4,178,433	4,048,081	3,632,265
Results from equity-accounted investees	11(b)	(4,644)	19,398	(10,218)
Net interest, monetary and foreign exchange gain/losses		6,311,431	10,457,272	4,145,110
Provisions (reversal and recovery of credits), net		819,130	336,838	320,439
Provision - geological event in Alagoas	26	1,339,765	6,901,828	3,383,067
PIS and COFINS credits - exclusion of ICMS from the calculation basis	32	(1,031,099)	(310,557)	(1,904,206)
Loss for impairment of trade accounts receivable and others from clients	34	8,914	55,252	7,069
Provision for losses and write-offs of long-lived assets		115,187	8,794	225,204
		29,698,140	11,833,122	5,195,662
Changes in operating assets and liabilities				
Judicial deposits - unfreezing (blocking) Public Civil Action	26.1(i)		3,746,107	(3,680,460)
Financial investments		296,957	(1,860,827)	797,445
Trade accounts receivable		(2,175,285)	(2,187,826)	895,046
Inventories		(7,574,285)	(252,534)	867,817
Taxes recoverable		4,963,587	1,532,554	1,195,427
Prepaid expenses		19,322	293,785	202,732
Other receivables		(217,878)	397,103	(273,665)
Trade payables		1,199,614	(3,001,564)	282,445
Taxes payable		(3,007,488)	449,761	(569,793)
Advances from customers		(233,951)	198,988	197,965
Leniency agreement		(389,087)	(349,842)	(341,605)
Sundry provisions		(314,194)	(145,355)	(215,548)
Geological event in Alagoas	26	(2,928,081)	(1,181,931)	
Other payables		1,039,403	(184,187)	362,203
		20,376,774	9,287,354	4,915,671
Cash generated from operations				
Interest paid		(2,883,433)	(2,736,821)	(2,238,445)
Income taxes paid		(2,706,856)	(257,542)	(411,951)
		14,786,485	6,292,991	2,265,275
Net cash generated (used) from operating activities				
Proceeds from the sale of property, plant and equipment and intangible assets		40,353	33,140	12,590
Dividends received		295	4,822	3,513
Acquisitions to property, plant and equipment and intangible assets		(3,421,324)	(2,759,789)	(2,682,522)
		(3,380,676)	(2,721,827)	(2,666,419)
Net cash used in investing activities				
Short-term and Long-term debt				
Acquired		16,308	13,049,459	20,586,103
Payments		(9,413,909)	(8,734,505)	(17,425,409)
Braskem Idesa borrowings				
Acquired		7,271,658		3,497,622
Payments		(7,995,045)	(905,210)	(4,398,453)
Payment loan to non-controlling shareholders of Braskem Idesa		(9,545)	(37,618)	
Lease payments	14	(841,706)	(662,068)	(454,190)
Dividends paid		(5,993,265)	(2,380)	(668,904)
Other financial liabilities			(534,456)	499,999
		(16,965,504)	2,173,222	1,636,768
Net cash (used) generated in financing activities				
Exchange variation on cash of foreign subsidiaries		377,529	1,314,586	20,619
		(5,182,166)	7,058,972	1,256,243
(Decrease) increase in cash and cash equivalents				

Represented by

Cash and cash equivalents at the beginning of the year	13,862,852	6,803,880	5,547,637
Cash and cash equivalents at the end of the year	<u>8,680,686</u>	<u>13,862,852</u>	<u>6,803,880</u>
(Decrease) increase in cash and cash equivalents	<u>(5,182,166)</u>	<u>7,058,972</u>	<u>1,256,243</u>

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

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Braskem S.A.

Notes to the consolidated financial statements at December 31, 2021

All amounts in thousands of Reals, except as otherwise stated

1 Operations

Braskem S.A. is a public corporation headquartered in Camaçari/Bahia, which, jointly with its subsidiaries (hereinafter “Braskem” or “Company”), is controlled by Novonor S.A. (“Novonor”), which directly and indirectly holds interests of 50.11% and 38.32% in its voting and total capital, respectively. The ultimate parent company of Braskem is Kieppe Patrimonial S.A.

The Braskem’s shares are traded on B3 S.A. Brasil, Bolsa, Balcão (“B3”), under the tickers BRKM3, BRKM5 and BRKM6, and on the New York Stock Exchange (“NYSE”) under the ticker BAK.

Braskem 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 and industrial gases, as well as rendering 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.

The Company has industrial plants in Brazil, the United States, Germany, and Mexico. The units produce thermoplastic resins, such as polyethylene (“PE”), polypropylene (“PP”), polyvinyl chloride (“PVC”) and other basic petrochemicals.

Operations of subsidiary Braskem Idesa

On December 2, 2020, the subsidiary Braskem Idesa (“BI”) was notified by the National Natural Gas Control Center (“Cenagas”), the Mexican government agency responsible for the natural gas pipeline and transportation system in the region, regarding the unilateral suspension of natural gas transportation, an energy input essential to produce polyethylene at the Petrochemical Complex in Mexico. As a result, and respecting the safety protocols, BI immediately suspended its operational activities.

In January 2021, BI partially resumed operations of polyethylene production based on an experimental business model, that follows all safety protocols, in order to attend the demand from Mexico’s plastics industry.

In addition, BI has taken legal measures as established in the Ethane Supply Agreement entered into between BI and PEMEX Transformación Industrial and PEMEX Exploración y Producción (“PEMEX”). Braskem Netherlands B.V., the direct parent company of BI, also has taken legal actions based on the applicable international rules to protect the rights and to ensure the performance of all legal obligations and also seeking to protect its investment in Mexico. Such measures provided for a remediation and negotiation period in which the parties seek a solution.

On February 26, 2021, BI signed the following documents to enable the continuity of its operations:

- (i) Memorandum of understanding with terms and conditions for discussing potential amendments to the ethane supply agreement with PEMEX, as well as for building an ethane import terminal, subject to negotiation and approval of creditors and shareholders of BI, and with rights reserved; and
- (ii) Natural gas transportation service agreement with Cenagas, with term of 15 years, subject to the execution of the documentation mentioned in item (i) above.

On September 27, 2021, BI signed the following documents:

- (i) Amendment to the ethane supply agreement (“Amendment”) with PEMEX; and
- (ii) Agreement with Petróleos Mexicanos, PEMEX Logística and other Mexican government entities, establishing administrative support measures, especially to obtain of licenses, permits and rights of way for the project to build an ethane import terminal with the capacity to meet all of BI's feedstock requirements (“Terminal Agreement”).

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The Amendment changes the minimum contractual volume commitment to 30,000 barrels/day until the limit date of February 2025 (subject to extensions in the event of delay in obtaining the licenses for the terminal's construction). The terminal's startup is expected to the second half of 2024. The terminal project is designed to supplement ethane supply in Mexico by gaining access to new feedstock sources.

The Amendment further establishes first-refusal rights, which consists of a preemptive right for BI in the acquisition of all ethane that PEMEX has available and does not consume in its own production process through 2045, at prices based on international references.

The Amendment and the Terminal Agreement were conditioned upon the applicable corporate approvals, including final approval by the shareholders and creditors of BI ("Conditions Precedent"). The Amendment produced effects retroactive to February 26, 2021, the execution date of the memorandum of understanding. The approvals required for the Amendment and Terminal Agreement to come into force were obtained in October 2021.

2 Basis of preparation of the financial statements

2.1 Basis of accounting

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

2.2 Basis of presentation

The Company's consolidated financial statements ("financial statements") were prepared under the historical cost convention, unless stated otherwise in the accounting policies. These financial statements were prepared considering the continuity of its operating activities.

The significant accounting policies applied in the preparation of these financial statements were included in the respective notes. The Company has consistently applied the accounting policies to all periods presented in these financial statements, except for the disclosures included in the note 2.5(a) New standards and pronouncements adopted in the current fiscal year.

The issue of these financial statements was authorized by the Executive Board on April 27, 2022.

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2.3 Basis of consolidation

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

	Headquarters	Total and voting interest (%)		
		2021	2020	2019
BM Insurance Company Limited ("BM Insurance")	Bermuda	100.00	100.00	100.00
Braskem America Finance Company ("Braskem America Finance")	USA	100.00	100.00	100.00
Braskem America, Inc. ("Braskem America")	USA	100.00	100.00	100.00
Braskem Argentina S.A. ("Braskem Argentina")	Argentina	100.00	100.00	100.00
Braskem Energy Ltda ("Braskem Energy")	(i) Brazil	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 Green S.A. ("Braskem Brasil Green")	(ii) Brazil	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 India Private Limited ("Braskem India")	Índia	100.00	100.00	
Braskem Mexico Proyectos S.A. de C.V. SOFOM ("Braskem México Sofom")	Mexico	100.00	100.00	100.00
Braskem Mexico Servicios S. RL de CV ("Braskem México Serviços")	Mexico	100.00	100.00	100.00
Braskem Mexico, S. de RL de CV ("Braskem México")	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 Green B.V. ("Braskem Holanda Green")	(iii) Netherlands	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	63.70	63.70
Distribuidora de Água Camaçari S.A. ("DAC")	Brazil	63.70	63.70	63.70
Lantana Trading Co. Inc. ("Lantana")	Bahamas	100.00	100.00	100.00
Terminal Química Puerto México ("Terminal Química")	(iv) Mexico	75.00		
<i>Special Purpose Entities ("SPE")</i>				
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")	Brazil	100.00	100.00	100.00

(i) Subsidiary incorporated in April 2021 is currently in the preoperational phase. The main activities will include power trading and rendering management and representation services in the Free Energy Contracting Environment.

(ii) Subsidiary incorporated in November 2021 is currently in the preoperational phase. The main activities will encompass the manufacture, trade, distribution, import and export of renewable products, development of technologies related to this purpose and holding interests in other companies.

(iii) Subsidiary incorporated in September 2021 is currently in the preoperational phase. The main activities will encompass the trade, distribution, import and export of renewable products, development of technologies related to this purpose and holding interests in other companies.

(iv) Subsidiary incorporated in December 2021 is currently in the preoperational phase. The main activities will encompass storing ethane, pumping feedstock to the complex and maintaining materials and its assets.

(a) 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 these financial statements as from the date the Company obtains control until the date of the loss of control.

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(b) Equity method investees

The Company's investments in entities with accounting treatment using the equity method consist of their interests in associates and joint ventures.

Associates are those in which over which the Company, directly or indirectly, holds has significant influence, but not control or shared control, over the financial and operational operating policies. To be classified as a joint venture, a contractual agreement must exist that gives the Company shared control of the entity and granting to the Company the right to the net assets of the joint venture, and not the right to its specific assets and liabilities.

Such investments are initially recognized at cost, which includes the expenses with the transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Company's interest in the net profit or loss for the fiscal year profit or loss and other comprehensive income of equity-accounted investees, in the investee until the date on which the significant influence or joint control ceases to exist.

(c) Conversion of functional currency to presentation currency

The assets and liabilities of foreign operations are translated into Reais at the exchange rates at the reporting date. The income and expenses of foreign operations are translated into Reais at the exchange rates at the dates of the transactions. Foreign currency differences are recognized in other comprehensive income.

Since Argentina's economy is considered hyperinflationary, to translate the financial statements of the subsidiary Braskem Argentina, the assets, liabilities, equity, income and expenses are translated into Reais at the exchange rate at the reporting date.

(d) 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 Functional and foreign currency

These financial statements are presented in Real, which is the functional currency of the Company. All amounts have been rounded to the nearest thousand, unless otherwise indicate.

The subsidiaries with a functional currency different from Real ("R\$") are listed below:

	<u>Functional currency</u>
Subsidiaries	
Braskem Alemanha	Euro
BM Insurance, Braskem America, Braskem America Finance, Braskem Holanda, Braskem Holanda Finance, Braskem Holanda Inc., Braskem México Sofom e Braskem Holanda Green	U.S.dollar ("US\$")
Braskem Idesa, Braskem Idesa Serviços, Braskem México, Braskem México Serviços e Terminal Química	Mexican peso
Braskem Argentina	Argentinean peso
Braskem Chile	Chilenean peso
Braskem India	Rupee

2.5 New standards and interpretations

(a) New standards and pronouncements adopted in the current fiscal year

- Interest Rate Benchmark Reform: Phase 2 (amendments to IFRS9, IAS39, IFRS7, IFRS4 and IFRS16).

The amendments to Pronouncements IAS39 and IFRS9 provide temporary exceptions that address the effects of financial statements when an interbank certificate of deposit rate is replaced by an alternative with a nearly risk-free rate. The amendments include the following practical expedients:

- A practical expedient requiring contractual changes or changes in the cash flows directly required by the reform, to be treated as changes in the floating interest rate equivalent to the change in a market rate.
- When a hedged item in a cash flow hedge is amended to reflect the changes that are required by the reform, the amount accumulated in the other comprehensive income will be deemed to be based on the alternative benchmark rate on which the hedged future cash flows are determined.
- When a group of items is designated as a hedged item and an item in the group is amended to reflect the changes that are required by the reform, the hedged items are allocated to subgroups based on the benchmark rates being hedged.
- If an entity reasonably expects that an alternative benchmark rate will be separately identifiable within a period of 24 months, it is not prohibited from designating the rate as a non-contractually specified risk component if it is not separately identifiable at the designation date.

These amendments to standards do not impact these financial statements. The Company is monitoring the subject and the impacts are being measured (see Note 4.1). The Company intends to use the practical expedients in future periods if they become applicable.

(b) New standards and interpretations not yet in force

The standards issued by the IASB that have not yet come into force and have not been adopted by the Company are listed below. These new or amended standards are not expected to have a significant impact on Company's financial statements:

- Onerous Contracts: costs of fulfilling a contract (amendments to IAS37).
- Annual improvements of IFRS Standards 2018-2020.
- Property, Plant and Equipment: proceeds before intended use (amendments to IAS16).
- Reference to Conceptual Framework (amendments to IFRS3).
- Classification of Liabilities as Current or Non-Current (amendments to IAS1).
- Definition of accounting estimates (amendment to IAS8).
- Definition of materiality for disclosure of accounting policies (amendments to IAS1 and IFRS Practice Statement 2).
- Deferred taxes related to assets and liabilities arising from a single transaction (amendments to IAS12).

2.6 Main measures and impacts due to COVID-19

Braskem has been monitoring the impacts from the COVID-19 pandemic on its business and surrounding communities. In 2020, Braskem formed a crisis committee to establish global procedures focusing mainly on the health and safety of people and the continuity of its operations. The main measures taken by the Company are:

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- (i) Determining that all team members and contractors from the group vulnerable to COVID-19 work remotely;
- (ii) Determining that all team members and contractors not directly related to the safe continuity of operations work remotely until the criteria for the start of flexible measures for a safe return are met;
- (iii) Reducing 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;
- (iv) Restricting visits by non-routine third parties and suppliers to Braskem's facilities;
- (v) Creating agendas jointly with clients and local communities to verify if there are products in its portfolio to help combat the pandemic;
- (vi) Creating, implementing and monitoring the indicators of the Plan for Safe Return to Braskem plants and offices.

During 2020, the Company adopted cash-preservation measures to preserve the financial stability and resilience of its business, which included:

- Drawing down a revolving credit facility in the amount of US\$1 billion (R\$5.2 billion) in April 2020, which comes due in 2023. At the end of July 2020, the Company prepaid the facility in full, in an amount corresponding to R\$5.5 billion;
- Issuing bonds in the international market by the subsidiary Braskem Holanda, in July 2020, in the amount of US\$600 million (R\$3.2 billion);
- Reducing the investments planned for 2020 from US\$721 million (R\$3.9 billion) to US\$555 million (R\$2.8 billion);
- Postponing the payment of social contribution charges in Brazil; and
- Optimizing working capital.

In 2021, the capacity utilization rates of the petrochemical complexes in Brazil remained in line with the past two years. In the United States, capacity utilization declined in relation to 2020, due to impacts from Winter Storm Uri on the U.S. Gulf Coast in early 2021 and operational faults at one of the PP plants in the last quarter of 2021. In Europe, the capacity utilization rates of the PP plants improved, supported by stronger demand in the region, which was affected by Covid-19 in 2020. The capacity utilization rate of the petrochemical complex in Mexico declined in relation to 2020, explained by the experimental production model implemented in the first quarter of 2021, following the unilateral interruption of natural gas transport service by Cenagas in early December 2020.

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 (cooking gas) 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.

Due to the uncertainties arising from the COVID-19 pandemic with regard to the global economy, it is impossible to accurately predict the adverse impacts on the equity and financial position of the Company and its subsidiaries after the reporting date. The Company did not suffer significant impacts on the supply chain due to logistical disruption. However, we will continue to monitor the short-term and long-term impacts of factors that may affect the cost availability of raw materials and inputs. With the recovery in demand for resins, the Company has no expectations of additional provisions for impairment of its assets arising from a scenario of demand constraints.

3 Application of estimates and judgments

In preparing these financial statements, Management has made judgments and estimates that affect the application of the Company's accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates due to differences in the variables, assumptions or conditions used in making estimates.

Judgments and estimates are reviewed on an ongoing basis and are based on historical experience and other factors, including expectations of future events that are deemed reasonable under the circumstances. Revision to estimates is recognized prospectively.

Critical judgments and estimates applied by the Company in the preparation of these financial statements are presented in the following notes:

3.1 Assumptions and estimation uncertainties

- **Note 12(c)**: Impairment test of property, plant and equipment: key assumptions underlying recoverable amounts.
- **Note 13.1**: Impairment test of goodwill: key assumptions underlying recoverable amounts.
- **Note 20.2**: Application of hedge accounting: key assumptions underlying a highly probable forecast transaction.
- **Note 22.2(c)**: Recognition of deferred tax assets: availability of future taxable income against which deductible temporary differences and tax losses carryforward can be utilized.
- **Note 23(a)**: Recognition and measurement of provisions for recovery of environmental damages: main assumptions regarding the probability and magnitude of the outflow of resources.
- **Note 24**: Recognition and measurement of provisions for lawsuits: main assumptions regarding the probability and magnitude of the outflow of resources.
- **Note 26**: Recognition and measurement of provision for costs arising from the geological event in Alagoas: main assumptions regarding the probability and magnitude of the outflow of resources.

4 Risk management

The Company 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.

The Company adopts procedures for managing market and credit risks that are in conformity with its Financial Policy, which is reviewed by the Board of Directors regularly. 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

The Company prepares a sensitivity analysis for foreign exchange rate and interest rate risks to which it is exposed, presented in Note 20.8.

Management of the interest rate benchmark reform and associated risks

Overview

The planning for an organized replacement of interbank offered rates (“IBORs”) for alternative, nearly risk-free interest rates (RFRs, or “Risk-Free Rates”) is being taken under several market initiatives. However, several details regarding the time and transition methods are still being discussed.

The Company uses IBORs as reference rates on several of its financial instruments, and as part of these market-wide initiatives, RFRs will eventually replace such reference rates. While the transition will force modifications on contracts that use IBORs as reference rates, the Company expects no significant impact on its risk management after its completion. However, the Company will continue to monitor the transition and implement whatever changes or new controls are deemed to be appropriate as potential issues arise.

Derivatives

The derivative instruments traded on over-the-counter market are governed by contracts based on the master agreements of the International Swaps and Derivatives Association (“ISDA”) and entered into with counterparties in the international banking market.

As part of the IBOR Reform, the ISDA published a protocol that changed all master agreements in force to include RFRs as replacement rates (fallback) for use upon discontinuation of the various IBORs. The protocol came into force on January 25, 2021; Braskem and its subsidiaries Braskem America, Braskem Idesa and Braskem Holanda Finance have already completed their adoption.

Liabilities

As of December 31, 2021, the Company has bank loans with interest rates linked to LIBOR in US\$ (see notes 16 and 17), which consequently will be subject to IBOR reform. The Company expects the benchmark interest rate of these loans to be changed to the SOFR by 2023.

(a) Exposure to commodity risks

Most of Company’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, nevertheless our sales prices are also impacted in a similar proportion when compared with our feedstock supply chain.

(b) Exposure to foreign exchange risk

Considering the dynamics of the international petrochemical market, where prices are mostly pegged to international dollar-denominated references, the Company’s sales in Brazil are strongly correlated to the US\$.

To mitigate the long-term exchange risk, since September 2016, the Company started to contract financial derivatives to compose a Long-Term Foreign Exchange Hedge Program. This Program mainly aims to mitigate dollar call and put option contracts, hedging expected flows over a 24-month horizon, as detailed in Note 20.5.

In addition to this program, to balance the composition between dollar-denominated assets and liabilities, as established in its Financial Policy, the Company will 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.

As of December 31, 2021, the Company prepared a sensitivity analysis for its exposure to the fluctuation in US\$, as disclosed in Note 20.8.

(c) Exposure to interest rate risk

The Company 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 R\$ is mainly subject to the variation in the Interbank Certificate of Deposit (“CDI”) rate. In 2021, the Company held swap contracts (Note 20.5) in which it receives LIBOR and pays a fixed rate.

As of December 31, 2021, the Company prepared a sensitivity analysis for the exposure to the floating interest rates LIBOR, CDI and Extended National Consumer Price Index (“IPCA”), as disclosed in Note 20.8.

4.2 Exposure to credit risk

The transactions that subject the Company to the concentration of credit risks are mainly in bank checking accounts, financial investments, and trade accounts receivable in which the Company is exposed to the risk of the financial institution or customer involved. In order to manage this risk, the Company 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.

As of December 31, 2021, 30.5% of the amounts recorded as “Cash and cash equivalents” (Note 5) and “Financial Investments” (Note 6) were allocated to financial institutions that had offset agreements with the Company. The obligations under these agreements are accounted for under “Borrowings” (Note 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, the Company 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 impairment losses.

4.3 Liquidity risk

The Company 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. According to its Financial Policy, the Company uses as minimum cash the greater of these two references.

In December 2021, the Company, in keeping with its commitment to maintain its financial liquidity, renewed an international revolving credit facility in the amount of US\$1 billion (R\$5.6 billion), which expires in 2026. This credit 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, 2021, this new credit line had not been used.

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The Company's financial liabilities, including the amounts due under the Leniency Agreement (Note 25), are shown in the table below by maturity. These amounts are calculated based on cash flows not discounted and may not be reconciled with the amounts disclosed in the statement of financial position.

	Carrying amount	Non-Discounted Cash Flows				Total
		Until one year	Between one and two years	Between two and five years	More than five years	
Trade payables	12,164,730	12,094,454	111,464	-	-	12,205,918
Borrowings	34,897,260	1,455,227	5,872,409	1,519,649	62,653,643	71,500,929
Debentures	196,918	63,883	150,265	34,776	-	248,925
Braskem Idesa borrowings	12,311,535	147,961	275,968	697,761	19,658,847	20,780,537
Derivatives	585,179	260,277	232,748	202,056	-	695,081
Loan to non-controlling shareholder of Braskem Idesa	3,646,538	-	-	-	4,894,826	4,894,826
Leniency agreement	1,123,296	385,073	886,818	218,723	-	1,490,614
Lease	3,156,414	777,410	633,141	1,220,548	746,143	3,377,242
At December 31, 2021	68,081,870	15,184,286	8,162,814	3,893,514	87,953,458	115,194,073

4.4 Capital management

The Company's policy is to maintain capital management to ensure the continuity and development of its business and to maintain the trust of investors, creditors and the general market. The capital structure, according to the Management, considers the balance between own capital and net debt. This composition meets the Company's policy providing a consistent return to shareholders and other stakeholders. This structure also allows borrowing costs to maximize shareholder remuneration.

Due to the impact of US\$ on the Company's operations, the Management 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 another capital structure, 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 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 managed at the consolidated level, except for the liquidity and capital of the subsidiary Braskem Idesa, whose specific management is concentrated at the subsidiary level.

5 Cash and cash equivalents

	2021	2020
Cash		
Domestic market	676,083	111,278
Foreign market	(i) 4,374,739	1,835,685
Cash equivalents:		
Domestic market	1,141,221	8,271,312
Foreign market	(i) 2,488,643	3,644,577
Total	8,680,686	13,862,852

(i) As of December 31, 2021, it includes cash of R\$1,267,582 of cash and R\$505,749 of cash equivalents (2020: R\$284,856 of cash and R\$619,577 of cash equivalents) of the subsidiary Braskem Idesa, which cannot be used by the other subsidiaries of the Company.

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Include cash, bank deposits and highly liquid fixed income investments with redemption capacity in less than three months from the contracting date.

Cash equivalents in Brazil are represented mainly by fixed-income instruments and time deposits held by the FIM Júpiter and FIM Netuno funds, such as government bonds issued by the National Treasury, bank deposit certificates ("CDBs"), financial bills, repurchase of debentures, and shares of fixed income investment funds. In 2021, the Company's average cash return was 102.5% of the CDI (2020: 98.59%).

The cash equivalents abroad consist of fixed income instruments (Time Deposit). In 2021, the Company's average cash return in US\$ was 0.45% p.a. (2020: 0.83% p.a.).

6 Financial investments

	<u>2021</u>	<u>2020</u>
Amortized cost		
Time deposit investments	106,271	53,941
Fair value through profit or loss		
<i>LFT's and LF's</i>	(i) 2,337,171	2,163,042
Restricted funds investments	(ii) 852,362	1,338,289
Other	213,751	87,519
Total	<u>3,509,555</u>	<u>3,642,791</u>
Current assets	3,492,710	3,627,227
Non-current assets	16,845	15,564
Total	<u>3,509,555</u>	<u>3,642,791</u>

(i) These financial instruments 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.

(ii) Include the following amounts: R\$835,517 in restricted funds used in the program for relocation of residents in Alagoas (Note 26.1(i)); and R\$16,845 of bank deposits with yields of approximately 100% of the CDI, and their use is related to the fulfillment of the contractual obligations of the debentures (Note 18).

In 2021, the average yield on time deposit investments was 0.52% p.a. (2020: 0.76% p.a.).

7 Trade accounts receivable

The Company's average receivables term is generally 30 days; therefore, the amount of the trade accounts receivable approximates 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.

As of December 31, 2021, the total amount of the trade accounts receivables sold to third parties was R\$3.5 billion (2020: R\$1.8 billion), with interest expenses of R\$39 million (2020: R\$12 million), recorded under Financial Expenses.

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	Note	2021	2020
Customers			
Domestic market			
Third parties		2,851,701	2,304,212
Related parties	9	12,240	20,863
		<u>2,863,941</u>	<u>2,325,075</u>
Foreign market			
Third parties		4,434,653	2,603,140
		<u>4,434,653</u>	<u>2,603,140</u>
Expected credit losses	(i)	(131,634)	(173,007)
Total		<u>7,166,960</u>	<u>4,755,208</u>
Current assets		7,153,565	4,731,979
Non-current assets		13,395	23,229
Total		<u>7,166,960</u>	<u>4,755,208</u>

(i) According to the Management, the Company's Expected Credit Losses ("ECL") are considered sufficient to cover any losses of receivables. Expected credit losses are determined based on the following stages:

Stage 1: 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. The Company considers receivables as deterioration of credit risk any credits that were renegotiated and that could be collected in court, regardless of their maturity.

Stage 3: includes notes with objective evidence of impairment. The trigger for evidence of impairment is an unprecedented delay of more than 180 days.

The following table shows the expected credit loss for each stage:

		Estimated loss percentage	Trade accounts receivable	Expected Credit Losses
Stage 1 (Performing)	Operation risk 1	Minimum risk	4,167,950	
	Operation risk 2	Minimum risk	2,395,347	
	Operation risk 3	0.83%	515,136	4,276
	Operation risk 4	1.53%	92,522	1,416
			<u>7,170,955</u>	<u>5,692</u>
Stage 2 (Significant Increase in Loss Risk)	1st Renegotiation lower than or equal to 24 months	25%	234	58
	Between 90 and 180 days	30%	2,172	651
			<u>2,406</u>	<u>709</u>
Stage 3 (No payment performance - Indicative of impairment)	Operation risk 5	100%	18,738	18,738
	Above 180 days	100%	8,774	8,774
	Legal	100%	97,721	97,721
			<u>125,233</u>	<u>125,233</u>
Total			<u>7,298,594</u>	<u>131,634</u>

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The changes in the expected credit loss are presented below:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Balance of provision at the beginning of the year	(173,007)	(229,323)	(233,625)
Provision in the year	(144,888)	(65,571)	(59,885)
Reversal in the year	149,681	28,563	45,501
Write-offs	36,580	93,324	18,686
Balance of provision at the end of the year	<u>(131,634)</u>	<u>(173,007)</u>	<u>(229,323)</u>

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

	<u>2021</u>	<u>2020</u>
Accounts receivables not past due	6,705,123	4,368,714
Past due securities:		
Up to 90 days	431,899	396,953
Between 91 to 180 days	45,134	6,272
Above 180 days	<u>116,438</u>	<u>156,276</u>
	7,298,594	4,928,215
Expected Credit Losses	<u>(131,634)</u>	<u>(173,007)</u>
Total	<u>7,166,960</u>	<u>4,755,208</u>

Write-off

The gross carrying amount of a financial asset is written-off when the Company has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof.

8 Inventories

	<u>2021</u>	<u>2020</u>
Finished goods	9,271,708	3,693,870
Semi-finished goods	568,914	409,674
Raw materials, production inputs and packaging	3,356,660	2,163,527
Maintenance materials	766,994	766,316
Advances to suppliers	62,573	69,965
Imports in transit	<u>2,308,252</u>	<u>1,298,334</u>
Total	<u>16,335,101</u>	<u>8,401,686</u>
Current assets	16,335,101	8,383,650
Non-current assets		18,036
Total	<u>16,335,101</u>	<u>8,401,686</u>

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is assigned by using the weighted average cost formula. In the case of manufactured inventories, besides raw materials and other consumables, cost includes an appropriate share of production overheads based on normal operating capacity.

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The effect of the provision for inventories at the year is shown below:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Balance at the beginning of the year	122,572	82,195	20,159
Additions	97,911	120,483	72,672
Utilization/reversals	(138,265)	(80,106)	(10,636)
Balance at the end of the year	<u>82,218</u>	<u>122,572</u>	<u>82,195</u>

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9 Related parties

	Balances at December 31, 2021				Balances at December 31, 2020				Year ended December 31, 2021				Year ended December 31, 2020				Year ended December 31, 2019				
	Novonor and subsidiaries and associates	Petrobras and subsidiaries	Other	Total	Novonor and subsidiaries and associates	Petrobras and subsidiaries	Other	Total	Novonor and subsidiaries and associates	Petrobras and subsidiaries	Other	Total	Novonor and subsidiaries and associates	Petrobras and subsidiaries	Other	Total	Novonor and subsidiaries and associates	Petrobras and subsidiaries	Other	Total	
Balance sheet																					
Assets																					
Current																					
Trade accounts receivable		4,894	7,346	12,240		6,354	14,509	20,863													
Inventories		9,927		9,927		35,998		35,998													
Dividends and interest on capital							165	165													
Other																					
Other receivables		287		287																	
Non-current																					
Related parties																					
Other receivables		38,987		38,987																	
Total assets		54,095	7,346	61,441		42,352	14,674	57,026													
Liabilities																					
Current																					
Trade payables	103,259	134,063	11,113	248,435	33,100	601,203	9,641	643,944													
Other payables		296,984	345	297,329		478	119	597													
Non-current																					
Loan to non-controlling shareholders of Braskem Idesa			3,646,538	3,646,538			3,222,493	3,222,493													
Total liabilities	103,259	431,047	3,657,996	4,192,302	33,100	601,681	3,232,253	3,867,034													
Transactions																					
Sales of products		171,665	540,855	712,520		182,521	326,825	509,346									665,417	588,785		1,254,202	
Purchases of raw materials, finished goods services and utilities	(306,426)	(19,833,063)	(6,953)	(20,146,442)	(133,127)	(14,566,840)	(20,350)	(14,720,317)	(293,501)	(12,584,453)	(10,738)	(12,888,692)									
Financial income (expenses), net	(141)	(11,758)	(245,819)	(257,718)	(452)	(3,810)	(818)	(5,080)	(96)	(5)	(10,967)	(11,068)									
General and administrative expenses																					
Post-employment benefits plan ("EPE")																					
Private pension ("Vexty")			(67,273)	(67,273)			(46,738)	(46,738)			(50,889)	(50,889)									
Other expenses		(217,497)		(217,497)					(34,873)			(34,873)									

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(a) New and/or renewed agreements with related parties

The related-party transactions policy establishes that all transactions carried out between the Company and related parties must be negotiated independently and transparently, observing commutative conditions with those practiced by the market.

As provided for in Braskem'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 Management 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.

As part of its control to identify related parties, Key Management Personnel annually inform whether they, or their close relatives, hold full or shared control of any company.

The related parties that have significant relationship with the Company are as follows:

Novonor and its direct and indirect subsidiaries:

- Tenenge Montagem e Manutenção Ltda. ("Tenenge")

Petrobras and its indirect joint ventures:

- Almirante Dutra Terminal ("TEDUT")
- Companhia de Gás da Bahia ("BahiaGás")
- Companhia de Gás do Estado do Rio Grande do Sul ("Sulgás")
- Gás de Alagoas S.A. ("Algás")
- Petrobras Transporte S.A. ("Transpetro")
- Petrocoque S.A. Indústria e Comércio ("Petrocoque")
- Petróleo Brasileiro S.A. ("Petrobras")
- Refinaria Alberto Pasqualini ("REFAP")
- Refinaria Capuava ("RECAP")
- Refinaria de Mataripe S.A. ("REFMAT") (*)
- Refinaria Duque de Caxias ("REDUC")
- Refinaria Henrique Lage ("REVAP")
- Refinaria Landulpho Alves ("RLAM") (*)
- Refinaria Planalto de Paulínia ("REPLAN")
- Refinaria Presidente Getúlio Vargas ("REPAR")

(*) In 2021, Petrobras sold 100% of its shareholding in RFMAT, the entity that owns RLAM.

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 C.V.

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- Grupo Idesa, S.A. de C.V.

The main transactions with related parties are as follows:

- (i) Sales of gasoline to RPR are negotiated monthly. In 2021, sales amounted to R\$100,539 (2020: R\$93,632 and 2019: R\$257,295).
- (ii) In January 2021, the Company entered into an agreement with Transpetro involving the provision of services to Braskem, namely tanker vessel unloading in the Madre de Deus Waterway Terminal ("TEMADRE"), tank storage, product transportation via the pipeline "ORMADRE" that connects TEMADRE to the RLAM, and the transportation of naphtha via pipeline from TEMADRE to the facilities of the carrier located in Camaçari/BA. The duration of the agreement is from February 1, 2021 to December 31, 2025, and the total estimated amount of the agreement is R\$203,314. In 2021, the transactions amounted to R\$37,194.
- (iii) In March 2021, the Company executed an amendment to extend the agreement with Petrocoque, for purchase of steam to be used as energy by Polyethylene plants. This amendment, summed to total amount of the original agreement, executed in September 2009, amounts to R\$325.6 million and is valid until March 2024. In 2021, these acquisitions totaled R\$16,541 (2020: R\$34,141).
- (iv) In March 2021, the Company executed an agreement with Sulgás to acquire 200,000 m³/day of natural gas, via local gas distribution pipeline. In December 2021 the parties signed an amendment to the agreement to extend its terms from January 01, 2022 to March 31, 2022. In the fiscal year, the transactions amounted to R\$125,163.
- (v) In October 2021, the Company entered into a purchase agreement with Petrobras for 108 kton/year of polymer-grade propylene from the REFAP, with delivery to Braskem's polypropylene industrial units, PP1 and PP2, in Triunfo/RS. This agreement is in force from November 1, 2021 to October 31, 2022. The maximum amount of the agreement is estimated at R\$630 million. In 2021, the transactions amounted to R\$117 million.
- (vi) In December 2021, the Company entered into a purchase agreement with Petrobras for 100 kton/year of polymer-grade propylene from the REDUC, with delivery to Braskem's PP5 industrial unit ("PP5") in Rio de Janeiro, and for 8,760 tons per year of waste streams from PP5 to REDUC. The agreement is in force from January 1, 2022 to May 17, 2026. The maximum amount of the agreement is estimated at R\$2.4 billion with the purchase of propylene and R\$190 million with the sale of waste.
- (vii) In December 2021, the Company entered into a purchase agreement with Petrobras for 140 kton/year of polymer-grade propylene from the RECAP, with delivery to Braskem's PP4 industrial unit ("PP4") in Mauá/SP, and for 1,400 tons per year of waste from PP4 to RECAP. The agreement is in force from January 1, 2022 to May 17, 2026. The maximum amount of the agreement is estimated at R\$3.3 billion for the purchase of propylene and R\$62 million for the sale of waste.
- (viii) In December 2021, the Company entered into a purchase agreement with Petrobras for 220 kton/year of polymer-grade propylene from the REPLAN, with delivery to Braskem's PP3 industrial unit ("PP3") in Paulínia/SP, and for 17,520 tons per year of waste streams from PP3 to REPLAN. The agreement is in force from January 1, 2022 to May 3, 2028. The maximum amount of the agreement is estimated at R\$8.1 billion for the purchase of propylene and R\$384 million for the sale of waste.
- (ix) In December 2021, the Company entered into a purchase agreement with Petrobras for 120 kton/year and 40 kton per year of polymer-grade propylene from the REVAP, with delivery to Braskem's PP3 and PP4 industrial units, respectively. This agreement is in force from January 1, 2022 to May 3, 2028 for the first 120 kton/year and from May 4, 2028 to June 30, 2029 for the remaining 40 kton/year. The maximum amount of the agreement is estimated at R\$4.7 billion.

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(x) In December 2021, the Company entered into a purchase agreement with Petrobras for 150 kton/year of polymer-grade propylene from the REPAR, with delivery to Braskem's PP3 and PP4 industrial units. This agreement is in force from January 1, 2022 to December 6, 2029. The maximum amount of the agreement is estimated at R\$6.8 billion.

(xi) In December 2021, the Company entered into the third amendment to the agreement governing the supply of natural gas by Algás to Braskem, via local gas pipeline, in force to March 2022. In 2021, the transactions amounted to R\$311,434 (2020: R\$183,476 and 2019: R\$236,913).

(xii) In December 2021, the Company entered into an amendment to the agreement governing the supply of natural gas by Bahiagás to Braskem, via local gas pipeline, effective until December 2022. In 2021, the transactions amounted to R\$759,710 (2020: R\$592,013 and 2019: R\$901,574).

(xiii) In January 2020, Braskem entered into an agreement with Tenenge to provide industrial maintenance services for shutdowns of large-scale equipment and occasional services on other types of equipment. This agreement has an estimated maximum value of R\$669,000 and a term of seven years. In 2021, the procurement of services rendered amounted to R\$221,461 (2020: R\$45,408).

(xiv) In February 2020, the Company signed the 5th amendment to the polypropylene and polyethylene thermoplastic resins sales agreement with Borealis. The agreement has an estimated maximum amount of R\$1,260,000 and is valid through December 17, 2025. In 2021, transactions amounted to R\$436,090 (2020: R\$213,830) as presented in the other sales of products.

(xv) In June 2020, the Company entered into a purchase option agreement for up to 2,850 kton/year of petrochemical naphtha to Petrobras. The agreement is in force from January 1, 2021 to December 31, 2025. The maximum estimated amount is R\$30 billion. In 2021, transactions amounted to R\$1,770,231.

(xvi) In June 2020, the Company entered into two contract amendments with Transpetro for vessel loading and unloading services, product storage and leasing of the OSCAN16 pipeline and tanks located at the TEDUT, that are in force from November 1, 2021 to June 30, 2024. The maximum estimated amounts of the agreements are R\$620,500 and R\$107,361, respectively. In 2021, transactions amounted to R\$104,819 (2020: R\$53,688 and 2019: R\$79,123).

(xvii) In June 2020, the Company entered into two naphtha supply agreements with Petrobras from 200 to 450 kton/y, respectively, from the RLAM, with delivery to our industrial unit in Bahia, and from the REFAP, to our unit in Rio Grande do Sul. The agreements are in force from December 23, 2020 to December 31, 2025. In 2021, the transactions amounted to R\$947,330 for RLAM/REFMAT and R\$2,408,198 for REFAP.

(xviii) In June 2020, the Company entered to a contractual amendment with Petrobras for the transfer of 80,000 m³ of space for storing products owned by Braskem in tanks at the REFAP, that are in force from November 1, 2020 to December 31, 2025. The maximum estimated amount is R\$240,000. In the fiscal year, transactions amounted to R\$33,182 (2020: R\$31,730 and 2019: R\$24,981).

(xix) In December 2020, the Company entered into an agreement with Petrobras to purchase ethane and propane to produce up to 580,000 tons of ethylene equivalent and sell up to 58.4 million Nm³ of hydrogen. This agreement is effective from January 1, 2021 to December 31, 2025. The estimated amount of the agreement is R\$9.2 billion. In 2021, transactions amounted to R\$1,981,786.

(xx) In December 2020, the Company entered into a purchase agreement with Petrobras for up to 2 million tons of petrochemical naphtha per year, for us in Braskem's industrial unit in São Paulo. This agreement is effective from December 23, 2020 to December 31, 2025. The estimated amount is R\$25 billion. In 2021, the transactions amounted to R\$5,074,529.

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(xxi) Loan payable to the non-controlling shareholders of Braskem Idesa, with maturity in December 2029 and interest of 7% p.a. These funds were used by Braskem Idesa to finance its construction project.

(b) Key management personnel compensation

The expenses related to the remuneration of key management personnel, including the Board of Directors, the Chief Executive Officer, and vice-presidents, recorded in the profit or loss for the year, are shown as follows:

Statement of profit or loss transactions	2021	2020	2019
Remuneration			
Short-term benefits	119,734	74,943	70,366
Post-employment benefit	2,121	961	1,104
Long term incentive plan	14,394	7,456	14,724
Total	136,249	83,360	86,194

Compensation of the Company's key management personnel includes salaries, short and long-term incentives, non-cash benefits and contributions to a post-employment defined benefit plan (see Note 27).

10 Taxes recoverable

	2021	2020
Parent Company and subsidiaries in Brazil		
IPI	521	1,435
Value-added tax on sales and services (ICMS)	(a) 291,424	293,193
ICMS - credits from PP&E	224,308	163,847
Social integration program (PIS) and social contribution on revenue (COFINS)	250,491	199
PIS and COFINS - credits from PP&E	447,476	353,928
REINTEGRA program	21,764	16,799
Federal tax credits	(b) 948,448	1,109,122
Other	88,684	40,234
Foreign subsidiaries		
Value-added tax ("IVA")	348,021	277,175
Other	59,579	9,470
Total	2,680,716	2,265,402
Current assets	1,428,658	1,192,665
Non-current assets	1,252,058	1,072,737
Total	2,680,716	2,265,402

(a) ICMS

Accumulated ICMS credits over the past few years arise mainly from interstate acquisitions of electric power subject to tax substitution method and domestic sales subject to deferred taxation.

The Management 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) Federal tax credits

The main tax credit refers to the exclusion of ICMS from the PIS/COFINS calculation basis. The Company and its merged companies filed various lawsuits claiming recognition of the right to exclude ICMS from the calculation basis for PIS and COFINS and the consequent tax refund. The oldest period of the lawsuit dates back to 1991. The Company, assisted by specialized third-party consulting firm, proceeded with the measurement of these tax credits, basically considering the amount of ICMS stipulated on the sales invoices and other tax information on the ancillary obligations, grounded in the legal opinion.

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During 2021, the final and unappealable decisions of proceedings originally filed by merged companies were certified, and the total of R\$2,021,976 (2020: R\$438,045; 2019: R\$2,048,782) was recognized related to PIS and COFINS contributions overpaid, with R\$1,031,099 recorded under "Other operating income (expenses)" (2020: R\$310,557; 2019: R\$1,904,206) and R\$990,877 under financial income (2020: R\$127,488; 2019: R\$207,582).

Of the total tax credit recorded by the Company related to this topic, since 2019, R\$4,302,376 already has been offset. As of December 31, 2021, the balance is R\$789,420, of which R\$787,676 was classified under current assets and R\$1,744 under non-current assets (2020: R\$1,002,605 under current).

11 Investments

See the accounting policy in Note 2.3 Basis of Consolidation.

(a) Information on investments

	Interest in total and voting capital (%)	Net profit (loss) for the year			Equity		
		2021	2020	2019	2021	2020	
Jointly-controlled investment							
RPR	(i)	33.20	312	(63,525)	29,687	50,064	32,217
Associate							
Borealis	(ii)	20.00	45,490	6,019	17,622	205,568	161,363

(i) The main activities are the refine, processing and sale and import of oil, its byproducts and correlated products.

(ii) The main activities are the production and commercialization of petrochemical byproducts and correlated products.

(b) Changes in investments

	Domestic associate			
	Borealis	RPR	Other	Total
Balance at 2019	32,816	30,887	140	63,843
Dividends and interest on equity	(1,748)	(164)		(1,912)
Equity in results of investees	1,204	(21,093)		(19,889)
Other comprehensive income		1,067		1,067
Other			44	44
Balance at 2020	32,272	10,697	184	43,153
Dividends and interest on equity	(295)			(295)
Equity in results of investees	9,136	103		9,239
Other comprehensive income		5,825		5,825
Capital increase			1,001	1,001
Balance at 2021	41,113	16,625	1,185	58,923

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(c) Impact on the consolidation of Braskem Idesa

In light of the allegations of undue payments related to the Ethylene XXI project, which were originally published in the media in Mexico and were included in the testimony by the former CEO of Pemex to the Office of the Attorney General of Mexico, Braskem S.A., together with Braskem Idesa, in compliance with the standards established by Braskem's Global Compliance System Policy and Braskem Idesa's governance guidelines, approved the hiring of an U.S. law firm with proven experience in similar cases to conduct an independent internal investigation of the allegations.

The investigation was concluded in February 2022 and did not find evidence to support the allegations by the former CEO of Pemex regarding allegedly improper payments in connection with or otherwise related to the Ethylene XXI project.

The Company presents the financial information of the subsidiary in which the non-controlling shareholder holds interests, and the material effects on the Company's consolidated statements:

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Balance sheet	Consolidated Braskem without the effect of Braskem Idesa consolidated				Braskem Idesa consolidated ⁽ⁱ⁾		Eliminations		Consolidated			
	2021		2020		2021		2020		2021		2020	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020		
Assets												
Current												
Cash and cash equivalents	6,907,355	12,958,419	1,773,331	904,433					8,680,686	13,862,852		
Financial investments	3,492,710	3,627,227							3,492,710	3,627,227		
Trade accounts receivable	6,607,762	4,386,825	1,225,479	577,530	(679,676)	(232,376)			7,153,565	4,731,979		
Inventories	15,325,001	7,876,485	1,010,100	507,165					16,335,101	8,383,650		
Taxes recoverable	1,402,100	1,144,355	26,558	48,310					1,428,658	1,192,665		
Recoverable income taxes	1,189,812	1,547,916							1,189,812	1,547,916		
Derivatives	33,816	33,769							33,816	33,769		
Other current assets	841,473	688,944	137,624	121,242					979,097	810,186		
	35,800,029	32,263,940	4,173,092	2,158,680	(679,676)	(232,376)			39,293,445	34,190,244		
Non-current												
Financial investments	16,845	15,564							16,845	15,564		
Taxes recoverable	983,655	847,399	268,403	225,338					1,252,058	1,072,737		
Income tax and social contribution	230,069	72,267							230,069	72,267		
Deferred tax assets	6,481,642	6,658,276	1,775,610	1,871,696					8,257,252	8,529,972		
Related parties	10,064,320	9,122,666			(ii)	(10,064,320)	(9,122,666)					
Derivatives	51	34,091							51	34,091		
Judicial deposits	194,212	196,911							194,212	196,911		
Other non-current assets	354,083	251,398	24,964	17,347					379,047	268,745		
Investments	58,923	43,153							58,923	43,153		
Property, plant and equipment	23,510,588	22,295,803	14,483,720	14,436,012	(iii)	(769,178)	(802,666)		37,225,130	35,929,149		
Intangible	2,572,675	2,568,869	304,624	259,822					2,877,299	2,828,691		
Right of use of assets	2,427,633	2,509,484	352,404	392,911					2,780,037	2,902,395		
	46,894,696	44,615,881	17,209,725	17,203,126	(10,833,498)	(9,925,332)			53,270,923	51,893,675		
Total assets	82,694,725	76,879,821	21,382,817	19,361,806	(11,513,174)	(10,157,708)			92,564,368	86,083,919		
Liabilities and shareholders' equity												
Current												
Trade payables	11,861,563	9,753,762	871,379	424,929	(679,676)	(232,376)			12,053,266	9,946,315		
Borrowings	1,343,494	1,318,931							1,343,494	1,318,931		
Debentures	59,088	54,436							59,088	54,436		
Braskem Idesa Borrowings			86,765	7,660,128					86,765	7,660,128		
Payroll and related charges	1,095,040	776,134	75,306	38,432					1,170,346	814,566		
Taxes payable	1,003,813	927,039	8,303	25,650					1,012,116	952,689		
Income tax and social contribution	1,672,844	284,129							1,672,844	284,129		
Lease	598,523	821,695	76,843	73,414					675,366	895,109		
Provision - geological event in Alagoas	4,378,071	4,349,931							4,378,071	4,349,931		
Other current liabilities	2,495,544	1,947,569	246,623	163,371					2,742,167	2,110,940		
	24,507,980	20,233,626	1,365,219	8,385,924	(679,676)	(232,376)			25,193,523	28,387,174		
Non-current												
Loan agreements	33,553,766	40,413,192							33,553,766	40,413,192		
Braskem Idesa Borrowings			12,224,770	4,399,110					12,224,770	4,399,110		
Debentures	137,830	181,679							137,830	181,679		
Accounts payable to related parties			10,134,287	9,140,064	(ii)	(10,134,287)	(9,140,064)		3,646,538	3,222,493		
Loan to non-controlling shareholders of Braskem Idesa			(v)	3,646,538					3,646,538	3,222,493		
Income tax and social contribution		576,174							576,174			
Deferred tax liabilities	1,407,434	1,234,398							1,407,434	1,234,398		
Provision for losses on subsidiaries	5,284,666	5,283,264							5,284,666	5,283,264		
Lease	2,147,745	1,962,235	333,303	350,542	(iv)	(5,284,666)	(5,283,264)		2,481,048	2,312,777		
Provision - geological event in Alagoas	3,283,188	4,825,846							3,283,188	4,825,846		
Other non-current liabilities	4,406,733	4,274,837	25,710	122,757					4,432,443	4,397,594		
	50,221,362	58,751,625	26,364,608	17,234,966	(15,418,953)	(14,423,328)			61,167,017	61,563,263		
Shareholders' equity												
Attributable to the Company's shareholders	7,865,819	(2,202,306)	(6,347,010)	(6,259,084)	6,347,010	6,259,084	7,865,819	(2,202,306)				
Non-controlling interest in subsidiaries	99,564	96,876			(1,761,555)	(1,761,088)	(1,661,991)	(1,664,212)				
	7,965,383	(2,105,430)	(6,347,010)	(6,259,084)	4,585,455	4,497,996	6,203,828	(3,866,518)				
Total liabilities and shareholders' equity (net capital deficiency)	82,694,725	76,879,821	21,382,817	19,361,806	(11,513,174)	(10,157,708)			92,564,368	86,083,919		

(i) Consolidation of Braskem Idesa with its direct subsidiaries Braskem Idesa Serviços and Terminal Química.

(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 above-mentioned 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 shareholders of Braskem Idesa. These proceeds were used by Braskem Idesa to fund its construction project.

Braskem S.A.

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All amounts in thousands of Reais, except as otherwise stated

Statement of profit or loss

	Consolidated Braskem						Eliminations			Consolidated		
	Ex consolidated		Braskem Idesa		Braskem Idesa consolidated		2021	2020	2019	2021	2020	2019
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2019	
Net revenue	101,448,155	55,779,528	49,961,286	6,333,199	4,046,581	3,050,420	(2,156,153)	(1,282,615)	(688,181)	105,625,201	58,543,494	52,323,525
Cost of products sold	(72,471,291)	(45,563,723)	(44,111,980)	(3,321,601)	(3,112,129)	(2,509,060)	2,224,661	1,344,438	741,922	(73,568,231)	(47,331,414)	(45,879,118)
	28,976,864	10,215,805	5,849,306	3,011,598	934,452	541,360	68,508	61,823	53,741	32,056,970	11,212,080	6,444,407
Income (expenses)												
Selling and distribution	(1,834,303)	(1,609,844)	(1,582,794)	(221,337)	(242,211)	(200,661)				(2,055,640)	(1,852,055)	(1,783,455)
(Loss) reversals for impairment of trade accounts receivable	(8,736)	(55,074)	(4,772)	(178)	(178)	(2,297)				(8,914)	(55,252)	(7,069)
General and administrative	(2,292,884)	(1,739,541)	(2,082,002)	(229,334)	(179,350)	(141,269)	91	144	(909)	(2,522,127)	(1,918,747)	(2,224,180)
Research and development	(296,583)	(250,648)	(247,730)							(296,583)	(250,648)	(247,730)
Results from equity-accounted investees	(82,709)	(1,026,922)	(326,427)				87,353	1,007,524	336,645	4,644	(19,398)	10,218
Other income	1,530,443	748,923	2,102,684	4,044	1,826	305,750				1,534,487	750,749	2,408,434
Other expenses	(2,651,425)	(7,573,874)	(4,466,450)	(17,865)	(364,747)	19,508				(2,669,290)	(7,938,621)	(4,446,942)
	23,340,667	(1,291,175)	(758,185)	2,546,928	149,792	522,391	155,952	1,069,491	389,477	26,043,547	(71,892)	153,683
Financial results												
Financial expenses	(4,750,895)	(3,851,233)	(3,009,471)	(1,618,020)	(1,505,628)	(1,205,412)	461,760	443,496	332,098	(5,907,155)	(4,913,365)	(3,882,785)
Financial income	2,276,312	1,032,530	1,135,118	12,886	11,150	47,534	(461,760)	(443,496)	(332,098)	1,827,438	600,184	850,554
Exchange rate variations, net	(2,884,292)	(4,823,269)	(1,768,850)	(1,164,697)	(482,125)	75,610	46,182	6,683	(31,280)	(4,002,807)	(5,298,711)	(1,724,520)
	(5,358,875)	(7,641,972)	(3,643,203)	(2,769,831)	(1,976,603)	(1,082,268)	46,182	6,683	(31,280)	(8,082,524)	(9,611,892)	(4,756,751)
Profit (loss) before income tax	17,981,792	(8,933,147)	(4,401,388)	(222,903)	(1,826,811)	(559,877)	202,134	1,076,174	358,197	17,961,023	(9,683,784)	(4,603,068)
Income taxes	(3,991,055)	2,253,684	1,873,207	(8,348)	414,794	89,463				(3,999,403)	2,668,478	1,962,670
	(3,991,055)	2,253,684	1,873,207	(8,348)	414,794	89,463				(3,999,403)	2,668,478	1,962,670
Net profit (loss) for the year	13,990,737	(6,679,463)	(2,528,181)	(231,251)	(1,412,017)	(470,414)	202,134	1,076,174	358,197	13,961,620	(7,015,306)	(2,640,398)

Braskem S.A.

Notes to the consolidated financial statements as of December 31, 2021

All amounts in thousands of Reais, except as otherwise stated

Statement of cash flows	Consolidated Braskem									Consolidated		
	Ex consolidated			Braskem Idesa			Braskem Idesa consolidated					
	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019
Profit (loss) before income tax	17,981,792	(8,933,147)	(4,401,388)	(222,903)	(1,826,811)	(559,877)	202,134	1,076,174	358,197	17,961,023	(9,683,784)	(4,603,068)
Adjustments for reconciliation of profit (loss)												
Depreciation and amortization	3,450,171	2,995,609	2,732,181	796,861	1,114,439	952,916	(68,599)	(61,967)	(52,832)	4,178,433	4,048,081	3,632,265
Results from equity-accounted investees	82,709	1,026,922	326,427				(87,353)	(1,007,524)	(336,645)	(4,644)	19,398	(10,218)
Net interest, monetary and foreign exchange gain/losses	3,792,708	8,541,980	3,050,987	2,564,905	1,921,975	1,062,843	(46,182)	(6,683)	31,280	6,311,431	10,457,272	4,145,110
Provisions (reversal and recovery of credits), net	819,130	336,838	320,439							819,130	336,838	320,439
Provision - geological event in Alagoas	1,339,765	6,901,828	3,383,067							1,339,765	6,901,828	3,383,067
PIS and COFINS credits - exclusion of ICMS from the calculation basis	(1,031,099)	(310,557)	(1,904,206)							(1,031,099)	(310,557)	(1,904,206)
Loss (reversals) for impairment of trade accounts receivable	10,134	55,252	7,069	(1,220)						8,914	55,252	7,069
Provision for losses and write-offs of long-lived assets	114,148	8,794	224,825	1,039		379				115,187	8,794	225,204
Adjustments for reconciliation of profit	26,559,458	10,623,519	3,739,401	3,138,682	1,209,603	1,456,261				29,698,140	11,833,122	5,195,662
Changes in operating assets and liabilities												
Judicial deposits - unfreezing (blocking) Public Civil Action		3,746,107	(3,680,460)								3,746,107	(3,680,460)
Financial investments	296,957	(1,860,827)	797,445							296,957	(1,860,827)	797,445
Trade accounts receivable	(2,002,897)	(2,247,729)	677,176	(619,688)	(152,971)	325,820	447,300	212,874	(107,950)	(2,175,285)	(2,187,826)	895,046
Inventories	(7,176,104)	(309,492)	825,236	(398,181)	56,958	42,581				(7,574,285)	(252,534)	867,817
Taxes recoverable	4,958,779	1,584,911	1,216,225	4,808	(52,357)	(20,798)				4,963,587	1,532,554	1,195,427
Prepaid expenses	(67,923)	(172,027)	85,549	87,245	465,812	117,183				19,322	293,785	202,732
Other receivables	(201,798)	44,513	(242,727)	(16,080)	352,590	(30,938)				(217,878)	397,103	(273,665)
Trade payables	1,218,550	(2,926,585)	330,633	428,364	137,895	(156,138)	(447,300)	(212,874)	107,950	1,199,614	(3,001,564)	282,445
Taxes payable	(2,878,056)	965,191	(485,309)	(129,432)	(515,430)	(84,484)				(3,007,488)	449,761	(569,793)
Advances from customers	(217,159)	224,764	176,189	(16,792)	(25,776)	21,776				(233,951)	198,988	197,965
Leniency agreement	(389,087)	(349,842)	(341,605)							(389,087)	(349,842)	(341,605)
Sundry provisions	(482,565)	(158,915)	(226,519)	168,371	13,560	10,971				(314,194)	(145,355)	(215,548)
Geological event in Alagoas	(2,928,081)	(1,181,931)								(2,928,081)	(1,181,931)	
Other payables	1,040,674	(217,997)	348,916	(1,271)	33,810	13,287				1,039,403	(184,187)	362,203
Cash generated from operations	17,730,748	7,763,660	3,220,150	2,646,026	1,523,694	1,695,521				20,376,774	9,287,354	4,915,671
Interest paid	(2,207,196)	(1,946,931)	(1,576,526)	(676,237)	(789,890)	(661,919)				(2,883,433)	(2,736,821)	(2,238,445)
Income taxes paid	(2,697,829)	(252,479)	(403,614)	(9,027)	(5,063)	(8,337)				(2,706,856)	(257,542)	(411,951)
Net cash generated by operating activities	12,825,723	5,564,250	1,240,010	1,960,762	728,741	1,025,265				14,786,485	6,292,991	2,265,275
Proceeds from the sale of property, plant and equipment and intangible assets	40,353	33,140	12,590							40,353	33,140	12,590
Dividends received	295	4,822	3,513							295	4,822	3,513
Acquisitions to property, plant and equipment and intangible assets	(3,249,132)	(2,653,009)	(2,578,558)	(172,192)	(106,780)	(103,964)				(3,421,324)	(2,759,789)	(2,682,522)
Net cash used in investing activities	(3,208,484)	(2,615,047)	(2,562,455)	(172,192)	(106,780)	(103,964)				(3,380,676)	(2,721,827)	(2,666,419)
Short-term and long-term debt												
Acquired	16,308	13,049,459	20,586,103							16,308	13,049,459	20,586,103
Payments	(9,413,909)	(8,734,505)	(17,425,409)							(9,413,909)	(8,734,505)	(17,425,409)
Braskem Idesa borrowings												
Acquired				7,271,658		3,497,622				7,271,658		3,497,622
Payments				(7,995,045)	(905,210)	(4,398,453)				(7,995,045)	(905,210)	(4,398,453)
Loan to non-controlling shareholders of Braskem Idesa - payment	216,862			(226,407)	(37,618)					(9,545)	(37,618)	
Lease payments	(787,932)	(610,392)	(407,320)	(53,774)	(51,676)	(46,870)				(841,706)	(662,068)	(454,190)
Dividends paid	(5,993,265)	(2,380)	(668,904)							(5,993,265)	(2,380)	(668,904)
Other financial liabilities		(534,456)	499,999								(534,456)	499,999
Cash generated (used) in financing activities	(15,961,936)	3,167,726	2,584,469	(1,003,568)	(994,504)	(947,701)				(16,965,504)	2,173,222	1,636,768
Exchange variation on cash of foreign subsidiaries	293,633	1,054,845	(59,659)	83,896	259,741	80,278				377,529	1,314,586	20,619
(Decrease) increase in cash and cash equivalents	(6,051,064)	7,171,774	1,202,365	868,898	(112,802)	53,878				(5,182,166)	7,058,972	1,256,243
Represented by												
Cash and cash equivalents at the beginning for the year	12,958,419	5,786,645	4,584,280	904,433	1,017,235	963,357	-	-	-	13,862,852	6,803,880	5,547,637
Cash and cash equivalents at the end for the year	6,907,355	12,958,419	5,786,645	1,773,331	904,433	1,017,235	-	-	-	8,680,686	13,862,852	6,803,880
(Decrease) increase in cash and cash equivalents	(6,051,064)	7,171,774	1,202,365	868,898	(112,802)	53,878				(5,182,166)	7,058,972	1,256,243

12 Property, plant and equipment

Items of property, plant and equipment are measured at the historical cost of acquisition or construction, which includes capitalized borrowing costs, less accumulated depreciation and any accumulated impairment losses.

The machinery, equipment and facilities 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 only relevant pieces of equipment, such as industrial boilers, turbines and tanks.

Expenses with each scheduled shutdown are included in property, plant and equipment items that were the stoppage's subject matter 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.

Depreciation starts when the assets become available and is calculated using the straight-line method, based on the useful life estimated by the Company's technicians with vast experience in managing the plants. The useful lives of assets are reviewed at each reporting date and adjusted if appropriate.

The main factors taken into consideration in the definition of the useful life of the assets that compose the Company's industrial plants are the information of manufacturers of machinery and equipment, level of the plants' operations, quality of preventive and corrective maintenance and the prospects of technological obsolescence of assets.

The estimated useful lives applied to the assets determined the following average depreciation rates per year:

	<u>2021</u>	<u>2020</u>
Buildings and improvements	2.92	2.82
Machinery, equipment and installations	6.74	6.31
Furniture and fixtures	10.06	10.03
IT equipment	21.18	20.23
Lab equipment	9.53	9.57
Security equipment	10.04	9.54
Vehicles	18.82	18.89
Other	17.05	13.55

Borrowing costs are capitalized as ongoing projects, 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 2021, capitalized interest amounted to R\$192,207 (2020: R\$252,427). The average rate of these charges in the year was 8.33% p.a. (2020: 7.85% p.a.).

As of December 31, 2021, the acquisition of property, plant and equipment with payment installments is R\$295,056 (2020: R\$160,877).

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All amounts in thousands of Reais, except as otherwise stated

(a) Reconciliation of carrying amount

	Land	Buildings and Improvements	Machinery, Equipment and Facilities	Projects and Stoppage in Progress (i)	Other	Total
Cost	613,807	7,064,972	44,439,196	7,009,473	1,726,026	60,853,474
Accumulated depreciation and amortization		(2,492,705)	(24,789,920)		(1,255,668)	(28,538,293)
Balance as of December 31, 2019	613,807	4,572,267	19,649,276	7,009,473	470,358	32,315,181
Acquisitions		590	60,130	2,609,565	4,030	2,674,315
Capitalized financial charges				252,427		252,427
Foreign currency translation adjustment						
Cost	69,244	1,132,817	2,982,072	1,136,671	74,856	5,395,660
Depreciation		(314,092)	(997,664)		(46,919)	(1,358,675)
Transfers by concluded projects		105,702	6,248,845	(6,542,755)	188,208	
Transfers to inventory				(53,903)	76,709	22,806
Transfers to intangible				(22,373)	(18,619)	(40,992)
Disposals						
Cost	(20)	(22,657)	(328,411)		(12,576)	(363,664)
Depreciation		20,299	305,759		10,631	336,689
Depreciation and amortization		(372,687)	(2,787,042)		(144,869)	(3,304,598)
Net book value	683,031	5,122,239	25,132,965	4,389,105	601,809	35,929,149
Cost	683,031	8,281,424	53,401,832	4,389,105	2,038,666	68,794,058
Accumulated depreciation		(3,159,185)	(28,268,867)	-	(1,436,857)	(32,864,909)
Balance as of December 31, 2020	683,031	5,122,239	25,132,965	4,389,105	601,809	35,929,149
Acquisitions		338	160,297	3,388,078	3,421	3,552,134
Capitalized financial charges				192,207		192,207
Foreign currency translation adjustment						
Cost	17,046	287,866	1,118,655	74,428	23,859	1,521,854
Depreciation		(88,406)	(313,267)		(16,760)	(418,433)
Transfers by concluded projects	244	13,965	3,207,833	(3,412,665)	190,623	
Transfers to inventory				(16,838)		(16,838)
Transfers to intangible		31,495	(11,673)	(73,397)	(11,847)	(65,422)
Disposals						
Cost	(10,856)	9,723	(353,274)	(91,485)	(41,066)	(486,958)
Depreciation		168	387,005		9,206	396,379
Depreciation		(195,900)	(3,038,176)		(143,164)	(3,377,241)
Transfers to "non-current assets held for sale"	(1,701)		(2)		2	(1,701)
Transfers Others			118,629	(40,095)	(78,534)	
Net book value	687,764	5,181,488	26,408,992	4,409,338	537,549	37,225,130
Cost	687,764	8,591,020	57,535,343	4,449,433	2,215,503	73,479,063
Accumulated depreciation		(3,409,532)	(31,126,351)	(40,095)	(1,677,954)	(36,253,933)
Balance as of December 31, 2021	687,764	5,181,488	26,408,992	4,409,338	537,549	37,225,130

(i) As of December 31, 2021, the amounts recorded under this item corresponded to expenses with scheduled shutdowns in Brazil and at overseas plants in the amount of R\$ 1,473,396 (2020: R\$924,747), capitalized financial charges in the amount of R\$237,519 (2020: R\$233,963), inventories of spare parts in the amount of R\$534,875 (2020: R\$405,497), strategic projects ongoing in Brazil in the amount of R\$351,657 (2020: R\$256,873) and in Braskem America in the amount of R\$136,342 (2020: R\$313,080). The remainder corresponds mainly to various projects for maintaining the production capacity of plants.

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Notes to the consolidated financial statements
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All amounts in thousands of Reais, except as otherwise stated

(b) Property, plant and equipment by country

	<u>2021</u>	<u>2020</u>
Brazil	15,867,387	15,105,253
Mexico	13,714,543	13,632,787
United States of America	7,281,077	6,823,655
Germany	356,288	363,975
Other	5,835	3,479
	<u>37,225,130</u>	<u>35,929,149</u>

(c) Impairment loss

Annually, or whenever there is any indication that an asset has suffered devaluation, the Company conducts an analysis to determine if there are indicators that the book value of property, plant and equipment 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.

The following are considered by the Company as relevant points and are observed in this analysis:

- (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.

The impairment value of an asset or CGU is the greatest of the value in use and its fair value less sales costs. The value in use is based on estimated future cash flows, discounted to present value using a discount rate before tax that reflects the current market assessments of the time value of money and the specific risks related to the asset or CGU.

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 going-concern analysis.

No events indicated that the carrying amount exceeds its recoverable amount as of December 31, 2021, and 2020.

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Notes to the consolidated financial statements as of December 31, 2021

All amounts in thousands of Reais, except as otherwise stated

13 Intangible assets

	Goodwill	Brands and Patents	Software licenses	Customers and Suppliers Agreements	Total
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)
Balance as of December 31, 2019	2,058,874	251,615	271,936	179,663	2,762,088
Acquisitions		1,789	38,660	66	40,515
Foreign currency translation adjustment		38,409	21,531		59,940
Cost		46,311	56,422		102,733
Amortization		(7,902)	(34,891)		(42,793)
Transfers from property, plant and equipment projects and stoppage in progress			40,992		40,992
Amortization		(6,753)	(46,075)	(22,016)	(74,844)
Net book value	2,058,874	285,060	327,044	157,713	2,828,691
Cost	3,187,678	499,515	1,010,201	392,246	5,089,640
Accumulated amortization	(1,128,804)	(214,455)	(683,157)	(234,533)	(2,260,949)
Balance as of December 31, 2020	2,058,874	285,060	327,044	157,713	2,828,691
Acquisitions		670	67,686	420	68,776
Foreign currency translation adjustment		9,732	4,539		14,271
Cost		12,443	13,023		25,466
Amortization		(2,711)	(8,484)		(11,195)
Transfers from property, plant and equipment projects and stoppage in progress			36,652		65,422
Disposals			(3,393)		(3,393)
Amortization		(10,444)	(64,008)	(22,016)	(96,468)
Net book value	2,058,874	313,789	368,520	136,117	2,877,299
Cost	3,187,678	549,196	1,123,619	392,666	5,253,159
Accumulated amortization	(1,128,804)	(235,408)	(755,099)	(256,549)	(2,375,860)
Balance as of December 31, 2021	2,058,874	313,789	368,520	136,117	2,877,299

13.1 Goodwill based on expected future profitability

The existing goodwill was determined in accordance with the criteria established by the accounting practices adopted in Brazil before the adoption of the IFRS pronouncements and represents the excess of the amount paid over the amount of equity of the companies acquired. Goodwill is allocated to the Cash Generating Units ("CGUs") or groups of assets that are expected to benefit from the synergies of the combination. Such goodwill was amortized for accounting purposes until December 2008. From 2009 on, it has been subjected to annual impairment tests.

Impairment testing is based on estimated cash generation in each CGU or groups of assets, extracted from the Company's five-year Business Plan (see Note 22.2) and from the Management plan for a period greater than 5 years to reflect the industry cycle patterns, with 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").

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The table below shows the results obtained in the tests conducted by the Company in December 2021:

	Allocated goodwill	Recoverable amount (i)	Book value (ii)	CF/Book value
Northeastern petrochemical complex	475,780	18,906,760	2,977,586	6.3
Southern petrochemical complex	1,390,741	32,032,400	6,674,673	4.8
Vinyls	192,353	9,020,523	2,937,569	3.1
Total	2,058,874	59,959,683	12,589,828	

(i) The book value includes, in addition to goodwill, property, plant and equipment and intangible assets with defined useful lives and the working capital.

The WACC used was 9.09% p.a. The inflation rate considered for perpetuity was 2.83%.

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, with cash flows shown in the table below:

	+0.5% on discount rate	-0.5% on perpetuity
Northeastern petrochemical complex	17,604,424	18,124,544
Southern petrochemical complex	29,062,222	30,003,729
Vinyls	8,251,301	8,595,310

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 the Company has operational plants. Macroeconomic indicators include items such as: exchange, inflation, interest rates, among others.

Prices for key petrochemical products are obtained from a specialized third party consulting firm, drawing on projections reviewed and supplemented based on Management’s experience. Final prices take into consideration the meetings of specific internal committees and the knowledge of the Company’s experts in preparing the benchmarks for each market.

Similar to prices, indicators for global demand also are prepared with specialized consulting firms. In the markets where the Company operates more directly, they consider additional variables for the local demand composition.

13.2 Intangible assets with definite useful lives

These intangible assets are measured at historical cost of acquisition or at fair value when acquired in a business combination, deducted from accumulated amortization and, if applicable, accumulated impairment loss. Subsequent costs are capitalized only when they increase the future economic benefits incorporated into the specific asset to which they are related.

Amortization is calculated using the straight-line method based on the estimated useful life of the items, and revised on each reporting date, as follows:

- Brands and patents	10-20 years
- Software licenses and rights of use	5-10 years
- Customers and suppliers agreements	14-28 years

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Expenditure on research activities is recognized in profit or loss as incurred. Development expenditure is capitalized only if the expenditure can be measured reliably, the product or process is technically, and commercially feasible, future economic benefits are probable and the Company intends to use or sell the asset. Otherwise, it is recognized in profit or loss as incurred.

Based on Management's assessment, there were no events indicating that the carrying amount exceeds its recoverable amount as of December 31, 2021, and 2020.

13.3 Intangible assets by country

	<u>2021</u>	<u>2020</u>
Brazil	2,526,999	2,517,470
Mexico	304,624	259,822
United States of America	24,404	25,156
Germany	21,253	26,211
Other	19	32
	<u>2,877,299</u>	<u>2,828,691</u>

14 Right-of-use assets and lease liability

The Company assesses whether a contract is or contains a lease if the contract transfers the right to control the use of an asset identified for a period in exchange for consideration. The Company leases various offices, railcars, vessels, equipment and vehicles. Such leases are negotiated individually and are subject to various terms and conditions.

As a lessee, the Company, to determine the enforceable term of the lease, 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.

14.1 Right-of-use assets

Leases are recognized as a right-of-use asset and a corresponding liability on the date on which the leased asset becomes available to the Company.

The right-of-use asset is measured at the cost composed of:

- The 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.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Company by the end of the lease term or the cost of the right-of-use asset reflects that the Company will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property, plant and equipment.

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Changes in right-of-use assets:

	Balance as of Dec. 31, 2020	Acquisitions	Depreciation	Disposal	Foreign currency translation adjustment	Balance as of Dec. 31, 2021
Rail cars	1,007,336	102,648	(187,915)		63,992	986,061
Machinery and equipment	749,728	281,113	(207,985)	(30,245)	643	793,254
Ships	834,848	258,201	(399,677)		3,289	696,661
Buildings and constructions	259,896	52,897	(52,997)	(6,333)	11,849	265,312
Vehicles	33,888	51,171	(24,078)	(31,667)	135	29,449
Computer equipment and goods	16,699	542	(4,334)	(3,682)	75	9,300
Total	2,902,395	746,573	(876,986)	(71,928)	79,983	2,780,037

	Balance as of Dec. 31, 2019	Acquisitions	Depreciation	Disposal	Foreign currency translation adjustment	Balance as of Dec. 31, 2020
Rail cars	746,040	244,199	(180,146)		197,243	1,007,336
Ships	865,387	258,193	(286,905)	(12,687)	10,860	834,848
Machinery and equipment	743,248	227,690	(198,441)	(25,801)	3,032	749,728
Buildings and constructions	212,170	65,176	(54,712)		37,262	259,896
Vehicles	26,286	21,502	(14,473)		573	33,888
Computer equipment and goods	12,523	9,341	(5,499)		334	16,699
Total	2,605,654	826,101	(740,176)	(38,488)	249,304	2,902,395

In 2021, the expenses related to the low-value leases was R\$7.2 million (2020: R\$981).

To optimize lease costs during the lease term, the Company must provide guaranteed residual amounts for the leased asset. For certain lease agreements for railcars, 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\$70,085 (US\$12,559) as of December 31, 2021 (2020: R\$62,256 equivalent to US\$12,559).

14.2 Lease liability

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease, or if that rate cannot be readily determined, the Company's incremental borrowing rate. 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.

The Company's incremental borrowing rate corresponds to the one the Company would have pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use in a similar economic environment. The weighted average incremental rate applied in 2021 was 5.18% p.a. (2020: 7.30% p.a.). The lease liability is subsequently measured at amortized cost.

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Changes in lease liabilities:

	<u>2021</u>	<u>2020</u>
Balance at the beginning of the year	3,207,886	2,676,896
Acquired	746,573	826,101
Disposals	(50,473)	(38,488)
Interests and monetary and exchange variations, net	206,375	327,135
Currency translation adjustments	85,984	267,493
Payments	(841,706)	(662,068)
Interest paid	(198,225)	(189,183)
Balance at the end of the year	3,156,414	3,207,886
Current liability	675,366	895,109
Non-current liability	2,481,048	2,312,777
Total	3,156,414	3,207,886

The table below presents the obligations (minimum annual commitments) related to undiscounted lease agreements, by maturity, and may not be reconcilable with the statement of financial position.

	<u>2021</u>
2022	777,410
2023	633,141
2024	493,147
2025	399,924
2026+	1,073,620
Total	3,377,242

14.3 Extension Options

Some leases contain 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.

14.4 Non-cash transactions

96100In 2021, out of the net effect of additions and disposals of the right of use assets, non-cash transactions are R\$565,774 (2020: R\$787,613).

14.5 Uninitiated lease arrangements

The Company has committed to lease arrangements not yet effective as of December 31, 2021. The present value of the commitments corresponds to R\$1.8 billion.

Braskem S.A.**Notes to the consolidated financial statements
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	Note	2021	2020
Trade payables:			
Domestic market			
Third parties		1,505,841	1,077,679
Third parties (forfait)	(i)	487,806	239,512
Total Third parties		1,993,647	1,317,191
Related parties		208,287	97,900
Related parties (forfait)	(i)	40,148	546,044
Total Related parties	9	248,435	643,944
Foreign market	(ii)		
Third parties		9,962,736	8,023,032
Present value adjustment - foreign market	(iii)	(40,088)	(30,619)
		12,164,730	9,953,548
Current liabilities		12,053,266	9,946,315
Non-current liabilities		111,464	7,233
Total		12,164,730	9,953,548

(i) The Company has payment agreements with financial institutions that allow certain suppliers to opt for granting their receivables from the Company upon accepting of financial institutions by acquiring or not the related receivables, without the Company's interference. The grant operation does not imply any change in the instruments issued by suppliers, with the same conditions of the original amount and the payment term maintained.

(ii) Considers R\$4.7 billion (2020: R\$4.7 billion) 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.

(iii) The rate for calculating the Present Value Adjustment ("PVA") applied to the external market payments with terms equal to or longer than 90 days is calculated based on the average rate for lengthening the term of trade payables.

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16 Borrowings

(a) Borrowings

	Annual financial charges (%)	2021	2020
Foreign currency			
Bonds	(i) Note 16 (b)	30,322,998	34,963,651
Export prepayment	(ii) US dollar exchange variation + quartely Libor + 1.75		521,469
Investments	Note 16 (c)	2,612,386	2,682,824
Other	Note 16 (d)	2,090,673	2,755,200
Transactions costs		(594,048)	(688,814)
		34,432,009	40,234,330
Current liabilities		1,284,483	1,206,084
Non-current liabilities		33,147,526	39,028,246
Total		34,432,009	40,234,330
Local currency			
Export credit notes	(ii) 100.00 of CDI + 0.70		402,739
Commercial notes	(ii) 100.00 of CDI + 0.85		545,171
BNDES	4.00		1,538
BNDES	IPCA + 6.04	435,778	490,963
FINEP/FINISA	(iii) Interest between 3.50 and 4.00	2,605	26,154
BNB-FNE (Fundo Constitucional de Financiamentos do Nordeste)	(iv) IPCA + interest between 2.39 and 2.78	4,616	5,639
Fundo de Desenvolvimento do Nordeste (FDNE)	6.50	22,259	27,196
Transactions costs		(7)	(1,607)
		465,251	1,497,793
Current liabilities		59,011	112,847
Non-current liabilities		406,240	1,384,946
Total		465,251	1,497,793
Foreign currency and local currency			
Current liabilities		1,343,494	1,318,931
Non-current liabilities		33,553,766	40,413,192
Total		34,897,260	41,732,123

(i) Braskem has fully, unconditionally and irrevocably, guaranteed the bonds issued by Braskem Finance, Braskem America Finance and Braskem Holanda Finance. The guarantees are senior unsecured obligations of Braskem, ranking equal in right of payment with all of its other existing and future senior unsecured debt.

(ii) Prepaid in July 2021.

(iii) Borrowings were made by Braskem and the subsidiary DAC, which provided a bank guarantee as collateral.

(iv) Borrowings were made by the subsidiaries Cetrel and DAC, with bank guarantee and fiduciary assignment of liquidity fund in a reserve account as collateral.

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The maturity profile of the long-term debentures is as follows:

	<u>2021</u>	<u>2020</u>
2022		2,086,460
2023	1,199,143	1,824,477
2024	3,965,917	5,653,432
2025	645,517	1,121,748
2026	622,032	580,062
2027	552,171	514,819
2028	7,081,301	6,986,264
2029	230,557	217,418
2030	8,535,493	7,951,181
2031	61,617	57,096
2032 and thereafter	10,660,018	13,420,235
Total	<u>33,553,766</u>	<u>40,413,192</u>

(b) Bonds

<u>Issue date</u>		<u>Issue amount</u> <u>US\$</u>	<u>Outstanding amount</u> <u>in US\$: principal plus</u> <u>interests</u>	<u>Maturity</u>	<u>Interest</u> <u>(% per year)</u>	<u>2021</u>	<u>2020</u>
Oct-2010 and Feb-2012	(i)	700,000		no maturity date	7.38		2,598,350
Jul-2011 and Jul-2012	(i)	750,000	590,792	Jul-2041	7.13	3,296,917	4,019,404
May-2012	(i)	500,000		May-2022	5.38		1,500,304
Feb-2014 and May-2014	(i)	750,000	612,444	Feb-2024	6.45	3,417,741	4,000,875
Oct-2017	(i)	500,000	106,436	Jan-2023	3.50	593,964	1,034,179
Oct-2017		1,250,000	1,199,760	Jan-2028	4.50	6,695,263	6,633,913
Nov-19		1,500,000	1,528,125	Jan-2030	4.50	8,527,701	7,941,207
Nov-19		750,000	768,359	Jan-2030	5.88	4,287,829	3,992,933
Jul-2020	(ii)	600,000	627,826	Jan-2081	8.50	3,503,583	3,242,486
Total		<u>7,300,000</u>	<u>5,433,742</u>			<u>30,322,998</u>	<u>34,963,651</u>

(i) Prepayments were made in 2021 in the total amount of US\$1.3 billion (R\$6.9 billion).

(ii) The bond is recorded as a financial liability. According to the specific methodology applied by some rating agencies to calculate leverage, and only for such purpose, 50% of this bond is classified as a hybrid equity instrument. It can be repaid by the Company at par value in the 5th, 10th and 20th years.

(c) Financings for investments in plants

<u>Issue date</u>		<u>Issue amount</u> <u>US\$</u>	<u>Outstanding amount</u> <u>in US\$: principal</u> <u>plus interests</u>	<u>Maturity</u>	<u>Charges (% per year)</u>	<u>2021</u>	<u>2020</u>
sep-2017	(i)	135,000	82,876	mar-2027	Us dollar exchange variation + semiannual Libor + 1.61	462,490	509,141
jul-2018	(ii)	205,956	169,859	dec-2028	Us dollar exchange variation + semiannual Libor + 0.65	947,898	996,531
aug-2020	(iii)	225,000	215,393	feb-2031	Us dollar exchange variation + semiannual Libor + 1.70	1,201,998	1,177,152
Total		<u>565,956</u>	<u>468,128</u>			<u>2,612,386</u>	<u>2,682,824</u>

(i) Financing contracted by the subsidiary Braskem Holanda Inc. and secured by NEXI, the Japanese export credit agency, and guaranteed by Braskem.

(ii) Financing contracted by the subsidiary Braskem America and secured by Euler Hermes, the German export credit agency.

(iii) Financing contracted by the subsidiary Braskem Holanda Finance and secured by NEXI, the Japanese export credit agency, and guaranteed by Braskem.

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(d) Other

Identification	Issue date		Initial amount	Outstanding	Maturity	Charges (% per year)	2021	2020
			of the transaction (US\$)	amount in US\$: principal plus interests				
SACE	Nov-2018	(i)	295,125	206,819	Nov-2028	Us dollar exchange variation + semiannual Libor + 0.90	1,154,146	1,228,285
SACE	Dec-2019	(i)	150,000	120,083	Dec-2029	Us dollar exchange variation + semiannual Libor + 0.90	670,124	702,027
MONFORTE	Apr-2019	(ii)	72,345	47,738	Apr-2026	Us dollar exchange variation + semiannual Libor + 1.00	266,403	300,434
ING	Jan-2020	(iii)	100,000		Jan-2025	Us dollar exchange variation + semiannual Libor + 1.65		524,454
Total			617,470	374,640			2,090,673	2,755,200

(i) Credit facility contracted by the subsidiary Braskem Holanda Finance and Braskem Holanda Inc. secured by SACE, an Italian export credit agency, and guaranteed by Braskem.

(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.

(iii) Prepaid in July 2021.

17 Braskem Idesa Financing

Identification	Principal amount US\$	Outstanding amount in US\$: principal plus interests	Maturity	Charges (% per year)	2021	2020
Project finance						
Project finance I	700,000		Feb-2027	Us dollar exchange variation + quarterly Libor + 3.25 (i)		2,444,515
Project finance II	210,000		Feb-2027	Us dollar exchange variation + 6.17 (i)		690,311
Project finance III	600,000		Feb-2029	Us dollar exchange variation + 4.33 (i)		2,145,326
Project finance IV	660,000		Feb-2029	Us dollar exchange variation + quarterly Libor + 3.88 (i)		2,419,920
Total under current liabilities	2,170,000					7,700,072
Bond						
Bond I	900,000	914,696	Nov-2029	Us dollar exchange variation + 7.45	5,104,463	4,729,587
Bond II	1,200,000	1,224,766	Feb-2032	Us dollar exchange variation + 6.99 (ii)	6,834,805	
	2,100,000	2,139,462			11,939,268	4,729,587
Other	150,000	152,291	Oct-2026	Us dollar exchange variation + quarterly Libor + 4.00 (ii)	849,859	
Transactions costs					(477,592)	(370,421)
Total					12,311,535	12,059,238
Current liabilities					86,765	7,660,128
Non-current liabilities					12,224,770	4,399,110
Total					12,311,535	12,059,238

(i) Prepaid in October 2021.

(ii) Funding operation carried out in October 2021.

In line with the Company's Financial Policy, the investment in the petrochemical complex of the subsidiary Braskem Idesa was financed under a Project Finance model, under which the construction loan is paid exclusively using the cash generated by the entity itself and the shareholders provide limited guarantees. This financing included the guarantees typical to Project Finance transactions, such as assets, receivables, cash generation and other rights of

Braskem Idesa, debt service reserve account and contingent equity. At the close of December 2020, such guarantees corresponded to US\$194 million (R\$1 billion) and US\$208 million (R\$1.1 billion), respectively. The financing also contained various other covenants typical to contracts of this kind.

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On October 20, 2021, the liability was fully settled using the proceeds from the following operations:

· Issue of US\$1.2 billion (R\$6.7 billion) in sustainability-linked bonds. The bonds due in 10 years have an interest rate of 7% p.a., which may be increased by up to 0.37% p.a. if certain conditions are not met. The Company gave as collateral assets from its property, plant and equipment in the same amount of the bonds;

· Credit facility in the amount of US\$150 million (R\$834 million) due in October 2026, at LIBOR plus 4% p.a.

On December 31, 2020, certain non-monetary covenants established in the contracts of Project Finance remained unfulfilled. As a result, the amount of R\$6,538,646 was reclassified from non-current liabilities to current liabilities.

The following table summarizes the long-term maturities of these financings as of December 31, 2021:

	<u>2021</u>	<u>2020</u>
2023	67,649	
2024	68,694	
2025	69,530	
2026	408,445	
2029	4,900,399	4,399,110
2032	6,710,053	
Total	<u>12,224,770</u>	<u>4,399,110</u>

18 Debentures

<u>Issue date</u>	<u>Issuer</u>	<u>Series</u>	<u>Maturity</u>	<u>Annual financial charges (%)</u>	<u>2021</u>	<u>2020</u>
Mar-2013	DAC	Single	Mar-2025	IPCA + 6%	150,013	177,009
Sep-2013	Cetrel	Single	Sep-2025	126.5% of CDI	46,905	59,106
					<u>196,918</u>	<u>236,115</u>
Current liabilities					59,088	54,436
Non-current liabilities					<u>137,830</u>	<u>181,679</u>
Total					<u>196,918</u>	<u>236,115</u>

The maturity profile of the long-term debentures is as follow:

	<u>2021</u>	<u>2020</u>
2022		53,406
2023	57,045	53,417
2024	57,096	53,443
2025	23,689	21,413
Total	<u>137,830</u>	<u>181,679</u>

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.

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19 Reconciliation of borrowing activities in the statement of cash flow

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	Loan to non-controlling shareholders of Braskem Idesa	Lease	Dividends
Balance as of December 31, 2020	41,732,123	236,115	41,968,238	12,059,238	3,222,493	3,207,886	5,456
Acquired	16,308		16,308	7,271,658			
Payments	(9,374,653)	(39,256)	(9,413,909)	(7,995,045)	(9,545)	(841,706)	(5,993,265)
Cash used in financing activities	(9,358,345)	(39,256)	(9,397,601)	(723,387)	(9,545)	(841,706)	(5,993,265)
Other changes							
Interest paid	(2,001,552)	(29,033)	(2,030,585)	(649,945)	(4,679)	(198,225)	
Interest and monetary and exchange variations, net	2,626,770	29,092	2,655,862	1,055,347	243,673	206,375	
VAT on loan					42,457		
Acquired						746,573	
Disposal						(50,473)	
Currency translation adjustments	1,898,264		1,898,264	570,282	152,139	85,984	
Prepaid dividends approved by the Board							6,000,000
Dividends-lapse of statute of limitation							(1,653)
Other							
	2,523,482	59	2,523,541	975,684	433,590	790,234	5,998,347
Balance as of December 31, 2021	34,897,260	196,918	35,094,178	12,311,535	3,646,538	3,156,414	10,538

20 Financial instruments

20.1 Initial recognition and measurement

Trade receivables and bonds issued are initially recognized when they are originated. All other financial assets and liabilities are initially recognized when the Company becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus or minus, for an item not measured at fair value through profit or loss ("FVTPL"), transactions costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

(a) Classification, subsequent measurement and gains and losses

Financial Assets

On initial recognition, a financial asset is classified as measured at: amortized cost; fair value through other comprehensive income ("FVOCI") or FVTPL.

A financial asset is measured at amortized 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 financial asset can also be measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

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- (i) It is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; 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.

All financial assets not classified as measured at amortized cost or FVOCI as described above are measured at FVTPL. This includes all derivative financial assets (see Note 20.5).

Financial assets at FVTPL are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss, except when the financial asset is designated as a hedging instrument (see Note 20.2).

Financial assets at amortized cost are subsequently measured at amortized cost using the effective interest method and, if applicable, reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

Financial assets at FVOCI are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and, when applicable, impairment loss are recognized in profit or loss. Other net gains and losses are recognized in Other Comprehensive Income ("OCI"). On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.

Financial liabilities

Financial liabilities are classified as measured at amortized cost or FVTPL. A financial liability is classified as at FVTPL if it is a derivative.

Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognized in profit or loss, except when the financial asset is designated as a hedging instrument (see Note 20.2). Any gain or loss on derecognition is also recognized in profit or loss.

(b) Derecognition of financial instruments

Financial Asset

The Company derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire or when the Company transfers the rights to receive the contractual cash flows in a transaction in which either:

- (i) Substantially all of the risks and rewards of ownership of the financial asset are transferred; or
- (ii) 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.

When the Company enters into transactions whereby it transfers assets recognized in its statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets, the financial assets are not derecognized.

Financial Liabilities

The Company derecognizes a financial liability when its contractual obligations are discharged, cancelled, or expire. The Company also derecognizes 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 recognized 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 recognized in profit or loss.

Interest rate reform

When the base for determining the contractual cash flows of a financial asset or financial liability measured at amortized cost changes as a result of interest rate reform, the Company updates the effective interest rate of the financial asset or financial liability to reflect the change required by the reform.

A change in the base for determining the contractual cash flows is required by the interest rate benchmark reform if the following conditions are met: (i) the change is necessary as a direct consequence of the reform; and (ii) the new base for determining contractual cash flows is economically equivalent to the previous base - i.e., the base immediately prior to the change.

When changes were made in a financial asset or financial liability in addition to changes in the base for determining the contractual cash flows required by the interest rate benchmark reform, the Company updates first the effective interest rate of the financial asset or financial liability to reflect the change required by the interest rate benchmark reform. Then the Company applies the accounting policies for changes from the additional modifications.

(c) Offsetting

Financial assets or 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 realize the asset and settle the liability simultaneously.

20.2 Derivative 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 recognized in profit or loss.

The Company designates certain derivatives and non-derivative financial liabilities 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.

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 hedges

When a derivative is designated as a cash flow hedging instrument, the effective portion of changes in the fair value of the derivative is recognized in OCI. The effective portion of changes in the fair value of the derivative that is recognized 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 recognized 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 hedge reserve remains recognized in OCI until the expected future cash flows affect the profit or loss.

If the hedged future cash flows are no longer expected to occur, then the amounts that have been accumulated in OCI are immediately reclassified to profit or loss.

20.3 Fair Value

(a) Fair value measurement

Fair value is the price to be received in the sale of an asset or paid for the transfer of a liability in a transaction not forced between market players on the measurement date, in the main market or, in the case of a lack of one, the most advantageous market in which the Company has access on said date.

The Company recognizes derivative financial instruments at their fair value and the main sources of information are the stock exchanges, commodities and futures markets, published by Central Bank of Brazil ("BACEN"), Bloomberg and Reuters. Nevertheless, the volatility of the foreign exchange and interest rate markets in Brazil has been resulting in significant changes in future rates and interest rates over short periods of time, leading to significant changes in the fair value of derivatives 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 techniques include the use of recent arm's length transactions, reference to other instruments that are substantially the same, discounted cash flow analysis, or option pricing models that make maximum use of market inputs and rely as little as possible on information provided by the Management.

The following methods and assumptions were used to estimate the fair value:

- (i) Financial assets classified as FVTPL or FVOCI 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 Company 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. The valuation of liabilities (Note 20.4) considers the present value of expected payments, discounted by a discount rate adjusted to the risk.

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(b) Fair value 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, the Company uses Credit Valuation Adjustment (“CVA”) or Debt Valuation Adjustment (“DVA”) 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.

20.4 Non-derivative financial instruments and other liabilities: consolidated

	Note	Classification by category	Fair value hierarchy	Book value		Fair value	
				2021	2020	2021	2020
Cash and cash equivalents	5						
Cash and banks		Amortized cost		5,050,822	1,946,963	5,050,822	1,946,963
Financial investments		Fair value through profit or loss	Level 2	3,629,864	11,915,889	3,629,864	11,915,889
				8,680,686	13,862,852	8,680,686	13,862,852
Financial investments	6						
LFT's and LF's		Fair value through profit or loss	Level 2	2,337,171	2,163,042	2,337,171	2,163,042
Time deposit investments		Amortized cost		106,271	53,941	106,271	53,941
Other		Fair value through profit or loss	Level 2	1,066,113	1,425,808	1,066,113	1,425,808
				3,509,555	3,642,791	3,509,555	3,642,791
Trade accounts receivable	7	Amortized cost		7,118,452	4,677,092	7,118,452	4,677,092
Trade accounts receivable	7	Fair value through other comprehensive income	Level 2	48,508	78,116	48,508	78,116
Trade payables	15	Amortized cost		12,164,730	9,953,548	12,164,730	9,953,548
Borrowings	16	Amortized cost					
Foreign currency - Bond			Level 1	30,322,998	34,963,651	33,690,876	37,155,060
Foreign currency - other borrowings			Level 2	4,703,059	5,959,493	4,696,970	6,371,070
Local currency			Level 2	465,258	1,499,400	451,899	2,591,920
				35,491,315	42,422,544	38,839,745	46,118,050
Braskem Idesa borrowings	17	Amortized cost					
Project Finance			Level 2		7,700,072		11,486,114
Bonds			Level 1	11,939,268	4,729,587	12,197,524	4,411,259
Other			Level 2	849,859		931,141	
				12,789,127	12,429,659	13,128,665	15,897,373
Debentures	18	Amortized cost	Level 2	196,918	236,115	195,570	248,778
Loan to non-controlling shareholder of Braskem Idesa	9(a)	Amortized cost		3,646,538	3,222,493	3,646,538	3,222,493
Leniency agreement	25	Amortized cost		1,123,296	1,474,350	1,123,296	1,474,350

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20.5 Derivative financial instruments

Identification	Fair value hierarchy	Operation characteristics		Accumulated OCI (equity)		Net (Asset)/ Liability 2020	Change in fair value	Financial settlement	Net (Asset)/ Liability 2021	
		Principal exposure	Derivatives	Extrinsic value	Intrinsic value					Fair value
Non-hedge accounting transactions										
Exchange swap	Level 2	Argentine peso	Dollar			(3)	58	(52)	3	
NCE swap	Level 2	Real	Dollar			145,144	48,726	(193,870)		
Swap C3/PGP	Level 2	Propane	Propene			63,901	202,002	(251,604)	14,299	
Swap Nafta/Gasolina	Level 2	Gasoline	Napthta			7,046	13,315	(37,208)	(16,847)	
						<u>216,088</u>	<u>264,101</u>	<u>(482,734)</u>	<u>(2,545)</u>	
Hedge accounting transactions										
Dollar call and put options	Level 2	Real	Dollar	(20,223)	(64,993)	(85,216)	144,801	143,336	(202,921)	85,216
Interest rate swaps	Level 2	Libor	Fixed rates				155,775	(52,164)	(103,611)	
Dollar swap CDI	Level 2	Real	Dollar+Fixed rates			(502,508)	566,640	87,555	(151,687)	502,508
				<u>(20,223)</u>	<u>(64,993)</u>	<u>(587,724)</u>	<u>867,216</u>	<u>178,727</u>	<u>(458,219)</u>	<u>587,724</u>
Derivatives										
Assets										
Current assets							33,769		33,816	
Non-current assets							34,091		51	
Total							<u>67,860</u>		<u>33,867</u>	
Liabilities										
Current liabilities							592,251		256,131	
Non-current liabilities							558,913		362,915	
Total							<u>1,151,164</u>		<u>619,046</u>	
Total (Liabilities (-)Assets)							<u>1,083,304</u>		<u>585,179</u>	

The counterparties in these contracts are constantly monitored based on the analysis of their respective ratings and Credit Default Swaps ("CDS"). The Company has many bilateral risk mitigators in its derivative contracts, such as the possibility of depositing or requesting deposits of a guaranteed margin from the counterparties.

Derivative financial instruments held on December 31, 2021, were contracted on both internationally recognized stock exchanges and on Over the Counter ("OTC") markets with large financial counterparties under global derivative contracts in Brazil or abroad.

The Company'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, the Company assesses the need for hedging in the analysis of prospective transactions and seeks to customize the hedge and keeps it in place for the hedged period transaction.

In general, the Company elects to designate derivative financial instruments in a hedge accounting relationship when the application is expected to significantly improve in presenting the offsetting effect on the changes in the hedged items.

Hedge accounting transactions

(a.i) Dollar call and put option

As of December 31, 2021, the Company holds a total notional amount of put options of US\$1.73 billion (R\$9.65 billion), with an average strike price of US\$1/R\$4.80 and notional amount of call options of US\$1.21 billion (R\$6.75 billion) with an average strike price of US\$1/R\$6.88. The operations have a maximum term of 24 months.

Dollar-denominated future sales in Reais were designated for hedge accounting, with the months of revenue recognition always coinciding with the months of the options. The future elements of forward exchange contracts are excluded from the designation of hedge instrument and are separately recorded as hedging cost, recognized in the other comprehensive income.

(a.ii) Dollar Swap

In 2018, the Company contracted foreign exchange derivative operations (“swaps”) in the aggregate amount of R\$1.27 billion, with annual maturities over the following 5 years starting January 2019. The amount payable in January 2020 was 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 R\$/US\$ price.

Accordingly, the mark-to-market adjustment of the effective portion of the hedge will be recognized under shareholders equity in OCI and will be recognized in the financial result only upon the maturity of each installment.

(a.iii) Interest rate swap linked to LIBOR

Braskem Idesa contracted swap operations with the purpose of offsetting part of the LIBOR variation arising from the financings mentioned in Note 17.

The Company prepaid the Project Finance (Note 17) and consequently settled the LIBOR swap linked to it.

20.6 Non-derivative financial liabilities designated to hedge accounting

(a) Future exports in US\$

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 high probability of performing exports according to its business plan (see Note 22.2), which are inherent to the market and business where it operates, and (ii) the Company’s capacity to finance its liabilities in US\$, since its guidance and strategy determine the financing priority in US\$ and its Financial Policy requires maintaining a minimum level of net liabilities in US\$.

On May 1, 2013, Braskem designated non-derivative financial liabilities, denominated in US\$, as a 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.

On October 10, 2017, new financial instruments for the future sales hedging, which mature in 2028, were designated. The hedged exchange rate was US\$1/R\$3.1688.

In 2019, three new designations were made, as follows: with maturity in 2025, at an initial rate of US\$1/R\$3.6694; with maturity in 2025, at an initial rate of US\$1/R\$3.9650; and with maturity between 2030 and 2031, at an initial rate of US\$1/R\$3.9786.

The main actions carried out are detailed below:

- January 2, 2020: Designation of US\$600 million (R\$2.6 billion) of future sales with maturity in 2032 (hedged exchange rate of US\$1/R\$4.0213);
- March 31, 2020: Discontinuation of hedge accounting of U\$362 million (R\$1.9 billion) in 2020 (discontinuation rate of US\$1/R\$5.1987).

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- March 1, 2021: Designation of US\$400 million (R\$2.2 billion) of future sales with maturity in 2025 (hedged exchange rate of US\$1/R\$5.5832);
- October 31, 2021: Discontinuation of hedge accounting of US\$400 million (R\$2.3 billion) in 2024 (hedged exchange rate of US\$1/R\$5.6430).

As of December 31, 2021, the exports that were designated not yet realized and not discontinued are shown below:

	Total nominal value US\$	Total nominal value R\$
2024	288,854	1,611,950
2025	800,000	4,464,400
2028	1,250,000	6,975,626
2030	800,000	4,464,400
2031	800,000	4,464,400
2032	800,000	4,464,400
	4,738,854	26,445,177

The following table shows the changes in financial instruments designated for this hedge in the year:

					US\$
	2020	Discontinued or realized hedge (*)	Realized discontinued hedge	Designations	2021
Designated balance	5,274,854	(1,316,000)	380,000	400,000	4,738,854

(*) Out of this amount, US\$600,000 refers to hedges that were discontinued and US\$716,000 that were realized in 2021.

The Company considers these exports in the selected period (2022/2032) as highly probable, based on the following factors:

- In recent years, Braskem exported an average US\$2.4 billion per year, which represents approximately 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. Several of the products produced by the Company are primarily and recurrently intended for export.

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As of December 31, 2021, the maturities of financial liabilities designated were as follows:

	Total nominal value US\$	Total nominal value R\$
2024	288,854	1,611,950
2025	800,000	4,464,400
2028	1,250,000	6,975,626
2030	800,000	4,464,400
2031	800,000	4,464,400
2032	800,000	4,464,400
	4,738,854	26,445,177

The following table provides the balance of discontinued hedge accounting in 2021 (US\$1,837,372), which is recorded in OCI 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 R\$/US\$	Closing rate R\$/US\$	Gross nominal value
Hedge discontinued - From first to fourth quarter 2022	719,000	2.0017	3.9786	1,421,391
Hedge discontinued - From first to fourth quarter 2023	718,372	2.0017	4.2698	1,629,321
Hedge discontinued - From third to fourth quarter 2024	400,000	2.0017	5.6430	1,456,520
	1,837,372			4,507,232

Hedge instruments were contracted with subsidiaries abroad observing the existence of guarantees arising from their operations with third parties, using non-derivative financial liabilities in which the foreign subsidiary acted as an intermediary of the Company in the operations were selected, which effectively maintained the essence of the transactions. Trade payables, especially naphtha, were also considered in the transaction.

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 IFRS9. 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 financial results due to the realization of exports designated, for this hedge in 2021:

	Total nominal value US\$	Conversion rate at Inception R\$/US\$	Closing rate R\$/US\$	Gross nominal value
First quarter	150,000	2.0017	5.3747	505,946
Second quarter	186,000	2.0017	5.4739	645,837
Third quarter	180,000	2.0017	3.9786	355,842
Fourth quarter	200,000	2.0017	3.9786	395,380
	716,000			1,903,005

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The changes in foreign exchange variation and income taxes under OCI of this hedge are as follows:

	Exchange variation	Income taxes	Net effect
As of December 31, 2020	(13,095,288)	4,452,397	(8,642,891)
Exchange variation recorded in the period on OCI / Income taxes	(1,910,274)	649,493	(1,260,781)
Exchange variation transferred to profit or loss / Income taxes	1,903,004	(647,021)	1,255,983
As of December 31, 2021	(13,102,558)	4,454,869	(8,647,689)

The realizations expected for 2022 will occur in conformity with the initial designation schedule, and the exchange variation recorded in other comprehensive income will be transferred to the financial results.

In 2022, realizations will be made at the discounted cash flow rates. The quarterly schedule of hedged exports in the following quarters of 2022 follows:

	Total nominal value US\$	Total nominal value R\$
First quarter	175,000	976,588
Second quarter	208,000	1,160,744
Third quarter	186,000	1,037,973
Fourth quarter	150,000	837,075
	719,000	4,012,380

(b) Liabilities related to the Project Finance of future sales in US\$

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 US\$, as hedge instruments to protect highly probable 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 (R\$916,640) and US\$23,608 (R\$86,700), respectively, for hedge accounting.

Therefore, the impact of exchange variation on future flows of sales in US\$ derived from these sales in US\$ 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 US\$. In 2016, Braskem Idesa began to operate and sell products, including sales in US\$ in the domestic and international markets.
- The hedged flow corresponds to less than 35% of the planned revenue flow of the project over the designated period. The current amount of sales already meets the volume of designated hedge, which confirms the highly probable nature of the designated cash flow.
- The financing was obtained through a Project Finance structure and will be repaid exclusively through the cash generation of the project (Note 17).

In October 2021, the subsidiary Braskem Idesa designated US\$1,350,000 (R\$7,277,175) in future sales due to the issue of sustainability-linked bonds (Note 17) denominated in US\$.

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As of December 31, 2021, designated and unrealized sales were as follows:

	Nominal value US\$	Nominal value R\$
2023	22,500	125,561
2024	22,500	125,561
2025	22,500	125,561
2026	82,500	460,391
2030	225,000	1,255,613
2031	225,000	1,255,613
2032	525,000	2,929,763
2033	525,000	2,929,763
2034	300,000	1,674,150
2035	300,000	1,674,150
	2,250,000	12,556,126

As a result of the prepayment of the Project Finance (Note 17), all cash flows designated and not yet realized will be discontinued. The balance under other comprehensive income will be transferred to financial results in accordance with the schedule of future hedged sales.

The following table shows the changes in financial instruments designated for this hedge in the year:

	2020	Discontinued hedge	Realized discontinued hedge	New designations	US\$ 2021
Designated balance	2,371,443	(1,622,370)	150,827	1,350,000	2,250,000

As of December 31, 2021, the designated financial liabilities to hedge future sales were distributed as follows:

	Nominal value US\$	Nominal value R\$
2023	22,500	125,561
2024	22,500	125,561
2025	22,500	125,561
2026	82,500	460,391
2030	225,000	1,255,613
2031	225,000	1,255,613
2032	525,000	2,929,763
2033	525,000	2,929,763
2034	300,000	1,674,150
2035	300,000	1,674,150
	2,250,000	12,556,126

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The following table provides the amounts of hedge accounting discontinued in 2021 (US\$1,920,920), recorded in Braskem Idesa's other comprehensive income, which will be transferred to financial results 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 16, 2016	9,917	13.4541	17.9915	44,997	12,284
Hedge discontinued in December 2, 2019	622,965	13.6665	19.6113	3,703,429	1,011,036
Hedge discontinued in December 10, 2019	24,839	13.4541	19.3247	145,821	39,809
Hedge discontinued in February 18, 2020	703	13.4541	18.5712	3,598	982
Hedge discontinued in October 20, 2021	1,262,496	13.6576	20.3587	8,460,057	2,309,596
	1,920,920			12,357,902	3,373,707

The following table provides the balances of exchange variation recognized in Braskem Idesa's financial results due to the realization of sales designated and discontinued for this hedge in 2021:

	Total nominal value US\$	Conversion rate at Inception MXN/US\$	Closing rate MXN/US\$	Total nominal value MXN	Gross nominal value
First quarter	69,855	13.6534	19.9798	441,931	117,985
Second quarter	75,848	13.6515	20.5309	521,789	125,812
Third quarter	77,094	13.6518	19.8298	476,287	124,636
Fourth quarter	80,594	13.6512	20.1269	521,903	138,796
	303,391			1,961,910	507,229

The changes in foreign exchange variation and income taxes under OCI are as follows:

	Exchange variation	Income taxes	Net effect
As of December 31, 2020	(2,534,135)	760,979	(1,773,156)
Exchange variation recorded in the period on OCI / Income taxes	(204,604)	61,381	(143,223)
Exchange variation transferred to profit or loss / Income taxes	507,228	(152,168)	355,060
As of December 31, 2021	(2,231,511)	670,192	(1,561,319)

Effectiveness tests were conducted and all operations were deemed effective in reducing the dispersion of revenue from sales designated for hedge, when evaluated in Mexican Pesos.

The realizations expected for 2022 will occur in accordance with the initial designation schedule, and the exchange variation recorded in other comprehensive income will be transferred to the financial results. Below is the quarterly schedule of hedged sales in US\$ in 2022:

	Nominal value US\$	Nominal value R\$
First quarter	29,136	162,594
Second quarter	72,612	405,210
Third quarter	72,612	405,210
Fourth quarter	78,844	439,992
	253,204	1,413,006

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20.7 Credit quality of financial assets

(a) Trade accounts receivable

The Company's clients do not have risk ratings assigned by credit rating agencies. For this reason, the Company developed its credit rating methodology for all accounts receivable from clients in Brazil and abroad.

Considering the stages 1, 2 and 3 of expected credit losses, the percentage of trade accounts receivable by risk ratings was as follows:

Schedule of trade accounts receivable by credit ratings

	(%)	
	2021	2020
Minimal Risk	65.39	67.53
Low Risk	26.65	20.08
Medium Risk	6.02	10.43
High Risk	1.54	1.10
Very High Risk (i)	0.40	0.86

(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 the Company and pay in advance.

The calculation below considers the accounts receivable figure overdue more than 30 days, divided by consolidated gross revenue in the last 12 months:

	Last 12 months	
	Domestic market	Export market
December 31, 2021	0.01%	0.08%
December 31, 2020	0.05%	0.14%

For the export market, approximately 80% of the portfolio has guarantees, consisting primarily of credit insurance. For the domestic market, approximately 23% of the portfolio has guarantees, mainly suretyships by the partners of counterparties, complemented by credit insurance.

(b) Cash and cash equivalents and financial investments

In order to determine the credit ratings of counterparties 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.

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	<u>2021</u>	<u>2020</u>
Financial assets with risk assessment		
AAA	6,858,500	13,639,273
AA+	107,444	412,612
AA	816,408	735,755
AA-	73,888	199,405
A+	2,919,276	1,336,334
A	107,057	53,941
A-	236,969	91,487
BBB+	894	982,225
BBB	1,026,232	49
BBB-	554	
BB+	50	
BB	1,479	
	<u>12,148,751</u>	<u>17,451,081</u>
Financial assets without risk assessment		
Quotas of investment funds in credit rights	1,721	
Other financial assets with no risk assessment	(i) 39,769	54,562
	<u>41,490</u>	<u>54,562</u>
Total	<u>12,190,241</u>	<u>17,505,643</u>

(i) Investments approved by the Management, in accordance with the Financial Policy.

20.8 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

As of December 31, 2021, the main risks that can affect the value of Company's financial instruments are:

- US\$/R\$ exchange rate;
- LIBOR floating interest rate;
- IPCA inflation rate;
- Selic interest rate; and
- CDI interest rate.

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 impact on the fair value adjustment that could result in one month as from December 31, 2021, with a probability of 5%, and under normal market conditions, was estimated by the Company at US\$23,657 (R\$132,018) for put options and call options (Note 20.5(a.i)) and US\$26,082 (R\$145,551) for the US\$ swap (Note 20.5(a.ii)).

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(c) Selection of scenarios

The Focus Market Readout published by the BACEN was used to create the probable scenario for the US\$/R\$ exchange rate, the Selic interest rate and the CDI interest rate as of December 31, 2021.

According to the Market Readout, at the end of 2022, US\$1 will remain at approximately R\$5.60, while the Selic rate should reach 11.50% p.a. at the end of the period. The Selic rate is used as benchmark for sensitivity analysis of the CDI rate.

Since the Market Readout survey does not include consensus forecasts for the LIBOR rate, the projection of the U.S. Federal Reserve for the Federal Funds rate at the end of the year was used, published in December 2021, in comparison with the current level of the Federal Funds rate on December 31, 2021. The forecasts point to the current level of the Federal Funds rate remaining unchanged, which means that the variation in the probable scenario for LIBOR in the sensitivity analysis is null for all financial instruments indexed to LIBOR.

For each variable analyzed in the sensitivity analysis, the Company has considered estimating annualized variations corresponding to 1 and 3 standard deviations of monthly averages of the last five years. They are equivalent to approximately 15.866% and a 0.135% probability of occurrence for the reasonably possible and possible scenarios, respectively. Then, these changes are applied to the current market levels of each variable.

Effects of COVID-19

The assumptions of the future value adopted in the construction of the probable scenario and the current value of each variable in this analysis are referenced to the reporting date December 31, 2021. Given the instability in the current economic scenario caused by the COVID-19 pandemic, interest rates and foreign exchange rates are affected daily. The Company's gains and losses in these probable stress scenarios are analyzed by increasing each variable according to the aforementioned.

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The sensitivity values in the table below are the changes in the value of the financial instruments in each scenario:

Instrument / Sensitivity	Exposure value as of December 31, 2021	Additional variations to the book value		
		Probable 1US\$ = R\$5,60	Reasonably possible 1US\$ = R\$6,32	Gain (losses) Possible 1US\$ = R\$7,81
Real/US\$ exchange rate				
Bonds	(42,262,266)	(147,677)	(5,622,868)	(16,868,605)
Export prepayments	(46,249)	(162)	(6,153)	(18,460)
Financings for investments in plants	(2,445,937)	(8,547)	(325,425)	(976,274)
SACE	(1,824,276)	(6,375)	(242,714)	(728,143)
Dollar call and put options (i)	(85,217)	(7,729)	(252,319)	(1,458,259)
Dollar swap x CDI	(502,508)	(8,388)	(212,589)	(632,005)
MONFORTE	(266,403)	(931)	(35,444)	(106,332)
Nexi	(120,200)	(420)	(15,992)	(47,977)
Other	(849,859)	(2,970)	(113,071)	(339,214)
Financial investments abroad	5,936,290	20,743	789,806	2,369,417
Libor floating interest rate				
Export prepayments	(46,249)	(19,280)	(1,373)	(4,118)
Nexi	(120,200)	(96,406)	(6,864)	(20,591)
SACE	(1,824,276)	(1,146,782)	(81,646)	(244,939)
MONFORTE	(266,403)	(86,426)	(6,153)	(18,460)
Financings for investments in plants	(2,445,937)	(1,448,186)	(103,105)	(309,316)
Other	(849,859)	(289,804)	(20,633)	(61,899)
CDI interest rate				
Debentures	(47,109)	(3,833)	(4,508)	(14,472)
Financial investments in Brazil	4,480,620	95,609	111,898	335,975
IPCA interest rate				
Debentures	(150,352)	24,477	(7,509)	(23,180)
BNDES	(435,778)	241,788	(87,535)	(291,961)
BNB/ FINEP/ FUNDES/FINISA/FINAME/FNE	(4,616)	830	(260)	(809)
Selic interest rate				
Leniency agreement	(1,085,468)	(36,697)	(42,993)	(130,903)
Dollar swap x CDI	(502,508)	16,752	20,802	77,279

(i) The Company is in the short position of a possible counterparty call.

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21 Taxes payable

	<u>2021</u>	<u>2020</u>
Brazil		
IPI	131,290	125,338
ICMS	485,302	403,422
PIS and COFINS	33,516	284,944
Other	46,117	43,560
Other countries		
Value-added tax	229,571	16,027
Tax on financial income	346,817	
Other		80,768
Total	<u>1,272,613</u>	<u>954,059</u>
Current liabilities	1,012,116	952,689
Non-current liabilities	260,497	1,370
Total	<u>1,272,613</u>	<u>954,059</u>

22 Income taxes

Income taxes comprises current and deferred taxes. It is recognized in profit or loss except to the extent that it relates to items directly recognized in other comprehensive income.

22.1 Current income taxes

Current income taxes comprise the expected tax payable or receivable on the taxable income or loss for the year and any adjustment to the tax payable or receivable in respect of previous years. The amount of current tax payable or receivable is the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted at the reporting date. Current tax also includes any tax arising from dividends.

Current tax assets and liabilities are offset only if certain criteria are met.

As of December 31, 2021, the amount presented as recoverable income taxes under current assets is R\$1,189,812 (2020: R\$1,547,916). Out of this total, R\$984.4 million (2020: R\$982 million) is tax recoverable recorded at the subsidiary Braskem America arising from the tax program offered by the U.S. government to aid and support U.S. companies in response to the economic impacts of COVID-19.

(a) Exclusion of inflation adjustment by Selic (economy's basic interest rate) on undue tax payments from taxable income

In July 2010, Braskem and the merged companies in previous years, filed lawsuits claiming exception from the levying of Brazilian income taxes (hereinafter "IR/CSL") on amounts they received as interest on late payment, since they do not represent any equity increase. On September 24, 2021, through Special Appeal 1.603.187, the Federal Supreme Court ("STF") declared the levy of IR/CSL on amounts updated by the Selic rate received for repetition of undue payments unconstitutional.

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Braskem benefited from this decision in the amount of R\$501 million referring to calendar years from 2005 onwards. Deferred tax assets amounting to R\$68 million were recognized for the periods in which tax losses increased.

(b) Exemption of IR/CSL on ICMS tax incentives and benefits

In October 2021, the Company obtained a preliminary injunction to exclude the ICMS tax incentives and benefits applicable to its operations, granted by the governments of States and the Federal District, from the income tax calculation base as from 2021, which results in a reduction of cash outlays on the calculation income tax in 2021 of R\$1.1 billion.

This decision is grounded in the argument defended by the Company that incentives and benefits are investment subsidies, in accordance with article 30 of Federal Law 12.973/2014 and Complementary Law 160/2017, and consequently are not taxable for income tax purposes. The matter will be evaluated as the lawsuit advances, becoming definitive after a final and non-appealable decision.

Given the initial phase of the lawsuit and the diversity of incentives and benefits granted by the States, based on its assessment and that of its external legal advisors, the Company considers the issue an uncertain tax treatment; therefore, the amount of R\$1.1 billion remains recorded as taxes payable.

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(c) Reconciliation of effective tax rate

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Profit (loss) before income taxes	17,961,023	(9,683,784)	(4,603,068)
Nominal income taxes computed based on Brazilian statutory corporate tax rates (34%)	(6,106,748)	3,292,487	1,565,043
Permanent adjustments to the IR and CSL calculation basis			
Income taxes on equity in results of investees	1,578	6,595	3,469
Thin capitalization (i)	(6,628)	(695,741)	(221,337)
Tax benefits (Sudene and PAT) (ii)	137,338		
Exclusion of inflation adjustment by Selic on undue tax payments from taxable income 22.1(a)	501,382		
Effect of the refund of Braskem America's tax benefit		(737,841)	
Effect from the retrospective tax rate on bonus depreciation of Braskem America (iii)		334,460	
Different jurisdictional taxes rates for companies abroad and tax basis (iv)	1,939,882	994,811	293,647
Fine in leniency agreement			(25,390)
Taxes on dividends distribution	(265,454)	(131,240)	
Other permanent adjustments	(200,753)	(395,053)	347,238
Effect of income taxes on results of operations	(3,999,403)	2,668,478	1,962,670
Breakdown of income taxes:			
Current income taxes			
Current year	(3,834,437)	(52,830)	(251,641)
Changes in estimates related to prior years			22,696
	(3,834,437)	(52,830)	(228,945)
Deferred income taxes			
Origination and reversal of temporary differences	(246,294)	2,677,328	2,062,501
Tax losses (IR) and negative base (CSL)	81,328		129,114
Recognition of previously unrecognised deductible temporary differences		43,980	
	(164,966)	2,721,308	2,191,615
Total	(3,999,403)	2,668,478	1,962,670
Effective rate	22.3%	27.6%	42.6%

(i) Includes the amount from the adjustment of interest rates in financial operations with subsidiaries in accordance with sub-capitalization tax rules.

(ii) SUDENE is a tax benefits granted by the Brazilian Government to the companies. The tax benefit granted by the Northeast Development Department ("SUDENE") is calculated based on the profit from exploration of the incentivized activity, with a period of utilization of 10 years. The Worker's Food Program ("PAT") is a tax incentive program to companies that provide food to workers based on criteria established by the Ministry of Labor.

(iii) Considering Universal Basis Taxation ("TBU"), the tax refund provided by U.S. Government affects the tax calculation of Braskem arising from the offsetting of Income Tax and Social Contribution Tax in the years of use of the bonus depreciation benefit.

(iv) Besides the differences on tax basis calculation, it includes the impact from the difference between Brazilian tax rate (34%) and the tax rates in countries where the subsidiaries abroad are located, as follows:

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	<u>Official rate - %</u>
<u>Headquarters (Country)</u>	<u>2021</u>
Braskem Alemanha	Germany 31.11
Braskem America e Braskem America Finance	USA 24.09
Braskem Argentina	Argentina 25.00
Braskem Chile	Chile 35.00
Braskem Holanda, Braskem Holanda Finance and Braskem Holanda Inc	Netherlands 25.00
Braskem Idesa, Braskem Idesa Serviços, Braskem México	
Braskem México Serviços, Braskem México Proyectos and Terminal Química	Mexico 30.00
Braskem India	India 30.00

22.2 Deferred income taxes

Deferred income taxes are recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Deferred tax assets are recognized for unused tax losses and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be used. Future taxable profits are determined based on the reversal of relevant taxable temporary differences. If the amount of taxable temporary differences is insufficient to recognize a deferred tax asset in full, then future taxable profits, adjusted for reversals of existing temporary differences, are considered, based on the business plans for the Company.

The measurement of deferred taxes reflects the tax consequences that would follow from how the Company expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities. Annually, the Company revises its projection of taxable income based on its Business Plan.

The Business Plan is prepared annually by the Executive Board, and its main variables include projections for the prices of the products produced by the Company, the prices of raw materials, the growth in gross domestic product of each country in which the Company operates, exchange rate variation, interest rates, inflation rates and fluctuations in supply and demand for inputs and finished goods.

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.

Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized; such reductions are reversed when the probability of future taxable profits improves. Unrecognized deferred tax assets are reassessed at each reporting date and recognized to the extent that it has become probable that future taxable profits will be available against which they can be used.

Deferred tax assets and liabilities are offset only if certain criteria are met.

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(a) Movement in deferred tax balances

	As of December 31, 2019	Impact on the P&L	Impact on the equity	As of December 31, 2020	Impact on the P&L	Other comprehensive income	As of December 31, 2021
Assets							
Tax losses carryforward	2,150,692	1,127,492		3,278,184	76,532		3,354,716
Goodwill amortized	21,677	(15,157)		6,520	(4,061)		2,459
Exchange variations	1,132,351	2,685,264		3,817,615	462,447		4,280,062
Temporary differences	2,357,267	2,639,070		4,996,337	(145,999)		4,850,338
Business combination	85,539	(29,328)		56,211	(29,327)		26,884
Tax credits	49,833	27,199		77,032	(77,032)		
Other	62,288	(16,922)		45,366	4,462		49,828
	5,859,647	6,417,618		12,277,265	287,022		12,564,287
Liabilities							
Amortization of goodwill based on future profitability	722,685	(463)		722,222	2,875		725,097
Tax depreciation	1,903,027	1,834,142		3,737,169	439,781		4,176,950
PIS/COFINS credit: exclusion of ICMS in basis of calculation					331,479		331,479
Temporary differences	432,587	(274,355)		158,232	(69,239)		88,993
Present value adjustment and amortized cost	11,276	68,644		79,920	74,771		154,691
Hedge accounting		1,788,568	(1,788,568)		(234,402)	234,402	
Amortization of fair value adjustments on the assets from the acquisition of Braskem Qpar	393,773	(114,452)		279,321	(46,888)		232,433
Long term incentive plan - LTI		(4,823)	4,823		15,906	(15,906)	
Health care		(8,020)	8,020		5,710	(5,710)	
Other	6,739	407,069	(408,981)	4,827	(68,005)	68,004	4,826
	3,470,087	3,696,310	(2,184,706)	4,981,691	451,988	280,790	5,714,469
Net	2,389,560	2,721,308	2,184,706	7,295,574	(164,966)	(280,790)	6,849,818
Presentation in the balance sheet:							
Non-current assets	2,662,596			8,529,972			8,257,252
(-) Non-current liabilities	273,036			1,234,398			1,407,434

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(b) Offset for the purpose of presentation in the consolidated statement of financial position

				2021
				Headquarters
				(Country)
				Tax calculation
				Offsetting
				Balance
Assets				
Braskem S.A.	Brazil	8,841,886	(2,496,637)	6,345,249
Braskem Argentina	Argentina	3,271		3,271
Braskem America	USA	294,328	(294,328)	
Braskem Alemanha	Germany	44,417		44,417
Braskem Chile	Chile	92		92
Braskem Idesa	Mexico	3,282,125	(1,506,541)	1,775,584
Braskem Idesa Serviços	Mexico	26		26
Braskem México Serviços	Mexico	2,502		2,502
Braskem México	Mexico	16,181		16,181
Cetrel	Brazil	40,434	(7,586)	32,848
DAC	Brazil	39,025	(1,943)	37,082
		12,564,287	(4,307,035)	8,257,252
Liabilities				
Braskem S.A.	Brazil	2,496,637	(2,496,637)	
Braskem America	USA	1,701,762	(294,328)	1,407,434
Braskem Idesa	Mexico	1,506,541	(1,506,541)	
Cetrel	Brazil	7,586	(7,586)	
DAC	Brazil	1,943	(1,943)	
		5,714,469	(4,307,035)	1,407,434
				2020
				Headquarters
				(Country)
				Tax calculation
				Offsetting
				Balance
Assets				
Braskem S.A.	Brazil	8,626,703	(2,090,002)	6,536,701
Braskem Argentina	Argentina	2,850		2,850
Braskem America	USA	293,942	(293,942)	
Braskem Alemanha	Germany	47,277		47,277
Braskem Chile	Chile	287		287
Braskem Idesa	Mexico	3,213,624	(1,356,693)	1,856,931
Braskem México Serviços	Mexico	14,765		14,765
Braskem México	Mexico	8,503		8,503
Cetrel	Brazil	23,645	(5,269)	18,376
DAC	Brazil	45,669	(1,387)	44,282
		12,277,265	(3,747,293)	8,529,972
Liabilities				
Braskem S.A.	Brazil	2,090,002	(2,090,002)	
Braskem America	USA	1,528,340	(293,942)	1,234,398
Braskem Idesa	Mexico	1,356,693	(1,356,693)	
Cetrel	Brazil	5,269	(5,269)	
DAC	Brazil	1,387	(1,387)	
		4,981,691	(3,747,293)	1,234,398

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23 Sundry provisions

	Note	2021	2020
Provision for environmental damages	(a)	1,035,426	602,490
Provision for customers rebates	(b)	101,253	123,465
Other		152,584	148,253
Total		1,289,263	874,208
Current liabilities		465,051	362,407
Non-current liabilities		824,212	511,801
Total		1,289,263	874,208

(a) Provision for recovery of environmental damages

The provision for recovery of environmental damages is estimated based on current legal and constructive requirements, technology, price levels and expected remediation plans.

Realized costs and cash outflows may differ from current estimates due to the changes in laws and regulations, public expectations, prices, new findings by the ongoing studies and analysis of local conditions and changes in remediation technologies.

The time and value of future expenses related to environmental liabilities are reviewed annually, as well as the interest rate used for discounting them to present value.

The Company operates in several countries and is subject to different environmental laws and regulations inherent to the operations and activities areas. Remediation expenses are incurred during several years due to their complexity and extension. New information on sites, new technologies or future developments, such as involvement in investigations by regulatory agencies, may require that we reevaluate our potential exposure related to environmental matters.

The provision is recorded based on the areas in which remediation actions are necessary. Due to the high complexity in identifying potential environmental impacts, alternative solutions and recovery costs estimations, these estimates can only be made with reasonable assurance after the completion of all phases of the process to identify and investigate environmental liabilities, which are in accordance with the phases and protocols established by environmental agencies.

The Company monitors the areas under study to capture any new facts and changes in circumstances that change the prognosis of actions to be adopted and consequently affect the estimation of provision for environmental remediations.

In 2021, the increase in the provision is mainly due to the implementation of new techniques to remediate the environmental damage.

(b) Rebates

Some sales agreements of the Company 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.

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(c) Changes in provisions

	Recovery of environmental damage	Rebate	Other	Total
December 31, 2019	365,155	84,110	55,941	505,206
Additions, monetary adjustments and exchange variation	306,274	150,132	119,831	576,237
Write-offs through usage and payments	(68,939)	(110,777)	(27,519)	(207,235)
December 31, 2020	602,490	123,465	148,253	874,208
Additions, monetary adjustments and exchange variation	576,086	144,710	114,395	835,191
Write-offs through usage and payments	(143,150)	(166,922)	(110,064)	(420,136)
December 31, 2021	1,035,426	101,253	152,584	1,289,263

24 Provisions for legal proceedings and contingent liabilities

Braskem is a defendant in lawsuits and administrative proceedings arising from the normal course of its business. The Management, based on its assessment and that of its external legal advisors, classifies these proceedings in terms of probability of loss as follows:

Probable chance of loss: present obligation for which there is a higher probability of loss than of a favorable outcome. For these claims, a provision is recognized based on an estimated amount of the obligation that reflects the expected outflow of resources (see Note 24.1).

Possible chance of loss: present obligation for which the possibility of loss is greater than remote and less than probable. For these claims, the Company does not recognize a provision and discloses the most significant matters (see Note 24.2).

The 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 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.

In addition, the Company also is a plaintiff to several lawsuits. In these cases, the Company discloses the contingent asset when the receipt of economic benefits is probable. 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 financial statements of the Company due to such proceedings.

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24.1 Claims with probable chance of loss

	<u>2021</u>	<u>2020</u>
Labor claims	(a) 268,758	280,066
Tax claims	(b)	
IR and CSL	61,946	61,342
PIS and COFINS	299,202	291,783
ICMS	331,094	319,851
Other tax claims	22,857	19,759
	<u>715,099</u>	<u>692,735</u>
Corporate claims	94,826	126,057
Civil claims and other	75,147	52,229
	<u>1,153,830</u>	<u>1,151,087</u>

(a) Labor claims

As of December 31, 2021, the provision is related to 515 labor claims, including occupational health and security cases (2020: 529 claims). The Management, based on its assessment and that 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

As of December 31, 2021, the main claims are the following:

(i) Non-cumulative PIS and COFINS

The Company is charged amounts arising from compensation of Non-Cumulative PIS and COFINS tax credits in the years 2005, 2010 and in the period from 2012 to 2016 that were not approved by the Brazilian Federal Revenue Service (*Secretaria da Receita Federal do Brasil*, hereinafter "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.

As of December 31, 2021, the balance of this provision was R\$202,737 (2020: R\$197,707). The Management, based on its assessment and that of its external legal advisors and considering the precedents on the matters at the Administrative Council of Tax Appeals ("CARF"), estimates that the administrative procedures will be concluded in 2025.

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(ii) PIS and COFINS taxes

The Company is assessed for the payment of these taxes in many legal and administrative 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 9.718/1998;
- 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.

As of December 31, 2021, the balance of this provision was R\$67,403 (2020: R\$65,041). Management estimates the administrative procedures will conclude in 2023 and the court decisions in 2030.

Guarantees were offered for court claims in the form of bank guarantee and finished products, which, together, cover the amount of claims.

(iii) ICMS tax on interstate purchases

In 2009, the merged company Braskem Qpar was assessed by the Finance Department of the State of São Paulo for the payment of ICMS in view of allegedly committing the following violations:

- undue use of ICMS tax credits in the amount of R\$58,164, due to the recording of credits indicated in the invoices for the sale of “acrylonitrile,” “methyl acrylate” and “methyl methacrylate,” issued by Acrinor Acrilonitrila do Nordeste S.A. and Proquigel Química S.A., since the products were to be exported, and were therefore 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.

After ending the discussions in the administrative sphere in 2015 with the partial reduction in contingency, the Company proposed lawsuits to continue the discussion.

As of December 31, 2021, the balance of this provision was R\$313,380 (2020: R\$305,747). The Management, based on its assessment and that of its external legal advisors, estimates the legal procedures will conclude in 2026. These lawsuits are secured by a guarantee insurance.

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(c) Changes in claims with probable chance of loss

	<u>Labor claims</u>	<u>Tax claims</u>	<u>Corporate claims</u>	<u>Civil claims and other</u>	<u>Total</u>
December 31, 2019	315,437	672,088	118,485	45,514	1,151,524
Additions, inflation adjustments and exchange variation	140,386	130,302	10,242	32,207	313,137
Payments	(42,174)	(21,649)		(9,166)	(72,989)
Reversals (*)	(133,583)	(88,006)	(2,670)	(16,326)	(240,585)
December 31, 2020	280,066	692,735	126,057	52,229	1,151,087
Additions, monetary adjustments and exchange variation	172,574	46,849	14,357	76,111	309,891
Payments	(70,968)	(3,659)	(40,109)	(2,770)	(117,506)
Reversals (*)	(112,914)	(20,826)	(5,479)	(50,423)	(189,642)
December 31, 2021	268,758	715,099	94,826	75,147	1,153,830

(*) A provision reversal occurs when the probability of loss or the value attributed to the lawsuit changes, or the suit is closed with a cash disbursement lower than the provisioned amount.

24.2 Contingent liabilities

Schedule of claims with probable chance of loss

	<u>Note</u>	<u>2021</u>	<u>2020</u>
Tax claims	(a)	17,224,429	12,156,030
Civil claims - Alagoas	26	2,614,344	796,712
Civil claims - Other	(b)	737,083	708,120
Labor claims	(c)	763,555	663,448
Environmental claims	(d)	571,057	507,973
Social security claims	(e)	398,783	326,730
Other lawsuits	(f)	337,807	286,643
Total		22,647,058	15,445,656

(a) Tax claims

(i) IR/CSL: Charges with goodwill amortization

The subsidiaries Cetrel and DAC were notified by the RFB, in December 2020 and June 2021, respectively, for the deduction of tax amortization charges on goodwill arising from the acquisition of equity interests in 2012.

The Management, based on its evaluation and that of its external legal advisors, considers it is probable that a taxation authority will accept this uncertain tax treatment since the ownership interest was acquired (i) for an amount determined on an arm's length basis, (ii) as effective payment, and (iii) for business purposes arising from the allocation of effluent and waste treatment assets in the environmental segment. The cases are pending in the administrative sphere.

As of December 31, 2021, the updated amount of these claims was R\$179,370 (2020: R\$42,433).

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(ii) IR/CSL: Exchange variation on naphtha imports

In December 2017 and December 2020, 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, related to calendar years 2012 and 2015, respectively. Regarding calendar year 2012, disallowances led to the adjustment of tax losses and social contribution tax loss carryforwards. For 2015, a tax credit was considered along with a qualified fine corresponding to 150% of the tax deficiency notice amount.

The tax deficiency notice issued in December 2020 also resulted in partial disallowance of the cost of naphtha imported from its subsidiary abroad, in an amount corresponding to the profit margin calculated by the subsidiary in the naphtha resale operations, carried out in 2014 and 2015.

As of December 31, 2021, this uncertain tax treatment is R\$1.1 billion (2020: R\$1 billion). The Management, based on its evaluation and that of its external legal advisors, estimates that: (i) it is probable that a taxation authority will accept this uncertain tax treatment given the regularity of using trading in import operations; the exchange variation expense is accessory to the principal and, therefore, deductible; fluctuations in exchange rates are not predictable; there are errors in the calculation of the subsidiary's profit margin; (ii) the administrative proceedings will be concluded in 2026.

(iii) ICMS: Credit reversal on output with tax deferral

In July and December 2020, the Company was notified, by the State of Alagoas, due to the lack of ICMS tax payment arising from the alleged lack of reversal of the tax credited in operations prior to outflows with tax deferral. As of December 31, 2021, the value of these cases was R\$587 million (2020: R\$569 million).

The Management, based on its evaluation and that of its external legal advisors, estimates that: (i) the probability of loss is possible due to court precedents and evidence produced; and that the deferral is not a tax benefit and the establishment notified does not receive incentives, therefore the credit reversal is not necessary (whose maintenance, in addition, is assured by the legislation in force on said date); (ii) the administrative proceedings should be concluded by 2025.

(iv) IR/CSL: Foreign earned income – Braskem America

In July 2020, the Company was notified by RFB for not subjecting to taxation the income earned abroad by its subsidiary Braskem America Inc. in fiscal year 2015, given the no consideration of the tax credits obtained by this foreign subsidiary. The notification also involves allegations of undue offset of social contribution tax loss carryforwards for fiscal year 2016, due to the nonexistence of balances, given the disallowances arising from tax deficiency notices and the applications under tax amnesty programs.

Based on its evaluation and that of its external legal advisors, the Management considers it is probable that a taxation authority will accept this uncertain tax treatment since, In March 2021, the objection filed against this claim was upheld in the lower administrative court.

As of December 31, 2021, the updated amount of the taxes and tax effects from disallowances of income tax losses and social contribution tax loss carryforwards under said tax deficiency notice was R\$271 million (2020: R\$279 million).

(v) IR/CSL: Foreign earned income - Braskem Holanda

The Company received a deficiency notice from RFB, referring to fiscal years 2015 and 2016, stating its disagreement with applying the Agreement between Brazil and the Netherlands to avoid double taxation, which establishes that Dutch companies' profits cannot be taxed in Brazil.

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The Management, based on its evaluation and that of its external legal advisors, understands that the profits earned by its subsidiary abroad are exempt from taxation in Brazil under Article 7th of said Agreement between Brazil and the Netherlands to avoid double taxation. It is pending in the administrative sphere. As of December 31, 2021, the amount of the uncertain tax treatment is R\$8.8 billion (2020: R\$3.7 billion), including fiscal years already filed and non-filed.

(vi) PIS and COFINS: taxation of liability reductions settled in connection with the installment plan under Provisional Executive Order (“MP”) 470/2009

The Company received notice for not applying to PIS and COFINS taxes the reductions for fines and interest, in view of the adoption of the installment plan offered under MP 470/2009.

As of December 31, 2021, the updated value of this proceeding amounted to R\$910 million (2020: R\$892 million).

The Management, based on its evaluation and that of its external legal advisors, estimates that the probability of loss is possible since the liability reductions arising from the amnesty and tax installment program, offered by the Federal Government, are not income taxable by PIS and COFINS and, even if so, should be considered financial income taxable, at the time, at zero tax rate.

The Management, based on its evaluation and that of its external legal advisors, estimates that this administrative proceeding should be concluded by 2023.

(vii) IR/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 2002, Braskem foundation was fulfilled due to petrochemical assets disposals from several business groups.

After definitive reductions made in the administrative instance, as of December 31, 2021, the updated contingency is R\$1.1 billion (2020: R\$1 billion).

The Management, based on its evaluation and that of its external legal advisors, estimates that: (i) it is probable that a taxation authority will accept this uncertain tax treatment since the equity interests were acquired with effective payment, a business purpose and the participation of independent parties; (ii) these administrative proceedings should be concluded by 2023, while the only current court proceeding should be concluded by 2030.

The Company offered a performance bond that covers the total amount involved in the court proceedings.

(viii) 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) charges on transmission of electricity; (ii) freight for storage of finished products; (iii) extemporaneous credits from various acquisitions; (iv) property, plant and equipment; and (v) Prodesin. These matters have already been contested at the administrative and court level and comprise the period from 2006 to 2017.

As of December 31, 2021, the amount under discussion of these notices is R\$1,334 (2020: R\$1,266).

The Management, based on its assessment and that of its external legal advisors, estimates that: (i) the administrative proceedings should be concluded by 2026, while the lawsuits should be concluded by 2031; and (ii) in the event of an adverse ruling for the Company, which is not expected, these contingencies could be settled for up to 50% of the amounts in dispute. These estimates are based on the probability of loss of the Company's defense thesis, based on previous administrative and court precedents.

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The Company offered a performance bond that covers the total amount involved in the court proceedings.

(ix) IR/CSL: Unlimited offsetting

In December 2009 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 and August 2013.

As of December 31, 2021, the updated value of the contingency amounted to R\$430 million (2020: R\$352 million).

The Management, based on its evaluation and that of its external legal advisors, estimates that: (i) it is probable that a taxation authority will accept this uncertain tax treatment since the noncompliance with the 30% limit mentioned above was exclusively due to the last Corporate Income Tax Statements ("DIPJ") submitted by the Company, which was dissolved due to its merger into Braskem; (ii) the court proceedings should be concluded by 2031.

The Company offered performance bonds that cover the total amount involved in the court proceeding.

(x) 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, which materialized in administrative and court proceedings. The matters assessed as possible losses include the following topics:

- ICMS credit on the acquisition of assets that are considered by tax authority 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 not necessarily be an integral part of the finished product, and can 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 tax authority 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; and
- nonpayment of ICMS tax on charges related to the use of the electricity transmission system in operations conducted in the Free Market of the Electric Power Trading Chamber.

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As of December 31, 2021, the updated value of these proceedings was R\$756 million (2020: R\$883 million).

The Management, based on its assessment and that of its external legal advisors, estimates that: (i) these administrative proceedings are expected to be terminated in 2026, while the court proceedings are expected to be terminated in 2031; 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 performance bonds that cover the total amount involved in the current court proceedings.

(xi) PIS and COFINS sundry

The Company is involved in collection actions related to PIS and COFINS assessments in the administrative and judicial courts, with possible probability of loss, 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-Decrees – Federal Laws 2.445 and 2.449; and (v) the COFINS tax arising from the undue payment or payment in excess.

As December 31, 2021, the updated amounts involved of these assessments was R\$131 million (2020: R\$130 million).

The Management, based on its assessment and that 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 guarantees that cover the total amount involved in the current court proceedings.

(xii) IRRF and IR/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.

As of December 31, 2021, the updated 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\$142 million (2020: R\$139 million).

It is probable that a taxation authority will accept this uncertain tax treatment 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 RFB 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 RFB 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 Management, based on its evaluation and that of its external legal advisors, estimates that this administrative proceeding should be concluded by 2023.

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(xiii) Isolated fine – failure to ratify DCOMPS

In 2016 through 2021, 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 IR/CSL taxes; (iii) REINTEGRA credits; and (iv) other credits, for offsets not approved by the RFB.

As of December 31, 2021, the updated value of these deficiency notices amounted to R\$310 million (2020: R\$345 million).

The Management, based on its evaluation and that of its external legal advisors, estimates that: (i) the probability of loss is possible, due to favorable court precedents, especially in the judicial sphere; (ii) these administrative proceedings should be concluded by 2026.

(xiv) IR/CSL: Negative Balance – Offset

The Company claims, at the administrative and judicial level, that RFB denies offsets seeking to settle federal taxes with credits arising from a negative balance of IR/CSL.

As of December 31, 2021, the updated value of the taxes whose offset was not approved amounted to R\$173 million (2020: R\$182 million).

The Management, based on its evaluation and that of its external legal advisors, estimates that: (i) it is probable that a taxation authority will accept this uncertain tax treatment given the court precedents and the evidence produced in records; (ii) the proceedings at the administrative level should be concluded by 2024, while the proceedings at the judicial level should be concluded by 2023.

The Company offered guarantees that cover the total amount involved in the current court proceedings.

(xv) PIS and COFINS: Cide-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.

As of December 31, 2021, the updated value of these cases was R\$118 million (2020: R\$116 million).

The Management, based on its evaluation and that of its external legal advisors, estimates that this proceeding should be concluded by 2030.

The Company offered guarantee that cover the total amount involved in the current court proceedings.

(b) Civil claims

(i) 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. The lawsuit is pending judgment.

As of December 31, 2021, the claims prepared by the other party amounted to R\$265 million (2020: R\$223 million).

(ii) 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 updated amount of R\$175 million (2020: R\$144 million).

Braskem filed its defense in December 2020. The defense of the other defendants and the subsequent decision of the judge is pending. The Management, based on its assessment and that of its external legal advisors, believes that the lawsuit possibly will be dismissed within a period of eight years.

(c) Labor claims

Lawsuits filed by former team members and contractors who provided services to Braskem, and are chiefly related to overtime, wage parity and other amounts established in labor laws.

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(d) Environmental claims

Public-Interest Civil Action filed in September 2011 by the Local Government of the city Ulianópolis in Pará State against Braskem and other companies, claiming reparation and/or remediation of environmental damages allegedly resulting from the delivery of waste to the Brazilian Bauxite Company, which had not disposed of it properly, polluting an area of the Municipality of Ulianópolis, as well as the joint and several liability of these companies for the payment of indemnification for environmental damage in the updated amount of R\$325 million (2020: R\$277 million). The companies filed their defense and the judge's decision is pending.

The Management, based on its assessment and that of its external legal advisors, believes that the lawsuit possibly will be dismissed within a period of eight years.

(e) Social security claims

In 2012, the Company withdrew sponsorship of the plans Petros Copesul and Petros PQU, whose private pension entity was Petros, remaining the obligation established under the Sponsorship Withdrawal Instrument to pay the mathematical reserves of Members, pursuant to Complementary Law 109/2001, which was met in 2015. However, after the payment, several beneficiaries filed individual and collective action regarding various claims, such as: (i) Difference of the Individual Withdrawal Fund; (ii) Change in data base; (iii) age limiter; (iv) 90% of supplementation; (v) Return of Contributions; (vi) Difference in Savings Account Reserve; (vii) Objection against legality of Sponsorship Withdrawal.

Currently, this portfolio is composed of 783 active cases deemed as possible in terms of financial contingency, representing an estimated disbursement of R\$332 million (2020: R\$327 million).

(f) Other lawsuits

(i) Incentivized Preferred Shares

The Company currently is subject to the liquidation of an award related to a lawsuit filed in 1988, whose decision required Polialden Petroquímica S.A., a company merged into Braskem, to pay certain non-controlling shareholders that hold preferred shares in Polialden the distribution of the remaining net profit of the company.

The liquidation of award aims to determine the value of the dividends to be paid in accordance with the terms of the decision. The process is awaiting the start of the expert evidence.

As of December 31, 2021, based on Management's evaluation and that of its external legal advisors, the Company recorded a provision of R\$19 million (2020: 16.9 million) for matters whose an outflow of resources is probable. The amount evaluated as possible loss is R\$238 million, and the total amount of the lawsuit is R\$257 million (2020: R\$206 million).

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(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); (ii) the assessment of premium for RAT in view of workers' alleged exposure to hazardous agents (noise and carcinogenic agents) in the period from January 2016 to July 2018; and (iii) the claim in a tax foreclosure, of said additional payment for RAT, related to periods from November 2000 to January 2001 and from November 2001 to June 2002.

As of December 31, 2021, the total amount of these proceedings as of is R\$187 million (2020: R\$182 million), including the new tax notice received in May 2020.

The Management, based on its assessment and that of its external legal advisors, estimates that the probability of loss is possible and the administrative proceedings should be concluded by 2024, while the only current court proceeding should be concluded by 2028.

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.

24.3 Class action

On August 25, 2020, an action was filed against Braskem and some of its current and former executives in the US District Court for the District of New Jersey, in the United States, on behalf of an alleged class of investors who acquired Braskem's shares. The action is grounded in the U.S. Securities Exchange Act of 1934 and its rules, based on allegations that the defendants made false statements or omissions related to the geological event in Alagoas. On January 15, 2021, the Court named two plaintiffs to act as leading plaintiffs in the action. On April 28, 2021, the lead plaintiff of the action filed a consolidated complaint with its initial arguments, defining as relevant the period of acquisition of the Company's securities from March 21, 2019 to July 8, 2020. The Company engaged a specialized US-based law office to represent it in the class action and has filed a motion to dismiss, which is pending analysis by the Court.

The Management, based on its assessment and that of its external legal advisors, and given the initial phase of the class action mentioned above, considers it is not possible to reliably estimate the potential amount involved.

Braskem cannot reliably predict the future developments of this matter or the expenses arising from it, including rates and costs in solving the dispute. The Company may be named as a defendant in other similar legal actions.

24.4 Contingent assets

Contingent assets normally arise from unplanned or unexpected events that give rise to the possibility of an inflow of economic benefits to the Company. Contingent assets are not recognized in the financial statements, but they are disclosed when it is likely that an inflow of economic benefits will occur. However, when the inflow of benefits is virtually certain, the asset is recognized in the financial position statement because that asset is no longer considered contingent.

(i) Compulsory loans Centrais Elétricas Brasileiras S.A. ("Eletrobrás")

The compulsory loan in favor of Eletrobrás was established by Federal Law 4.156/62, to finance the energy industry and remained effective until 1993. It was collected through the energy bills of industrial consumers with monthly consumption equal to or higher than 2000kwh and, after successive amendments to the law, the reimbursement, plus compensatory interest of 6% p.a., was extended to 20 years, which can be anticipated through conversion of credits into shares issued by Eletrobrás.

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Between 2001 and 2009, the companies merged into Braskem S.A. filed proceedings seeking the recovery of amounts related to differences in the inflation adjustment of the compulsory loan, interest on arrears and compensatory interest and other related payments.

The Company obtained a favorable final and unappealable decision in the cases of the merged companies Alclor Química de Alagoas Ltda., Companhia Alagoas Industrial (“Cinal”), Companhia Petroquímica do Sul S.A. (“Copesul”) and Trikem S.A., which are in the execution phase, discussing the amounts to be effectively returned. The cases of the merged companies Ipiranga Petroquímica S.A., Petroquímica Triunfo Ltda. and Quattor Química S.A are in the cognizance phase.

The term, form and amount to be realized are still uncertain, so it is not possible to determine the amount to be received and, for such reason, the asset does not meet the conditions to be recorded in the financial statements.

25 Leniency agreement 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.

In December 2016, the Company entered into Leniency Agreements with the Federal Prosecution Office (*Ministério Público Federal*, hereinafter “MPF”) and with U.S. and Swiss authorities (“Global Settlement”), in the amount of US\$957 million (R\$3.1 billion, at the time), which were officially ratified.

Further, the Company engaged in the process of cooperation and negotiation with the Ministry of Transparency and the Office of The Federal Controller General (*Controladoria-Geral da União*, hereinafter “FCG”) and the Office of the Attorney General (*Advocacia-Geral da União*, hereinafter “AGU”), which culminated in the execution of the leniency agreement with such authorities on May 31, 2019 (“FCG/AGU Agreement” and, jointly with the Global Settlement, “Agreements”).

The FCG/AGU Agreements addresses the same facts that are the subject of the Global Settlement and provides for an additional disbursement of R\$409,877 million due to the calculations and parameters adopted by FCG/AGU. In addition, in 2019, the State Prosecution Office of Bahia and the State Prosecution Office Rio Grande do Sul adhered to the Agreement with MPF. However, no additional payments are expected to be made by the Company.

The AGU, FCG 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 Company already has paid R\$2,752,711, distributed as shown below:

Agreements signed with:	AGU FCG and					Total
	MPF	DoJ	OAG	MPF	SEC	
Amounts paid	559,896	296,591	407,300	1,282,464	206,460	2,752,711

(*) Swiss Office of the Attorney General (“OAG”).

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As of December 31, 2021, the outstanding amount is R\$1,123,296 (with R\$353,385 and R\$769,911 as current and non-current liabilities, respectively), under the Agreement with MPF and FCG/AGU Agreement, which will be paid in four annual installments adjusted by the variation in the Selic rate and payable until January 30, 2025. 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.

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.

The Company does not anticipate the need for any additional payment, but it cannot guarantee that the total amount agreed will be sufficient for full reparation of all any injured parties, considering that the agreements do not exempt the Company from any liabilities with third parties that have legitimate interests in the facts covered by the Agreements.

The Company will continue to cooperate with the competent public authorities, while improving its compliance and anti-corruption practices. The Company was subject to external independent monitoring, for a period of three years, as a result of the Agreements. The monitors were responsible for verifying compliance with the Global Settlement, as well as the efficacy of internal controls, policies and procedures of the Company in reducing the risk of noncompliance with anti-corruption laws.

Finally, in March 2020, based on the certification report issued by the independent monitors that have monitored the Company over the last three years, 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 U.S. Department of Justice ("DoJ") and the U.S. Securities Exchange Commission ("SEC") confirmed the conclusion of the monitorship established under the agreements with said authorities.

The Company will continue to undergo external monitoring by the FCG/AGU until the end of 2022. All compliance obligations are being honored as recommended by the authorities.

The Company is in compliance with all of its obligations under the Agreements and continues to cooperate with government authorities.

26 Geological event - Alagoas

The Company operated, since their origin and as the successor of Salgema Company, salt mining wells located in Maceió city, with the purpose of supplying raw material to its chlor-alkali and dichloroethane plant. In March 2018, an earthquake hit certain districts of Maceió, Alagoas, where the wells are located, and cracks were found in buildings and public streets of Pinheiro, Bebedouro, Mutange and Bom Parto districts.

The Geological Survey of Brazil ("CPRM") issued a report, in May 2019, indicating that the geological phenomenon observed in the region, could be related to the rock salt exploration activities developed by Braskem. In view of these events, on May 9, 2019, Braskem preventively decided to suspend its salt mining activities and the operation of its chlor-alkali and dichloroethane plant.

The Company has been devoting its best efforts to understand the geological event occurring in a specific region of Maceió and has been conducting, with the support of independent institutions and nationally and internationally renowned specialists, a series of studies focusing on: (i) the understanding the geological phenomenon and possible surface effects; and (ii) the analysis of well's stability. The results are being shared with the Brazilian National Mining Agency ("ANM") and other pertinent authorities, with which the Company has been maintaining constant dialogue.

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Braskem presented to ANM measures for shutting down its salt mining fronts in Maceió, with measures for the closure of its wells, and, on November 14, 2019, it 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 geomechanical analysis of areas of salt extraction by dissolution, and are being adopted in coordination with the local Civil Defense and other authorities.

On January 3, 2020, the 3rd Federal Court of Alagoas 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", and in conjunction with the MPE, DPE and MPF, the "Authorities"). The Agreement establishes cooperative actions for relocating residents from risk areas, defined in the Map of Sectors of Damages and Priority Action Lines by the Civil Defense of Maceió ("Civil Defense Map"), and guaranteed their safety, which provides support, under the Financial Compensation and Support for Relocation Program ("PCF") implemented by Braskem to the population in specified risk areas.

After updates of the Civil Defense Map, two legal instruments were signed with the Authorities, in July and October 2020, to include properties in the PCF.

In parallel, the Company conducted negotiations with the competent authorities regarding the Public-Interest Civil Action for Socio-environmental Reparation proposed by the MPF, related to the geological event in Alagoas.

On December 30, 2020, the Company and the Authorities executed:

(i) the Second Amendment to the Agreement dated January 3, 2020 ("Agreement for Compensation of Residents") through which the parties agreed to include in the PCF the relocation of additional properties defined by both the Civil Defense Map, which was updated in December 2020 (version 4), and the specialized and independent technical studies ("Studies") commissioned by the Company and carried out by internationally recognized entities, comprising the area affected and with potential to be affected by the geological event according to these documents; and

(ii) the "Agreement to Dismiss the Public-Interest Civil Action on Socio-Environmental Reparation" and the "Agreement to define the measures to be adopted regarding the preliminary injunctions of the Public-Interest Civil Action on Socio-Environmental Reparation" with the MPF and MPE, the latter as intervening-consenting party (jointly referred to as "Agreement for Socio-Environmental Reparation"), both detailed in Note 26.1(ii). Moreover, the Agreement for Socio-Environmental Reparation envisages the inclusion of other parties, which depends on specific negotiation with such potential parties.

Over the course of 2021, the Company maintained its best efforts towards solving the issues arising from the geological event, proactively adopting all necessary and applicable measures whilst fully honoring all commitments undertaken. Highlights: (i) PCF significant advances on assisting public authorities to vacate properties located in the risk areas and submitting full financial compensation offers with a high level of acceptance; (ii) the actions for closing and monitoring the salt wells, which are following the mining closure plan approved by the ANM, seeking to stabilize the subsidence phenomenon resulting from salt mining; and (iii) the social and environmental diagnoses conducted in connection with the Socio-Environmental Reparation Agreement.

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As assessed by the Company and its external advisors, considering the measures recommended on technical studies in the short and long-term and the existing information and refined estimates of expenses for implementing several measures connected with the geological event in Alagoas, the provision recorded as of December 31, 2021 was R\$7,661,259, with R\$4,378,071 under current liabilities and R\$3,283,188 under non-current liabilities.

The following table shows the changes in the provision in the period:

	Consolidated		
	2021	2020	2019
Balance at beginning of the year	9,175,777	3,383,067	
Provisions	1,339,765	6,901,827	3,383,067
Payments and reclassifications (*)	(2,928,081)	(1,181,931)	
Realization of present value adjustment	73,798	72,814	
Balance at the end of the year	7,661,259	9,175,777	3,383,067
Current liability	4,378,071	4,349,931	1,450,476
Non-current liability	3,283,188	4,825,846	1,932,591
Total	7,661,259	9,175,777	3,383,067

(*) Out of this amount, R\$2,739,686 (2020: R\$1,137,736) refers to payments made and R\$188,395 (2020: R\$44,195) was reclassified to other accounts payable.

The current provision can be segregated into the following action fronts:

a. Support for relocating and compensating for the residents, business and real state owners of properties located in the Civil Defense Map updated in December 2020, including establishments that requires special measures for their relocation, such as hospitals, schools and public equipment.

For these actions, the recorded amount of R\$3,390,849 (2020: R\$5,194,627 / 2019: R\$1,687,700) comprises expenses related to relocation actions, such as relocation allowance, rent allowance, household goods transportation and negotiation of individual agreements for financial compensation.

b. Actions for closing and monitoring the salt wells, environmental actions and other technical matters. Based on the findings of sonar and technical studies, Braskem has defined stabilization and monitoring actions for all 35 existing salt mining wells. Considering the discussions held in December 2021, based on studies of the specialists, the recommendation was to fill 5 more salt wells with solid material, bringing the total wells to be filled to 9, a process that should take 4 years. For the remaining 26, the recommended actions are: conventional closure using the tamponade technique, which consists of promoting the cavity pressurization, applied worldwide for post-operation cavities; confirmation of natural filling status; and, for some wells, sonar monitoring.

The monitoring system implemented by Braskem envisages actions to be developed during and after the closure of wells, focusing on safety and monitoring of region's stability.

The Company's actions are based on technical studies conducted by outsourced specialists, with the recommendations presented to the competent authorities. The Company is implementing the actions approved by ANM.

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In December 2021, the environmental diagnosis study indicated preliminary proposal of actions for addressing the environmental impacts identified, which should still follow the process established in the Socio-Environmental Reparation Agreement.

The provisioned amount of R\$1,691,032 (2020: R\$1,585,366) to implement the measures described in this item was calculated based on existing techniques and the solutions planned for the current conditions of the wells, including expenses with technical studies and monitoring, as well as environmental actions already identified. The provision amount may change in the future, in accordance with the results of the monitoring of the wells, the progress of implementing the plans to close wells, the monitoring of the ongoing measures and other possible natural alterations.

c. Social and urban measures, under the Agreement for Socio-environmental Reparation signed on December 30, 2020, allocating R\$1,580,000 for the adoption of actions and measures in vacated areas, urban mobility and social compensation actions, of which R\$300 million going to indemnification for social damages and collective pain and suffering and possible contingencies related to the actions in the vacated areas and urban mobility actions. The provision amount, updated by inflation index established in the agreement and net of present value adjustment, is R\$1,577,186 (2020: R\$1,515,498).

d. Additional measures, for which the provision amounts to R\$1,002,192 (2020: R\$880,286), for expenses with: (i) actions related to the Technical Cooperation Agreements entered into by the Company; (ii) the hiring of external advisors to support the execution of the relocation actions and compensation of the families; (iii) infrastructure for assisting residents; (iv) expenses with managing the event in Alagoas relating to communication, compliance, legal services, etc.; (v) additional measures to assist the region and maintenance of areas; and (vi) other matters classified as a present obligation for the Company, even if not yet formalized.

The provisions of the Company are based on current estimates and assumptions and may be updated in the future due to new facts and circumstances, including, but not limited to: changes in the execution time, scope and method; the success of action plans; new repercussions or developments arising from the geological event; and the conclusion of studies that indicate recommendations from specialists, including the Technical Monitoring Committee, according to Agreement for Compensation of Residents, and other new developments in the matter.

The measures related to the mine closure plans are also subject to the analysis and approval by ANM, the monitoring of results of the measures under implementation as well as changes related to the dynamic nature of geological events.

Continuous monitoring is essential for confirming the results of the current recommendations. Accordingly, the plans to close the wells may be updated based on the need to adopt technical alternatives to stabilize the subsidence phenomena arising from the extraction of salt. In addition, the conclusion of the studies to confirm the natural filling of certain cavities and the assessment of the future behavior of cavities to be monitored using sonar could indicate the need for certain additional measures to stabilize them.

The actions to repair, mitigate or offset potential environmental impacts and damages, as provided for in the Socio-environmental Reparation Agreement, to be financed by Braskem, will be proposed considering the environmental diagnosis prepared by a specialized and independent company. After the conclusion of all discussions with authorities and regulatory agencies, as per the process established in the agreement, an action plan will be agreed to be part of the measures for a Plan to Recover Degraded Areas ("PRAD").

At this time, the preliminary actions for addressing the environmental impacts are already being mapped, but it is still impossible to predict the outcome of the environmental diagnosis, as well as possible costs to be added in the Company's provisions.

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Furthermore, the Socio-Environmental Reparation Agreement envisages the potential adherence by other parties, including the Municipality of Maceió. In the context of developments in this topic, on February 25, 2022, the Municipality of Maceió signed the partial Term of Adhesion to the Socio-environmental Reparation Agreement, which addresses the allocation of resources provided for in mentioned Agreement to urban mobility actions, as disclosed in Note 37 (b).

The Company continues in negotiation with the Municipality of Maceió regarding its other claims, however, to date, it is unable to predict the results and timeframe for concluding this negotiation or its possible scope and associated costs. In the same direction, Braskem became aware of the establishment of a special commission by the State of Alagoas Government to investigate possible damages caused to the State as a result of the vacation of risk areas or the geological event, and it is not possible to predict what types of claims may be formulated.

It is not possible to anticipate all new claims, related to damages or other nature, that may be brought by individuals or groups, including public or private entities, that understand they suffered impacts or damages somehow related to the geological phenomenon and the relocation of people from risk areas, as well as new notices of infraction or administrative penalties of diverse natures. Braskem continues to face and could still face administrative procedures and various lawsuits filed by individuals or legal entities not included in the PCF or that disagree with the financial compensation offer for individual settlement, as well as new collective actions and new lawsuits filed by public utility concessionaires, entities of the direct or indirect administration of the State, Municipality or Federal level. Therefore, the number of such actions, their nature or the amounts involved cannot be estimated at this moment.

Consequently, the Company cannot eliminate the possibility of future developments related to the Geological Event in Alagoas, the relocation process and actions in vacated and adjacent areas, so the expenses to be incurred may differ from its estimates and provisions.

The Company is negotiating with its insurers the coverage of its insurance policies. The payment of compensation will depend on technical assessment of the insurance coverage under these policies, taking into consideration the complexity of the subject. For this reason, no payment of compensation was recognized in the 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 – Reparation for Residents

Public-Interest Civil Action claiming the payment of indemnification for damages caused to the buildings and the residents of areas affected in the Pinheiro district and surrounding areas (currently includes the Mutange, Bebedouro and Bom Parto districts), in the total minimum amount of R\$6.7 billion, with initial request for provisional measure to freeze the Company’s financial and other assets in the same amount. Successive orders to freeze funds resulted in the court blocking of R\$3.7 billion in assets in 2019, and the unfreezing occurred in January 2020. Once the case was sent to the Federal Courts, the Federal Prosecution Office started to participate in the action.

The first agreement under this Public-Interest Civil Action (Reparation for Residents) was ratified on January 3, 2020. The Agreement to Support the Relocation of People in Risk Areas (“Agreement”), entered into by Braskem and the Alagoas State Prosecutors’ Office (“MPE”), the Alagoas State Public Defenders’ Office (“DPE”), the Federal Prosecutors’ Office (“MPF”) and the Federal Public Defenders’ Office (“DPU”, and jointly with the MPE, DPE and MPF, the “Authorities”), establishes cooperative actions for relocating people in risk areas and guaranteeing their safety, which provides support under the Financial Compensation and Support for Relocation Program (“PCF”) implemented by Braskem, for the population in specified risk areas.

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After updates of the Map of Sectors of Damages and Priority Action Lines by the Civil Defense of Maceió ("Civil Defense Map"), two legal instruments were entered into with the Authorities, in July and October 2020, to include properties in the PCF.

On December 30, 2020, the Company and the Authorities executed a second amendment to the Agreement ("Agreement for Compensation of Residents") to terminate the Public-Interest Civil Action, through which the parties agreed to include in PCF the relocation of additional properties defined in the updated version of the Civil Defense Map, of December 2020, and in the independent technical and specialized studies engaged by the Company on the potential impact of the geological event on the surface of the region ("Studies"). The Agreement for Compensation of Residents includes the area currently affected by the geological event, according to the Civil Defense, and the areas with potential future impacts indicated in the Studies. The Company estimates that the total number of properties covered by PCF after the execution of the Second Amendment is around 15,000 properties.

To implement the actions envisaged in the Public-Interest Civil Action, the Company undertook to maintain R\$2.7 billion in a checking account (R\$1.7 billion under the Agreement and an additional R\$1 billion under the Second Amendment), with minimum working capital of R\$100 million, whose transactions will be verified by an external audit company. As December 31, 2021, arising from the costs incurred related to the PCF, the balance of this checking account corresponded to R\$835,517 under current assets (2020: R\$1,322,725). In addition, the Company and the Authorities agreed to: (i) create a technical group (Technical Monitoring Committee) to monitor the geological event and study the areas adjacent to the Civil Defense Map for a period of five years; and (ii) maintain a performance bond in the amount of R\$1.8 billion (down from the R\$2 billion performance bond envisaged in the Agreement).

With the judicial ratification by the courts of the Agreement for Compensation of Residents on January 6, 2021, this Public-Interest Civil Action was terminated.

(ii) Public-Interest Civil Action filed by the Alagoas State Federal Prosecution Office (MPF-AL) – Social-environmental reparation

Public-Interest Civil Action claiming the payment by the Company of indemnification for socio-environmental damages and other collective damages, as well as the adoption of corrective and environmental compliance measures, with preliminary injunction requiring the freezing of assets, suspension of borrowings with the BNDES, formation of an own private fund in the initial amount of R\$3.1 billion and the pledging of guarantees in the amount of R\$20.5 billion. The original amount of the action, initially at R\$28.3 billion, was adjusted by a court decision to R\$27.6 billion.

On December 30, 2020, the Agreement for Socio-environmental Reparation was executed, with the Company mainly undertaking to: (i) adopt measures to stabilize and monitor the subsidence phenomenon resulting from salt mining; (ii) repair, mitigate or compensate potential impacts and environmental damages arising from salt mining in the Municipality of Maceió; and (iii) repair, mitigate or compensate potential impacts and social and urban damages arising from salt mining in the Municipality of Maceió, as detailed below:

(i) To stabilize the cavities and monitor the soil, the Company will continue to implement the action plans involving the closure of mining fronts prepared by Braskem and approved by the ANM, whose measures can be adjusted until the stability of the subsidence phenomenon resulting from salt mining is verified.

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(ii) Regarding the potential environmental impacts and damages resulting from salt mining in the Municipality of Maceió: as agreed with the MPF, the Company hired a specialized independent company to identify and recommend measures for recovering, mitigating or compensating any environmental impacts identified as the result of salt mining activities in Maceió. After the ongoing study is concluded, the Company will implement and pay for any measures recommended by the study and agreed upon between the Company and the MPF. Since the study is in progress, we cannot anticipate its outcome or if it will entail additional provisions.

(iii) Regarding potential impacts and social and urban damages arising from salt mining in the city of Maceió: to allocate the maximum amount of R\$1,280 million for adopting actions and measures in vacated areas, urban mobility actions and social compensation actions.

Moreover, the Company and the MPF agreed to: (i) allocate the additional amount of R\$300 million for indemnification for social and collective pain and suffering and possible contingencies related to actions in vacated areas and in urban mobility actions; (ii) constitute a security interest on certain assets of the Company in the amount of R\$2.8 billion to replace the performance bond of R\$ 1 billion; and (iii) engage specialized consulting firms to support the definition of actions established in the Agreement for Socio-environmental Reparation and the assessment of the Company's Socio-Environmental program.

The Agreement for Socio-environmental Reparation was ratified by Court on January 6, 2021, with the termination of the Public-Interest Civil Action for Socio-environmental Reparation with regard to Braskem. Moreover, this agreement provides for the possibility of adhesion by other parties, at the discretion of the main parties.

Finally, under the Agreement for Socio-environmental Reparation, on January 21, 2021 the Civil Investigation launched in June 2020 by the MPE was closed. It aimed to: (i) calculate the extent of the urban damages caused by the geological event that occurred in Maceió; (ii) seek, from liable parties, necessary and adequate architectural solutions for the destination, restoration and/or use of the cited empty spaces left in the districts impacted; (iii) calculate, if applicable, potential compensatory liabilities for the damages caused to the urban order.

(iii) Public-Interest Civil Action filed by the Federal Public Defender's Office ("DPU"): refusal of insurance within the scope of Housing Financial System ("SFH")

Public-interest civil action filed by DPU to question the denial of necessary insurance for contracts under the SFH to acquire properties located within a radius of 1 km outside the risk area defined by the version 4 map of Civil Defense authorities, which is the subject matter of the Residents PCA agreement – v. item (i).

Insurers linked to SFH, financial agents, the regulatory agency and Braskem are the defendants. The main claim is only against the insurers, financial agents and the regulatory agency on the grounds that the refusal to contract the insurance is abusive and has no technical or legal grounds. There is a secondary and eventual claim to sentence Braskem to pay indemnification in an amount to be settled in the future, if the judge understands that the refusal somehow has grounds due to the subsidence phenomenon.

It is not possible to estimate the indemnification amount, which will depend on the evidence of damages submitted by people whose insurance was denied.

(iv) Indemnifying action: Companhia Brasileira de Trens Urbanos ("CBTU")

On February 2, 2021, the Company was notified of the filing of a lawsuit by Companhia Brasileira de Trens Urbanos ("CBTU"), formulating initially only a preliminary injunction for maintaining the terms of the cooperation agreement signed previously by the parties. The request was denied in lower and appellate courts, given the fulfillment of the obligations undertaken by Braskem. On February 24, CBTU filed an amendment to the initial request claiming the payment of compensation for losses and damages in the amount of R\$222 million and for moral damages in the amount of R\$500 thousand, as well as the imposition of obligations, including the construction of a new rail line to substitute the stretch that passed through the risk area. As of December 31, 2021, the updated value of this action is R\$1.4 billion (the initial value attributed to the claim, by CBTU, is R\$1.3 billion). Braskem signed a memorandum of understanding with CBTU to seek a consensual solution and the stay of the lawsuit during the negotiation period. As a result of a joint petition by the parties, the lawsuit was stayed until December 20, 2022.

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The Management, based on its evaluation and that of its external legal advisors, classifies the probability of loss in this case as possible.

(v) 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. As of December 31, 2021, the amount of this action is R\$264 million (2020: R\$181 million).

The Management, supported by the opinion of the external legal advisors, classifies the probability of loss in this case as possible.

(vi) Individual actions: Indemnifications related to the impacts of subsidence and relocation of areas affected

As of December 31, 2021, Braskem was defendant in several actions, that, in aggregate, involve the amount of R\$895 million (2020: R\$573 million), filed by individuals in Brazil and abroad, seeking the payment of indemnifications directly or indirectly related to the geological event in Maceió.

27 Benefits offered to team members

27.1 Short-term benefits

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.

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Health care	235,681	197,683	181,466
Private pension	136,851	94,302	90,687
Transport	77,201	66,752	67,761
Feeding	51,240	38,400	35,677
Life insurance	10,324	9,875	7,997
Training	15,723	14,892	26,261
Other	12,546	14,117	12,164
	<u>539,566</u>	<u>436,021</u>	<u>422,013</u>

27.2 Long-term Incentive Plan ("LTI Plan")

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.

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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.

On March 21, 2018, the Extraordinary Shareholders' Meeting approved the Long-Term Incentive Plan ("LTI Plan"), which aims to align the interests of its participants with those of the Company's shareholders. Also, the LTI Plan encourages participants' retention at the Company by offering eligible participants an opportunity to receive shares of the Company by voluntarily investing their own funds and holding such shares through the end of the 3-year vesting period.

The Board of Directors approved the programs listed below under the terms and conditions of the LTI Plan, which includes a list of eligible people, the period for the acquisition of own shares by the participants and the number of shares to be delivered to participants as consideration for each share acquired.

Program Name	Approval Date	Grant Date	Description	Expected amount for delivery
2018 LTI Program	March 28, 2018	April 6, 2018	LTI Programs' participants will receive shares held in treasury or acquired through repurchase programs. If these shares cannot be delivered, the Company may pay participants in cash in an amount corresponding to the share price traded on the stock exchange on the second business day immediately prior to the respective payment date.	(*)
2019 LTI Program	March 13, 2019	March 19, 2019		582 thousand shares
2020 LTI Program	March 19, 2020	April 1, 2020		1,817 thousand shares
2021 LTI Program	May 5, 2021	May 10, 2021		847 thousand shares

(*) In April 2021, the LTI Program 2018 was fully settled with the delivery of shares in Braskem held in treasury. Consequently, the difference between the historical cost of the shares held in treasury (R\$11,507) and the amounts recorded at OCI (R\$14,980) was transferred to capital reserve, corresponding to R\$3,473.

The fair value of the Company's consideration is calculated in accordance with the agreed terms. For the eligible people of the Company, the fair value considers the price of the class A preferred shares. For the eligible people of subsidiaries abroad, the fair value considers the quoted price of the American Depository Receipts ("ADR") on December 31, 2021.

As of December 31, 2021, the amount recorded under shareholders equity is R\$32,629 (2020: R\$32,295).

27.3 Post-employment benefits

The obligations for contributions to defined contribution plans are recognized in profit or loss as personnel expenses when the related services are provided by employees. The contributions paid in advance are recognized as an asset to the extent that a cash reimbursement or a reduction in future payments is possible.

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 result 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.

Braskem and subsidiaries in Brazil

Braskem and the subsidiaries in Brazil sponsor a defined contribution plan for its team members managed by Vexty, a private pension plan entity. Vexty 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.

As of December 31, 2021, the number of active participants in Vexty was 6,113 (2020: 5,834) and the contributions made by the sponsors in the year amounted to R\$68,744 (2020: R\$46,689) and the contributions made by the participants amounted to R\$83,599 (2020: R\$74,980).

According to Brazilian laws, the type of health plan offered by Braskem, 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 plus participant's part).

Braskem America

The subsidiary Braskem America administers the Novamont, which is a closed defined benefit pension plan for the employees of a plant located in the State of West Virginia. On December 31, 2021, there were 36 active participants, 141 employees with deferred benefits along with 173 participants assisted (2020: 37 active participants, 151 employees with deferred benefits and 170 assisted participants).

Due to the financing level of the plan, the subsidiary was not required to make contributions during the 2021 and 2020; therefore, there were no additional cash contributions made by the subsidiary or the participants in 2021 and 2020.

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Braskem Alemanha

The subsidiary Braskem Alemanha is the sponsor of the defined benefit plans and defined contribution plans of its employees. On December 31, 2021, the plans have 158 participants (2020: 158 participants) and no contributions were made by the subsidiary or the participants in 2021 and 2020.

Braskem Holanda

The subsidiary Braskem Holanda is the sponsor of the defined contribution plans of its employees. On December 31, 2021, the plans have 9 participants (2020: 8 participants) and no contributions were made by the subsidiary or the participants in 2021 and 2020.

Braskem Idesa

The subsidiary Braskem Idesa is the sponsor of defined benefit plans for its team members. On December 31, 2021, the plan was composed of 936 active participants (2020: 833 active participants). The contributions the subsidiary made in the year amounted to R\$3,810 (2020: R\$3,037). During 2021 and 2020, there were no contributions from participants.

(a) Amounts in statement of financial position

	<u>2021</u>	<u>2020</u>
Defined benefit		
Novamont Braskem America	117,509	113,662
Braskem Idesa	22,960	17,243
Braskem Alemanha and Braskem Holanda	<u>223,193</u>	<u>239,955</u>
	363,662	370,860
Health care		
Bradesco saúde	243,706	217,089
Total obligations	<u>607,368</u>	<u>587,949</u>
Fair value of plan assets		
Novamont Braskem America	(117,509)	(113,662)
Braskem Alemanha	<u>(2,162)</u>	<u>(2,213)</u>
	(119,671)	(115,875)
Consolidated net balance (non-current liabilities)	<u>487,697</u>	<u>472,074</u>

(b) Change in obligations

	<u>2021</u>			<u>2020</u>			<u>2019</u>		
	Health insurance	Benefit plans	Total	Health insurance	Benefit plans	Total	Health insurance	Benefit plans	Total
Balance at beginning of year	217,089	370,860	587,949	224,852	245,565	470,417	90,679	183,687	274,366
Current service cost	4,817	13,681	18,498	4,678	12,486	17,164	2,698	8,233	10,931
Interest cost	15,692	5,906	21,598	17,097	6,482	23,579	8,663	6,133	14,796
Benefits paid	(10,712)	(7,191)	(17,903)	(5,949)	(7,409)	(13,358)	(5,817)	(4,677)	(10,494)
Change plan								8,068	8,068
Actuarial losses (gain)	16,820	(26,668)	(9,848)	(23,589)	25,803	2,214	128,629	38,437	167,066
Exchange variation		7,074	7,074		87,933	87,933		5,684	5,684
Balance at the end of the year	<u>243,706</u>	<u>363,662</u>	<u>607,368</u>	<u>217,089</u>	<u>370,860</u>	<u>587,949</u>	<u>224,852</u>	<u>245,565</u>	<u>470,417</u>

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(c) Change in fair value plan assets

	2021	2020	2019
Balance at beginning of year	115,875	81,342	67,993
Actual return on plan assets	722	15,791	14,329
Employer contributions			285
Benefits paid	(5,301)	(4,973)	(3,966)
Exchange variation	8,375	23,715	2,701
Balance at the end of the year	119,671	115,875	81,342

As of December 31, 2021, and 2020, 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.

(d) Amounts recognized in profit and loss

	2021			2020			2019		
	Health insurance	Benefit plans	Total	Health insurance	Benefit plans	Total	Health insurance	Benefit plans	Total
Current service cost	4,817	13,681	18,498	4,678	12,486	17,164	2,698	8,233	10,931
Interest cost	15,692	5,906	21,598	17,097	6,482	23,579	8,663	6,133	14,796
Actuarial losses		(24,203)	(24,203)		15,461	15,461		28,936	28,936
	20,509	(4,616)	15,893	21,775	34,429	56,204	11,361	43,302	54,663

(e) Actuarial assumptions

	2021					2020					2019				
	Health insurance	United States	Mexico	Germany	Netherlands	Health insurance	United States	Mexico	Germany	Netherlands	Health insurance	United States	Mexico	Germany	Netherlands
Discount rate	5.33	2.90	8.00	1.20	1.20	3.99	2.60	7.25	0.70	0.70	3.60	3.35	7.25	2.00	2.00
Inflation rate	3.00	n/a	4.00	2.00	2.00	3.25	n/a	4.00	2.00	2.00	4.00	n/a	4.00	2.00	2.00
Expected return on plan assets	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	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	5.00	3.00	3.00	n/a	n/a	5.00	3.00	3.00
Rate of increase in future pension plan	n/a	n/a	n/a	1.75	1.75	n/a	n/a	n/a	1.75	1.75	n/a	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	n/a	2.50	n/a	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	n/a	3.50	n/a	n/a	n/a	n/a
Duration	14.16	n/a	n/a	n/a	n/a	14.99	n/a	n/a	n/a	n/a	15.32	n/a	n/a	n/a	n/a

(f) 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%	0.3%	0.3%	26,078	15,283	1,752	10,495	558	(31,796)	(12,714)	(2,078)	(11,294)	(599)
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	13,163	695	n/a	n/a	n/a	(12,415)	(655)
Rate of increase in future pension plan	1.0%	n/a	n/a	0.25%	0.25%	(5,870)	n/a	n/a	6,488	343	6,021	n/a	n/a	(6,296)	(332)
Life expectancy	1.0%	n/a	n/a	1 year	1 year	44,929	n/a	n/a	5,565	294	(35,676)	n/a	n/a	(5,809)	(307)
Mortality rate	n/a	10.0%	n/a	n/a	n/a	n/a	6,455	n/a	n/a	n/a	n/a	(12,714)	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%	689	32	(879)	79
Life expectancy	1.0%	1.0%	604	3,814	(508)	(3,029)
Rate of increase in future pension plan	1.0%	1.0%	119	498	(122)	(511)

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28 Equity

28.1 Capital

As of December 31, 2021, the Company's subscribed and paid-up capital stock amounted to R\$8,043,222 and comprised 797,207,834 shares with no par value, distributed as follows:

	Amount of shares							
	Common shares	%	Preferred shares class A	%	Preferred shares class B	%	Total	%
Novonor	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			35,476,394	10.28			35,476,394	4.45
Other	12,907,077	2.86	153,737,595	44.55	478,790	100.00	167,123,462	20.96
Total	451,668,652	100.00	344,158,226	99.74	478,790	100.00	796,305,668	99.89
Treasury shares			902,166	0.26			902,166	0.11
Total	451,668,652	100.00	345,060,392	100.00	478,790	100.00	797,207,834	100.00
Authorised	535,661,731		616,682,421		593,818		1,152,937,970	

(i) American Depository Receipt ("ADR") on the New York Stock Exchange – NYSE (USA).

Changes in shares during the year:

	Note	Amount of shares		
		2020	Changes	2021
Outstanding shares				
Common shares		451,668,652		451,668,652
Preferred shares class A	28.4	343,824,794	333,432	344,158,226
Preferred shares class B		500,230	(21,440)	478,790
		795,993,676	311,992	796,305,668
Treasury shares				
Preferred shares class A	28.4	1,224,878	(322,712)	902,166
Total		797,218,554	(10,720)	797,207,834

28.2 Capital reserves

This reserve includes part of the shares issued in Company'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.

The Company used the balance of this reserve to absorb the loss of the year 2020.

28.3 Profit reserves

The Company used the balance of these reserves to absorb accumulated losses at the end of fiscal year 2020 being reconstituted in 2021 according to note 28.6.

(a) 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.

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(b) Tax incentive reserve

The government grants (see note 31) are recognized in the profit or loss and are appropriated from retained earnings to the tax incentive reserve. This reserve may only be used to offset losses with subsequent reconstitution or increase share capital.

(c) Profit retention

In accordance with corporation law, portions of net income for the fiscal year may be allocated to reserves or retained based on the capital budget. Profits not allocated as such may be distributed to shareholders in the form of dividends. In 2021, a portion of net income was retained based on the capital budget for capital expenditures and to enable the buying of new shares and the securing of those held in treasury for making payments to the beneficiaries of programs under the Long-term Incentive Plan of the Company.

28.4 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 2021, 322,712 shares (2020: 1,721 shares) held in treasury were delivered to participants of the LTI Program 2018, which was fully settled in April 2021 (Note 27.2). Moreover, in 2021, class B preferred shares (21,440 shares) were converted into class A preferred shares (10,720 shares).

28.5 Prepayment of dividends

On December 2, 2021, the Board of Directors approved the prepayment of dividends based on the 2021 results of R\$6,000,000 segregated in R\$3,405,152 to common shareholders, R\$2,594,545 to class A preferred shareholders, and R\$303 to class B preferred shareholders.

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28.6 Retained earnings

Retained earnings in the fiscal year were allocated as follows:

	<u>2021</u>
Profit for the year	13,984,946
Accumulate losses absorption	(4,529,547)
Comprehensive income	26,883
Dividends-lapse of statute of limitation	1,653
Profit for allocation	9,483,935
Alocation profit	
Prepaid dividends approved by Board	(6,000,000)
Profit reserves	
Tax incentive	(1,017,546)
Legal reserve	(472,770)
Retention of profits	(643,619)
Additional proposed dividends	(1,350,000)
	(3,483,935)
Total allocation	(9,483,935)

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28.7 Other comprehensive income

	Attributed to shareholders' interest									Total
	Deemed cost and additional indexation of PP&E (ii)	Fair value adjustments (iii)	Gain (loss) on interest in subsidiary (i)	Foreign sales hedge (iv)	Cash flow hedge (iv)	Actuarial gain (loss) on Defined Benefit and health plan (v)	Foreign currency translation adjustment (vi)	Total Braskem shareholders' interest	Non-controlling interest in Braskem Idesa	
As of December 31, 2018	151,214	(450)	(9,469)	(7,626,515)	(257,508)	(53,574)	2,166,875	(5,629,427)	(566,035)	(6,195,462)
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)	(136)	(109,628)
Foreign currency translation adjustment							220,228	220,228	(83,506)	136,722
(Loss) gain from investments							(50)	(50)	(34)	(84)
Effect of IAS29 - hyperinflation							(3,561)	(3,561)		(3,561)
As of December 31, 2019	123,614	(435)	(9,469)	(6,893,066)	(218,589)	(163,066)	2,383,492	(4,777,519)	(526,047)	(5,303,566)
Additional indexation										
Realization by depreciation or write-off assets	(39,853)							(39,853)		(39,853)
Income tax and social contribution	13,551							13,551		13,551
Deemed cost of jointly-controlled investment										
Realization by depreciation or write-off assets	(1,123)							(1,123)		(1,123)
Income tax and social contribution	382							382		382
Fair value adjustments										
Accounts receivable		113						113		113
Foreign sales hedge										
Exchange rate				(7,215,247)				(7,215,247)	(111,363)	(7,326,610)
Transfer to result				2,547,855				2,547,855	117,932	2,665,787
Income tax and social contribution				1,587,701				1,587,701	(1,965)	1,585,736
Fair value of Cash flow hedge										
Change in fair value					(545,038)			(545,038)	7,613	(537,425)
Transfer to result					(47,223)			(47,223)	(15,742)	(62,965)
Income tax and social contribution					200,393			200,393	2,439	202,832
Fair value of cash flow hedge from jointly-controlled (RPR)					1,260			1,260		1,260
Actuarial loss with post-employment benefits, net of taxes						(648)		(648)	1	(647)
Foreign currency translation adjustment							3,054,126	3,054,126	(396,084)	2,658,042
(Loss) gain from investments			3,695					3,695		3,695
Effect of IAS29 - hyperinflation							8,077	8,077		8,077
As of December 31, 2020	96,571	(322)	(5,774)	(9,972,757)	(609,197)	(163,714)	5,445,695	(5,209,498)	(923,216)	(6,132,714)

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	Attributed to shareholders' interest									Non-controlling interest in Braskem Idesa	Total
	Deemed cost and additional indexation of PP&E (ii)	Fair value adjustments (iii)	Gain (loss) on interest in subsidiary (i)	Foreign sales hedge (iv)	Cash flow hedge (iv)	Actuarial gain (loss) on Defined Benefit and health plan (v)	Foreign currency translation adjustment (vi)	Total Braskem shareholders' interest			
As of December 31, 2020	96,571	(322)	(5,774)	(9,972,757)	(609,197)	(163,714)	5,445,695	(5,209,498)	(923,216)	(6,132,714)	
Additional indexation											
Realization by depreciation or write-off assets	(39,644)							(39,644)		(39,644)	
Income tax and social contribution	13,480							13,480		13,480	
Deemed cost of jointly-controlled investment											
Realization by depreciation or write-off assets	(1,091)							(1,091)		(1,091)	
Income tax and social contribution	372							372		372	
Fair value adjustments											
Accounts receivable		(130)						(130)		(130)	
Exchange rate				(2,063,726)				(2,063,726)	(51,152)	(2,114,878)	
Transfer to result				2,283,425				2,283,425	126,807	2,410,232	
Income tax and social contribution				(65,619)				(65,619)	(22,696)	(88,315)	
Fair value of Cash flow hedge											
Change in fair value					123,717			123,717		123,717	
Transfer to result					260,058			260,058	86,686	346,744	
Income tax and social contribution					(120,081)			(120,081)	(26,006)	(146,087)	
Fair value of cash flow hedge from jointly-controlled (RPR)					(968)			(968)		(968)	
Actuarial loss with post-employment benefits, net of taxes						23,028		23,028	(14)	23,014	
Foreign currency translation adjustment							1,591,094	1,591,094	(87,946)	1,503,148	
Effect of IAS29 - hyperinflation							35,425	35,425		35,425	
As of December 31, 2021	69,688	(452)	(5,774)	(9,818,677)	(346,471)	(140,686)	7,072,214	(3,170,158)	(897,537)	(4,067,695)	

(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.

(iv) Transfer to the income statement when maturity, prepayment or loss of efficacy for hedge accounting.

(v) Transfer to retained earnings when the extinction of the plan.

(vi) Transfer to the income statement when write-off of subsidiary abroad.

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29 Earnings per share

Basic earnings (loss) per share is calculated by means of the division of 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 28.4, particularly in relation to the limited rights enjoyed by class "B" preferred shares. The calculation of the diluted earnings (loss) per share is based on the weighted average of class "A" preferred shares, assuming the conversion of all preferred shares into treasury that would cause the dilution.

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 28.4 and there is no highest limit for their participation.

The table below shows the reconciliation of profit or loss for the period adjusted for the amounts used to calculate basic and diluted earnings per share.

	2021		2020		2019	
	Basic	Diluted	Basic	Diluted	Basic	Diluted
Profit (loss) for the year attributed to Company's shareholders	13,984,946	13,984,946	(6,691,720)	(6,691,720)	(2,540,995)	(2,540,995)
Distribution of priority dividends attributable to:						
Preferred shares class "A"	208,574	208,574				
Preferred shares class "B"	290	290				
	<u>208,864</u>	<u>208,864</u>				
Distribution of 6% of unit price of common shares	273,729	273,729				
Distribution of excess profits, by class:						
Common shares	7,664,208	7,664,208				
Preferred shares class "A"	5,838,145	5,838,145				
	<u>13,502,353</u>	<u>13,502,353</u>				
Reconciliation of income available for distribution, by class (numerator):						
Common shares	7,937,937	7,937,937	(3,797,070)	(3,797,071)	(1,441,839)	(1,441,839)
Preferred shares class "A"	6,046,719	6,046,719	(2,890,445)	(2,890,444)	(1,097,559)	(1,097,559)
Preferred shares class "B"	290	290	(4,205)	(4,205)	(1,597)	(1,597)
	<u>13,984,946</u>	<u>13,984,946</u>	<u>(6,691,720)</u>	<u>(6,691,720)</u>	<u>(2,540,995)</u>	<u>(2,540,995)</u>
Weighted average number of shares, by class (denominator):						
Common shares	451,668,652	451,668,652	451,668,652	451,668,652	451,668,652	451,668,652
Preferred shares class "A"	344,054,700	345,049,701	343,823,811	345,049,672	343,820,162	345,049,672
Preferred shares class "B"	500,171	500,171	500,230	500,230	500,230	500,230
	<u>796,223,523</u>	<u>797,218,524</u>	<u>795,992,693</u>	<u>797,218,554</u>	<u>795,989,044</u>	<u>797,218,554</u>
Earnings (loss) per share (in R\$)						
Common shares	17.5747	17.5747	(8.4068)	(8.4068)	(3.1922)	(3.1922)
Preferred shares class "A"	17.5749	17.5242	(8.4068)	(8.3769)	(3.1922)	(3.1809)
Preferred shares class "B"	0.5798	0.5798	(8.4068)	(8.4068)	(3.1922)	(3.1922)

Braskem S.A.

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Weighing of shares

	2021				
	Basic				
	Preferred shares				
	Class "A"		Class "B"		
Outstanding shares	Weighted average	Outstanding shares	Weighted average		
Amount at beginning of year	343,824,794	343,824,794	500,230	500,230	
Incentive long term plan payments with treasury shares	322,712	229,877			
Preferred shares Classe "B" converted into preferred shares Classe "A"	10,720	29	(21,440)	(59)	
Amount at the end of the year	344,158,226	344,054,700	478,790	500,171	

	2020				
	Basic				
	Preferred shares				
	Class "A"		Class "B"		
Outstanding shares	Weighted average	Outstanding shares	Weighted average		
Amount at beginning of year			343,823,073	343,823,073	
Incentive long term plan payments with treasury shares			1,721	738	
Amount at the end of the year			343,824,794	343,823,811	

	2019				
	Basic				
	Preferred shares				
	Class "A"		Class "B"		
Outstanding shares	Weighted average	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			343,823,073	343,820,162	

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30 Net revenue

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Net sales and services revenue	<u>105,625,201</u>	<u>58,543,494</u>	<u>52,323,525</u>

Revenue from sales of products is recognized when the control of assets is transferred to the customer for an amount that reflects the consideration to which the Company expects to be entitled in exchange of these assets. The performance obligations are met at a specific moment in time. 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.

The specific moment when the Company satisfies a performance obligation by transferring a promised good or service 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 when 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 when 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.

Braskem S.A.**Notes to the consolidated financial statements
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(a) Net revenue by country

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Brazil	55,830,330	32,369,199	28,523,327
United States	24,232,413	10,848,609	9,416,558
Mexico	5,505,893	2,765,815	2,335,198
Argentina	2,068,023	1,267,967	1,104,044
Germany	1,912,373	1,106,877	1,157,431
Italy	1,304,113	811,787	690,422
Switzerland	1,230,540	633,512	759,189
Chile	1,230,493	544,329	610,454
Singapore	1,175,133	1,183,838	1,162,432
Japan	1,162,226	618,940	240,579
Luxembourg	987,656	592,777	526,768
South Korea	669,055	360,704	279,900
Peru	666,867	471,847	551,967
Poland	649,825	285,714	200,563
Netherlands	642,844	432,897	516,409
United Kingdom	585,766	204,953	359,937
Canada	558,730	297,756	201,635
Spain	517,532	282,362	344,433
Uruguay	495,120	405,946	359,049
Sweden	481,289	310,984	296,601
China	354,071	496,920	542,209
France	326,570	247,062	225,986
Paraguay	318,842	254,255	194,859
Bolivia	296,138	190,447	231,848
Colombia	274,335	174,381	200,370
Taiwan	136,173	176,400	191,593
Other	2,012,852	1,207,216	1,099,764
	<u>105,625,201</u>	<u>58,543,494</u>	<u>52,323,525</u>

(b) Net revenue by product

	<u>2021</u>	<u>2020</u>	<u>2019</u>
PE/PP	73,306,089	41,137,288	34,287,597
Ethylene, Propylene	6,872,999	3,600,276	3,743,581
PVC/Caustic Soda/EDC	5,806,011	3,134,617	2,692,778
ETBE/Gasoline	4,321,371	2,170,289	2,319,253
Benzene, toluene and xylene	5,819,696	3,051,752	2,503,667
Butadiene	3,019,836	1,372,428	1,609,264
Cumene	1,342,811	636,635	723,469
Solvents	1,129,484	654,793	505,804
Naphtha, condensate and crude oil	1,648,581	915,807	676,044
Other	2,358,324	1,869,609	3,262,068
	<u>105,625,201</u>	<u>58,543,494</u>	<u>52,323,525</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 2021, the most significant revenue from a single client amounts to approximately 2.7% of total net revenues of the Company and refers to the sale of resins.

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31 Tax incentives

(a) SUDENE - IR

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 (in Bahia State). The tax incentive granted by the Northeast Development Department ("SUDENE") is calculated based on the Profit from Exploration of the incentivized activity, with an enjoyment period of 10 years. In 2020, the operations in Brazil recorded tax loss, therefore it is not possible to make any deductions as a tax incentive.

In 2021, the Company determined the taxable base for income tax for its operations in Brazil, which generated a R\$125 million reduction in IR payable and R\$31.5 million in reinvestment of IR paid, which may be used to purchase new equipment for the above-mentioned industrial plants.

(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.

The Company obtained a final and no appealable decision (Case No. 0042875-86.2015.4.01.3300) that exempted it from the payment of IR/CSL on tax incentives granted under PRODESIN, ensuring their treatment as a reducer of taxes on sales, in the period between the calendar years 2010 to 2017, in the accumulated amount of R\$425,913. In 2021, the amount was R\$176,284 (2020: R\$68,893).

32 Other income (expenses), net

	Note	2021	2020	2019
Other income				
PIS and COFINS credits - exclusion of ICMS from the calculation basis	10 (b)	1,031,099	310,557	1,904,206
Tax Credits recovery		209,558	219,254	3,094
Fine on supply contract of raw material		63,017	41,134	375,020
Fixed assets disposal results		40,353	7,035	11,140
Other		190,460	172,769	114,974
		<u>1,534,487</u>	<u>750,749</u>	<u>2,408,434</u>
Other expenses				
Provision for damages - Alagoas	26	(1,339,765)	(6,901,828)	(3,383,067)
Provision for environmental liabilities and other damages		(588,110)	(306,275)	(141,536)
Fine on purchase and sale contracts	(i)	(344,902)	(4,008)	(104,179)
Allowance for attorney's fees and judicial claims, net of reversals		(123,108)	(59,836)	(136,135)
Expenses with plant maintenance		(26,909)	(116,233)	(266,512)
Other		(246,496)	(550,441)	(415,513)
		<u>(2,669,290)</u>	<u>(7,938,621)</u>	<u>(4,446,942)</u>

(i) Of the amount in 2021, R\$263 million refers to the Take-or-Pay penalty applied to Braskem due to the non-consumption of HLR (chemical input) under the agreement with the supplier.

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33 Financial results

Transactions in foreign currencies are translated into the respective functional currency of the Company's subsidiaries at the exchange rates in effect 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 recognized in financial income, unless the liability involves a cash flow hedge accounting relationship.

	Note	2021	2020	2019
Financial income				
Interest income		439,891	310,202	390,841
Inflation indexation income on tax assets	10(b)	1,041,917	170,857	317,701
Other		345,630	119,125	142,012
		1,827,438	600,184	850,554
Financial expenses				
Interest expenses		(2,922,958)	(2,928,803)	(2,191,765)
Inflation indexation expenses on tax liabilities		(93,722)	(138,410)	(232,612)
Discounts granted		(75,677)	(81,920)	(80,404)
Loans transaction costs - amortization		(691,243)	(172,269)	(465,000)
Adjustment to present value - appropriation		(179,461)	(225,889)	(348,930)
Interest expense on leases		(173,536)	(164,166)	(137,903)
Losses on derivatives		(1,003,502)	(809,150)	(115,050)
Other		(767,056)	(392,758)	(311,121)
		(5,907,155)	(4,913,365)	(3,882,785)
Exchange rate variations, net				
On financial assets		230,370	336,527	(31,137)
On financial liabilities		(4,233,177)	(5,635,238)	(1,693,383)
		(4,002,807)	(5,298,711)	(1,724,520)
Total		(8,082,524)	(9,611,892)	(4,756,751)

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 Variation				
	2021	2020	Variation	2021	2020	2019	2021-2020	2020-2019
U.S. dollar - Brazilian real	5.5805	5.1967	7.39%	5.3956	5.1578	3.9461	4.61%	30.70%
Euro - Brazilian real	6.3210	6.3779	-0.89%	6.3784	5.8989	4.4159	8.13%	33.58%
Mexican peso - Brazilian real	0.2730	0.2610	4.60%	0.2660	0.2402	0.2049	10.75%	17.22%
U.S. dollar - Mexican peso	20.4519	19.9240	2.65%	20.2900	21.5098	19.2568	-5.67%	11.70%
U.S. dollar - Euro	0.8853	0.8166	8.41%	0.8458	0.8775	0.8930	-3.61%	-1.74%

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34 Expenses by nature and function

Schedule of expenses by nature and function

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Classification by nature:			
Raw materials other inputs	(63,570,499)	(37,913,921)	(37,380,310)
Personnel expenses	(3,478,323)	(3,074,305)	(3,004,762)
Outsourced services	(3,193,970)	(2,219,413)	(3,242,373)
Depreciation and amortization	(4,178,433)	(4,048,081)	(3,632,265)
Freights	(2,966,229)	(2,321,740)	(2,204,453)
Costs of idle industrial plants	(338,987)	(518,528)	(309,742)
Provision - geological event in Alagoas	(1,339,765)	(6,901,828)	(3,383,067)
PIS and COFINS credits - exclusion of ICMS from the calculation basis	1,031,099	310,557	1,904,206
Other general and administrative expenses	(1,551,191)	(1,908,729)	(927,294)
Total	<u>(79,586,298)</u>	<u>(58,595,988)</u>	<u>(52,180,060)</u>
Classification by function:			
Cost of products sold	(73,568,231)	(47,331,414)	(45,879,118)
Selling and distribution	(2,055,640)	(1,852,055)	(1,783,455)
(Loss) reversals for impairment of trade accounts receivable	(8,914)	(55,252)	(7,069)
General and administrative	(2,522,127)	(1,918,747)	(2,224,180)
Research and development	(296,583)	(250,648)	(247,730)
Other income	1,534,487	750,749	2,408,434
Other expenses	(2,669,290)	(7,938,621)	(4,446,942)
Total	<u>(79,586,298)</u>	<u>(58,595,988)</u>	<u>(52,180,060)</u>

35 Segment information

The Company's organizational structure is formed by the following segments:

- **Brazil:** includes: (i) the production and sale of chemicals at the Camaçari Petrochemical Complex in Bahia, the Triunfo Petrochemical Complex in Rio Grande do Sul, the Capuava Petrochemical Complex in the state of São Paulo, and the Duque de Caxias Petrochemical Complex in the state of Rio de Janeiro; (ii) the supply of electricity and other inputs produced in these complexes to second-generation producers located in the petrochemical complexes; (iii) the production and sale of PE, including the production of green PE made from renewable resources, and of PP; and (iv) the production and sale of PVC and caustic soda.
- **United States and Europe:** operations related to PP production and sale in the United States and Europe, through the subsidiaries Braskem America and Braskem Alemanha, respectively.
- **Mexico:** comprises the activities relation to the PE production and sale 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 operating segments are stated based on the results of operations.

The eliminations and reclassifications line are mainly represented by purchases and sales between the Company's reportable segments.

USA and Europe	10,044,263	(8,217,515)	1,826,748	(525,701)		(23,859)	1,277,188
Mexico	3,051,440	(2,504,012)	547,428	(351,199)		324,682	520,911
Total	52,238,264	(45,967,468)	6,270,796	(2,729,808)		(3,851,078)	(310,090)
Other segments	296,285	(188,335)	107,950	40,306	10,218	4,175	162,649
Corporate unit				(1,533,590)		1,773,267	239,677
Braskem consolidated before eliminations and reclassifications	52,534,549	(46,155,803)	6,378,746	(4,223,092)	10,218	(2,073,636)	92,236
Eliminations and reclassifications	(211,024)	276,685	65,661	(39,342)		35,128	61,447
Profit before net financial expenses and taxes	52,323,525	(45,879,118)	6,444,407	(4,262,434)	10,218	(2,038,508)	153,683

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(c) Property, plant and equipment and intangible assets by segment

	<u>2021</u>	<u>2020</u>
Reporting segments		
Brazil	18,072,312	17,299,352
USA and Europe	7,688,713	7,242,262
Mexico	14,019,167	13,892,609
Total	39,780,192	38,434,223
Unallocated amounts	322,237	323,617
Total	40,102,429	38,757,840

36 Contractual obligations

The Company has entered into contracts to purchase production inputs. As of December 31, 2021, these commitments summed R\$6,079,568 and are expected to be settled until 2044.

37 Subsequent events

- (a) On January 5, 2022, Braskem S.A. issued Certificates of Agribusiness Receivables ("CRA") in the amount of R\$721 million, with interest rates of IPCA plus 5.5386% p.a. and of IPCA plus 5.5684% p.a. for the series due in 7 and 10 years, respectively.
- (b) On February 25, 2022, the Municipality of Maceió signed the partial Term of Adhesion to the Agreement for Socio-Environmental Reparation executed on December 30, 2020, which addresses the allocation of resources provided for in mentioned Agreement to urban mobility actions. The Term of Adhesion enables the implementation of adequate and sufficient urban mobility projects to mitigate the impacts of the evacuation of affected areas. The actions established in this term were already measured and recorded, not resulting in changes in the provision.
- (c) Global markets are currently operating in a period of global economic and financial uncertainty, volatility and disruption following Russia's invasion. Although the length and impact of the ongoing military conflict is highly unpredictable, it and any other geopolitical tensions could impact the economy and business activity globally.

The Company has formed a committee to closely monitor the consequences of such conflict to take measures to minimize the potential impacts on the Company, its team members and the communities where it operates. As of the date of these financial statements, no material impacts were identified on the Company's business stemming from the sanctions and the adverse scenario caused by the military conflict.

Due to the uncertainties arising from the potential impact on the global economy and, consequently, on the demand and costs of products, the global supply chain and industrial operations, we are unable to accurately predict the adverse impacts on the equity and financial position of the Company.

Further sanctions, embargoes, regional instability, geopolitical shifts, adverse effects on macroeconomic conditions, currency exchange rates and financial markets may increase our costs, disrupt our supplies, reduce our sales, or otherwise affect our operations.

- (d) On April 19, 2022, the Annual and Extraordinary General Shareholders Meeting approved the dividends for the year 2021, corresponding to R\$1,696348838321 (one real sixty-nine cents and fraction) per common and preferred share class "A" in circulation. The dividends will be paid as of May 2, 2022.