

BRASKEM SA  
Form 6-K  
March 14, 2019

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**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

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**FORM 6-K**

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13A-16  
OR 15D-16 OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the month of March, 2019**  
**(Commission File No. 1-14862 )**

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**BRASKEM S.A.**  
*(Exact Name as Specified in its Charter)*

**N/A**  
*(Translation of registrant's name into English)*

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**Rua Eteno, 1561, Polo Petroquimico de Camacari**  
**Camacari, Bahia - CEP 42810-000 Brazil**  
*(Address of principal executive offices)*

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Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F  Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K  
in paper as permitted by Regulation S-T Rule 101(b)(1).

Indicate by check mark if the registrant is submitting the Form 6-K  
in paper as permitted by Regulation S-T Rule 101(b)(7).

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to  
the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes  No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82- \_\_\_\_\_.

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## MANAGEMENT REPORT 2018

### MANAGEMENT REPORT

#### BRASKEM 2018

The Management of Braskem S.A. ("Braskem") hereby submit to you the Management Report and corresponding Financial Statements, accompanied by the reports of the Independent Auditors and Audit Board, for the fiscal year ended December 31, 2018.

In 2018, world economic growth was stable, driven mainly by the United States and emerging economies. However, uncertainties related to (i) the sustainability of U.S. growth driven by tax stimulus; (ii) the slowdown of the Chinese economy; and (iii) the protectionist policies adopted by China and the United States, fueled expectations of a global slowdown. This spurred a repricing of global assets, which generated volatility in global markets, including in the petrochemical market.

In addition to these uncertainties in the global petrochemical scenario, 2018 was marked by non-recurring events that affected the Company's operating and financial performance: (i) the incident involving the chlor-alkali plant in Alagoas; (ii) the power outage that affected the plants in Brazil's Northeast; (iii) the severe winter in the United States; (iv) the truck drivers' strike in Brazil; and (v) logistics constraints on inbound propylene shipments at the plants in Europe due to low river levels. In this scenario, net income came to R\$2,867 million<sup>1</sup>, down 30% from 2017, corresponding to R\$3.60 per common share and class "A" preferred share

Despite these challenges, Braskem remained focused on creating value for its shareholders and posted record-high free cash flow of R\$7.1 billion, 187% higher than in 2017, which is basically explained by: (i) the positive variation in operating working capital; (ii) the weaker Brazilian real against the U.S. dollar; (iii) the lower payment of income tax in the United States; and (iv) lower interest expenses. In this scenario, return on free cash flow stood at 19%.

Financial leverage measured by the ratio of net debt to EBITDA in U.S. dollar ended 2018 at 2.06x<sup>3</sup>. Accordingly, the Company maintained investment grade ratings at Standard & Poor's (BBB-) and Fitch Ratings (BBB-) and credit ratings above Brazil's sovereign risk at the three main agencies.

In this scenario, the Company's management is proposing to the Annual Shareholders Meeting, to be held on April 16, 2019, the distribution of dividends in the amount of R\$2,670 million

related to fiscal year 2018, equivalent to 100% of net income distributable to shareholders.

The highlights in the Company's strategy during the year were: (i) first year operating the cracker in Bahia using imported ethane as feedstock. Of the total ethylene produced by the cracker, 11% used ethane feedstock; (ii) continuous construction of the new PP plant reached 48.3% completion (iii) approval by the Board of Directors of the incorporation of a subsidiary in India to pursue new growth and sales opportunities for the Company; (iv) launch of the Company's digital transformation; and (v) creation of working groups to monitor priority topics and to develop innovative solutions in the fields of mobility, recycling and digital manufacturing (3D printing).

In its commitment to sustainable development, Braskem once again remained on the A Lists of the Carbon Disclosure Program (CDP) for climate risk management for the third consecutive year and for water management for the second consecutive year, and was the only Brazilian company to attain the highest classification in both these rankings. Moreover, Braskem, along with 27 other companies in the plastics value chain, founded the Alliance for the End of Plastic Waste, a non-profit organization that plans to invest up to US\$1.5 billion in projects to develop technologies to end plastic waste disposal in the environment, especially in the oceans. The Company also announced its position in favor of the Circular Economy, with the definition of eight global key initiatives.

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1 Considers the net profit attributable to Company's shareholders

2 In the case of class "B" preferred shares, the amount is R\$0.59 per share

3 Excludes the Project finance in Mexico

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## MANAGEMENT REPORT 2018

Braskem revised its Private Social Investment (PSI) strategy with the definition of three priorities: (i) sustainable consumption and post-consumption; (ii) innovation and sustainable entrepreneurship; and (iii) local development.

With regard to People, the Company is conducting a transformation with the involvement of its members and co-creating the new people management model. Some initiatives have already been implemented and the Company has already obtained 5 important market recognitions.

Consistent with the adoption of the best governance practices, two new independent directors were elected to the Board of Directors. Now, seven of the 11 directors are considered independent.

Regarding the commitment to acting ethically, with integrity and transparency, Braskem remained a signatory to the Business Pact for Integrity and Against Corruption (Ethos Institute) and to the UN Global Compact. Furthermore, to mitigate process risks and promote significant improvements in the general control environment, in 2018, Braskem completed 95.4% of the initiatives in its Compliance Program.

### Acknowledgements:

Management once again takes this opportunity to thank Shareholders for the trust they place in Braskem, as well as our Clients, since this partnership motivates us to always follow a path of excellence. The management also thanks the Team Members, Partners and Suppliers for their dedication and competence, which are critical to ensuring our accomplishments and results, towards an increasingly more global Braskem.

In its January 2019 report, the IMF revised downward its forecast for world GDP growth in 2019 by 0.2 p.p. in relation to its last forecast in October 2018. The current expectation is for the global economy to grow by 3.5% in 2019, reflecting (i) the sharper-than-expected declines in the growth rates of developed economies; (ii) the temporary slowdown in the growth rates of emerging countries; and (iii) the impacts from the trade war between the United States and China on the latter's economy.

In the regions where the Company has industrial operations, the GDP growth projected for 2019 is: (i) 2.2% in Brazil, driven by the recovery in domestic demand, sustained by stable monetary policy and fiscal austerity measures, with approval of the structural reforms; (ii) 2.5% in the United States, impacted by the weakening of the government tax stimulus and the expectations of interest rate hikes by the Federal Reserve in a context of trade tensions, primarily with China; (iii) 1.6% in the Euro Zone, with a deceleration in industrial production in Germany, an economic recession in Italy and uncertainties regarding Brexit; and (iv) 2.1% in Mexico, with stronger domestic demand and higher exports of manufactured goods.

The recent change in expectations for global economic growth led to a downward revision in oil demand, which, combined with the expected growth in the supply of shale oil in the United States, have pressured oil prices, with the Brent oil barrel price averaging US\$59 in January 2019, down 17% from the average price in 2018.

With regard to the petrochemical industry, the expectation for 2019 is for a moderately challenging scenario<sup>4</sup>:

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4 Source: external advisory

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## **MANAGEMENT REPORT 2018**

§ Spreads of key chemicals<sup>5</sup> produced by Braskem: expectation of narrower spreads, due to the perception of a higher global supply of products. New petrochemical capacities combined with forecasts of more moderate economic growth, especially in Asia, have affected key industrial chains.

§ Spread of the polyolefins<sup>6</sup> produced by Braskem in Brazil: expectation of contraction due to the startup of new ethane-based PE capacities in the United States and the slowdown in the Chinese economy.

§ Spread for vinyls<sup>7</sup>: upward trend due to the lack of major new capacities, mainly due to environmental concerns, especially in China.

§ PP spread in United States<sup>8</sup>: expectation of expansion due to stronger domestic demand and the lack of new capacities coming online before 2020, coupled with lower propylene prices, given the increased use of heavier feedstock by crackers, especially LPG (propane and butane) and naphtha, at the expense of ethane.

§ PP spread in Europe<sup>9</sup>: downward trend explained by the slowdown in euro zone economies and the deceleration in the automotive industry, which should continue to be adversely affected by PP demand in the region.

§ PE spread in North America<sup>10</sup>: should be pressured by lower PE prices, as explained above, and by higher ethane prices due to strong demand, with the startup of new crackers and higher exports, combined with the lack of pipelines and fractionators to transport and separate gas, respectively.

Braskem's priorities in the year will be: (i) meeting the needs of clients in key markets, using Europe as an export platform and the offices in Singapore and India to strengthen its presence in Asia; (ii) further diversifying its feedstock profile and supplier base; (iii) executing the scheduled shutdown at the cracker in Bahia on time and on budget; (iv) advancing construction of the new PP plant in the United States; (v) ensuring zero severe accidents by upholding high health, environment and safety standards; (vi) continuing to implement the actions in the Compliance Program and the recommendations of the Independent Monitorship; (vii) accelerating the implementation of innovation programs, especially digital ones; (viii) developing initiatives for the positioning to promote the circular economy; and (ix) maintaining the company's financial health.

## **§ PETROCHEMICAL INDUSTRY 2018**

§ Spreads of key chemicals<sup>5</sup> produced by Braskem: were lower as a result of lower: (i) butadiene prices, which in 2017 was benefited from strong demand in China; and (ii) cumene

prices that in 2018 were impacted by the higher supply following the startup of new capacities in Asia.

§ Spread of the polyolefins<sup>6</sup> produced by Braskem in Brazil: reduced due to the startup of new PE capacities, especially in the United States, as well as to weaker demand in Asia.

§ Spread for vinyls<sup>7</sup>: narrowed mainly due to the higher naphtha price, which followed the upward trend in oil prices, and to the high inventories of caustic soda in the United States, combined with weaker demand for caustic soda, given that a large alumina producer operated at low capacity utilization rates during most of the year.

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5 Difference between the international prices of key chemicals (15% ethylene, 10% propylene, 35% BTX, 10% butadiene, 5% cumene and 25% fuels, based on the capacity mix of Braskem's industrial units in Brazil) and the price of naphtha. (Source: external advisory.)

6 Difference between the international price of PE and PP based on the capacity mix of Braskem's industrial units in Brazil and the price of naphtha. (Source: external advisory.)

7 Corresponds to: international PVC Price - (048\*3,33\*ARA Naphtha Price Reference) - (Brent Oil Price\*1.75/1.725) + (0.685 x Caustic Soda Price)

<sup>8</sup> Difference between the U.S. polypropylene price and the U.S. propylene price.

9 Difference between the Europe polypropylene price and the Europe propylene price.

<sup>10</sup> Difference between the U.S. polyethylene price and the U.S. ethane price.

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## **MANAGEMENT REPORT 2018**

§ PP spread in United States<sup>8</sup>: improved, explained by the higher supply of propylene, given the good operating performance of propane dehydrogenation plants (DHP), which registered higher utilization rates in the year. In addition, following the increase in ethane prices, many producers substituted the gas by heavier feedstocks, such as LPG (propane and butane) and naphtha, which contributed to the higher supply of propylene in the region.

§ PP spread in Europe<sup>9</sup>: narrowed, due to the weaker demand for PP in the region, mainly from the automotive industry, whose supply chain was affected by regulations to ensure reductions greenhouse gas emissions.

§ PE spread in North America<sup>10</sup>: narrowed, due to the oversupply of PE and the increase in ethane prices driven by stronger demand from recently inaugurated crackers, combined with the lack of pipelines to transport gas and fractionators to extract the ethane.



§ **OPERATING PERFORMANCE IN 2018 BY REGION**

**BRAZIL**

Demand for resins (PE, PP and PVC) came to 5.2 million tons, up 2.4% from 2017, which is explained by the stronger economic activity driven by demand from the agricultural, cosmetics, pharmaceutical and food packaging sectors. The highlight was the PVC market, which grew 1.4% after four straight years of contraction.

In 2018, Braskem's crackers operated at an average capacity utilization rate of 91%, down 3 p.p. from 2017, which is mainly explained by: (i) the truckers' strike; (ii) the incident involving the chlor-alkali plant in Alagoas; (iii) the blackout that affected Brazil's Northeast plants in March; and (iv) lower demand in 4Q18.

In this scenario, resin sales came to 3.4 million tons, down 2% from 2017. Sales of key chemicals were 1% higher than 2017, at 2.9 million tons. In 2018, resin exports were 1.3 million tons and exports of key chemicals amounted to 570,741 tons, down 14% and 31% from 2017, respectively.

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## **MANAGEMENT REPORT 2018**

COGS was US\$9,510 million, up 9% from 2017, due to higher prices for all feedstocks, which was partially offset by lower sales volumes.

In 2018, COGS was positively impacted by the PIS/COFINS tax credit on feedstock purchases of US\$278 million (R\$1,020 million) and by the Reintegra credit in the amount of US\$20.5 million (R\$69 million).

In the year, the units in Brazil and exports posted EBITDA of US\$1,905 million (R\$6,985 million), to account for 61% of the Company's consolidated EBITDA from all segments.

### **UNITED STATES AND EUROPE**

PP demand in the U.S. market grew about 3% in relation to 2017, with the highlight the caps and oriented film segments, which are widely used in food packaging. In the European market, PP demand decline compared to 2017, following the region's weak economic performance, especially in countries such as Germany and Italy.

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## **MANAGEMENT REPORT 2018**

Plants in the region operated at an average capacity utilization of 87%, down 10 p.p. from 2017, mainly due to: (i) outages at plants in the United States; (ii) the scheduled shutdown of the unit in Oyster Creek, Texas for 50 days; and (iii) logistics constraints on propylene shipments to the plants in Europe due to low river levels. In this context, PP sales decreased 9% compared to 2017, to 1.9 million tons.

COGS was US\$2,496 million, up 7% from 2017, explained by higher propane prices, which accompanied oil prices, and by logistics constraints in Europe that increased the monomer prices in the region.

In the year, the units in the United States and Europe posted EBITDA of US\$608 million (R\$2,208 million), representing 19% of the Company's consolidated EBITDA.

Construction of the new PP plant in the United States reached 48.3% completion at the end of 2018, with investments of US\$382 million already realized.

### **MEXICO**

PE Demand in Mexico was 2.1 million tons, compared to 2.0 million tons in 2017, representing growth of 2.7%. Demand growth was led by blow molding and film and sheets, which are used extensively in the food packaging and personal care sectors.

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## MANAGEMENT REPORT 2018

The PE plants operated at a capacity utilization rate of 77%, down 11 p.p. from 2017, due to the lower supply of ethane in the period and the scheduled shutdown in May. As a result, PE sales decreased 18% from 2017, to 798,840 tons, 67% of which was sold in Mexico's domestic market.

COGS was US\$636 million, 3% down from 2017, due to lower sales volumes, which was offset higher ethane prices.

The result of the segment includes income of US\$95 million related to the delivery-or-pay provision under the ethane supply agreement.

In the year, the Mexico unit posted EBITDA of US\$617 million (R\$2,251 million), representing 20% of the Company's consolidated EBITDA.

### § **CONSOLIDATED RESULTS<sup>11</sup> (ECONOMIC-FINANCIAL)**

#### **EBITDA**

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<sup>11</sup> Braskem's consolidated result corresponds to the sum of the results in Brazil, United States & Europe and Mexico, less eliminations from the revenues and costs from the transfers of products among these regions.

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**MANAGEMENT REPORT 2018****OTHER INCOME (EXPENSES) NET**

In 2017, the Federal Supreme Court (STF) decided, that ICMS tax should not be included in the calculation base of PIS/COFINS. In this scenario, Braskem recognized in 4Q18 income of R\$520 million related to PIS and COFINS tax liabilities paid in excess from March 2017 to November 2018, of which R\$265 million, related to the months of 2018, was recorded under "Net sales revenue," R\$236 million, related to the months of 2017, under "Other income (expenses) net" as per the following table, and R\$18 million under "Financial income".

**NET FINANCIAL RESULT**

**Financial expenses:** in the year, despite the effect from the Brazilian real depreciation of 17% on consolidated net exposure, financial expenses decreased compared to 2017, during which period "Other Expenses" were impacted in the amount of R\$471 million by the early settlement of derivative operations due to debt prepayment.

**Financial income:** influenced by the reduction in Brazil's interest rates.

**Net exchange variation:** compared to 2017, this line was affected by the Brazilian real depreciation in the period on the net exposure of the financial result not designated for hedge accounting and by the expense with the transition to hedge accounting of exports, which previously were recorded under shareholders' equity, in the amounts of R\$1,023 million at Braskem and R\$237 million at Braskem Idesa.

## MANAGEMENT REPORT 2018

### LIQUIDITY AND CAPITAL RESOURCES

On December 31, 2018, the average debt term was approximately 14 years, while the average weighted cost of the Company's debt was equivalent to exchange variation + 5.52%. The main new funding operations were as follows: US\$158 million (R\$610.5 million), guaranteed by Euler Hermes, for the new PP plant in the United States and US\$295 million, with credit coverage by the Italian government agency SACE, for corporate purposes.

Braskem's liquidity position of US\$1,794 million is sufficient to cover the payment of all obligations maturing over the next 40 months. Considering the international revolving credit facility in the amount of US\$1 billion and not used in the period, this coverage is 48 months.

In September 2018, given its strong cash generation and to reduce interest expenses on borrowings, Braskem partially redeemed US\$200 million in the 7.375% perpetual bonds at par value.

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## MANAGEMENT REPORT 2018

### Risk-rating agencies:

A Braskem maintained investment grade ratings above Brazil's sovereign risk at Standard & Poor's (BBB-) and Fitch Ratings (BBB-) and a stable ratings outlook at the three main agencies. The reports are available on the Investor Relations website (<http://www.braskem-ri.com.br/>).

### **INVESTMENTS<sup>12</sup>**

#### Operating Investments in 2018:

In Brazilian real, capital expenditure was 2% lower than planned, due to gains in commercial negotiations with suppliers and the cancelation/postponement of projects. In U.S. dollar, expenditures were 13% lower than planned, explained by the depreciation in the Brazilian real in relation to the exchange rate projected for 2018. Of the total investments, R\$145 million was allocated to Health, Environment & Safety projects and R\$44 million was allocated to Innovation & Technology.

#### Strategic Investment in 2018:

Of the total spending in strategic projects, R\$778 million (US\$210 million), or 98% of the total, was invested in the construction of the new PP plant in the United States.

At the end of 2018, Braskem already had invested US\$382 million and construction had reached 48.3% completion, as follows:

- § Engineering Detailing: 97.4% completed;
- § Equipment and Material Acquisitions: 94.7% completed; and
- § Construction: 41.6% completed.

#### Braskem Idesa

Regarding Braskem Idesa, the investment made was below the amount planned due to the cancelation/postponement of projects.

### **FREE CASH FLOW<sup>13</sup>**

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<sup>12</sup> Considers operating investment, maintenance shutdowns and acquisitions of spare parts.





## MANAGEMENT REPORT 2018

In the year, free cash flow increased 187% in relation to 2017, due to:

- (i) the positive variation in operating working capital;
- (ii) the positive impact of the depreciation of the Brazilian real against the U.S. dollar;
- (iii) the lower payment of income tax in the United States in US dollars; and
- (iv) the lower interest expenses due to the early settlement of higher-cost liabilities denominated in Brazilian real, including the partial redemption of the perpetual bond.

Consistent with its commitment to foster continuous development in the petrochemical industry and plastics chain, Braskem maintains an Innovation department with 299 dedicated Team Members. The department has 2 Innovation & Technology Centers, with 1 in Triunfo, Rio Grande do Sul, Brazil and 1 in Pittsburgh, Pennsylvania, United States; 1 Renewable Chemicals Research Center in Campinas, São Paulo; 1 Center for the Development of Process Technologies in Mauá, São Paulo; 2 Technical Centers in Wesseling, Germany and Coatzacoalcos, Mexico; and 7 pilot plants. In December 2018, its portfolio was formed by 308 projects to develop new products and processes.

A relevant portion of the pipeline's value is represented by long-term projects of higher technological complexity, which are divided into programs to develop new technologies, create new product families and expand into new markets.

The importance of Braskem's innovation program and its pipeline is demonstrated by the results of new Polyolefins product in all regions, where 8% of consolidated sales come from products launched in the last three years. In 2018, 27 new resin grades were added to the portfolio, which included:

13 Note that the cash flow analysis above does not consider the reclassification of "cash and cash equivalents" to "financial investments" related to financial investments in Brazilian federal government bonds (Brazilian floating-rate (SELIC) government bond - LFT) and floating-rate bonds (LFs) issued by financial institutions, whose original maturities exceed three months, with immediate liquidity and expected realization in the short term, in accordance with Note 4 to the Quarterly Financial Statements as of June 30, 2018. In the cash flow presented, this is recorded as "financial investments" (includes LFTs and LFs), with the following effects from reclassifications: (i) decrease in the balance of financial investments of R\$1,061 million in 2017; and (ii) increase in the balance of financial investments of R\$430 million in 2018.



## MANAGEMENT REPORT 2018

- LLDPE for oil bottle caps: low-density polyethylene that features higher resistance for edible oil bottle caps.
  - LLDPE for flexible packaging: new metallocene that combines excellent processing for film manufacturing with good mechanical properties and gloss for packaging.
  - Polypropylene impact copolymer: resin launched during the NPE plastics showcase that combines transparency, stiffness and hardness against impact. Used in thermoformed packaging, this product's market was developed in the United States and Europe.
  - PP for buckets: new resin with improved mechanical properties and a higher melt flow rate, which improves processability and facilitates production.
  - PVC: Development of a new grade for rigid profiles for ceiling panels, with superior processability and the capacity to incorporate mineral components. The development aims to serve the converter industry, in alignment with the recently revised standard ABNT NBR 14285.
- Some of the most notable achievements in the field of Innovation & Technology in the year are described below:

- a) Filing of 34 new patent applications and 152 requests for extensions. The Company currently has 652 active filings, 282 of which with patents granted.
- b) With regard to the assets dedicated to research and development, the highlights were:
  - (i) Investment of over R\$14 million in the Technology & Innovation Center in Triunfo, Rio Grande do Sul, which was allocated to the Polymer and Catalysis laboratories and to the Pilot Plants, especially in the renewal of equipment.
  - (ii) Investments of more than R\$10 million in the Technology & Innovation Center in Pittsburgh, Pennsylvania, including the installation of a semi-commercial thermoforming line to support the development of new products and applications. In addition, robots were installed to automate operational routines in the laboratory, including for compression molding, elasticity and impact tests.
- c) The Innovation & Technology center in Brazil provided support to 420 clients through over 59,000 analyses. Meanwhile, the center located in the United States provided support to 75 clients through roughly 16,000 analyses.
- d) New operation in Boston, Massachusetts focusing on the research and development of chemicals and biobased materials. The choice of the site aims to take advantage of the region's expertise in biotechnology and advanced materials. Activities include research and development in biotechnology, materials science, business and market development and identifying new technologies for strategic partnerships.

e) Construction of a pilot fermentation plant at the Renewable Chemicals Research Center in Campinas, São Paulo. The plant's startup was in November 2018. The pilot plant will enable Braskem to advance in projects involving renewable chemicals, which in turn will support the development of new products and processes. These projects, which are related to the proposal to promote the circular economy, support the development of products that help to capture carbon dioxide.

f) Start of construction of the new 2,800-square-meter building in Triunfo, Rio Grande do Sul. The preparation of the site where the new laboratory will be built began in late 2018 and its conclusion is slated for October 2019. The space will receive advanced polymer characterization laboratories, which include chromatography, polymer cracking and microscopy analyses, as well as catalysis and petrochemical process technology laboratories. The site also will house a quality control laboratory. Total investment, including equipment, will amount to approximately R\$50 million.

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## MANAGEMENT REPORT 2018

g) Mechanical recycling platform for the development of all-new recycling solutions, which will help to differentiate Braskem's portfolio.

### Squads

To accompany disruptive global trends, Braskem created multidisciplinary teams formed by team members from various areas, which it called "squads." The objective of these squads is to accompany priority topics and to develop innovative solutions in the fields of mobility and digital manufacturing (3D printing).

### Digital transformation

The year marked the beginning of the Company's digital transformation. Targeting areas such as industrial operations, marketing, sales, supply chain and corporate activities, the process is defined by a roadmap that includes over 50 initiatives. With the aim of creating digital tools for optimizing processes, preventive maintenance, quality control, blockchain applied to logistics processes, projecting supply and demand, tracking products and many other functions, Braskem is adopting technologies such as artificial intelligence, machine learning and advanced analytics.

On December 31, 2018, Braskem's capital was R\$8,043,222,080.50, divided into 797,218,554 shares, as shown in the following table. Its common shares, class "A" preferred shares and class "B" preferred shares are traded on the Sao Paulo Stock Exchange (B3) under the stock tickers "BRKM3," "BRKM5" and "BRKM6," respectively.

On the New York Stock Exchange (NYSE), its shares are traded through the Level II ADR Program under the ticker "BAK." On the Madrid Stock Exchange, its shares are traded through the Latibex Program under the ticker "XBRK."

In 2018, there were no material changes in the Company's ownership structure, such as capital increases, stock splits, reverse stock splits, bonus shares or capital reductions.

Braskem was informed by Odebrecht, its controlling shareholders, that all common shares issued by the Company and owned by Odebrecht Serviços e Participações S.A. are currently subject to fiduciary sale, as guarantee for loans owed by Odebrecht S.A. and its subsidiaries.

On February 1, 2019, Braskem was informed by Odebrecht S.A., its indirect parent company, of the corporate restructuring of the Odebrecht Group with the main goal of segregating its business activities. As informed, the restructuring involved the spin-off of Odebrecht Serviços e Participações S.A. (OSP) with the segregation of its assets composed of all common and preferred shares issued by Braskem and of its liabilities composed of the Debentures Sales Agreement entered into on March 16, 2016 by and between BNDESPAR and OSP, with

intervening third-parties, as amended ("Spun-Off Portion"), of the other operating activities of OSP, followed by the merger of the Spun-Off Portion into OSP Investimentos S.A. (OSP Inv.).

Given that the corporate transactions occurred within the Odebrecht Group, Odebrecht S.A. remained the indirect parent company of Braskem.

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## MANAGEMENT REPORT 2018

### § **B3 (Level I Corporate Governance) – BRKM5 and BRKM3 Stock Performance**

In 2018, the Bovespa Index, the benchmark stock index of the São Paulo Stock Exchange (B3), maintained its series of annual gains by advancing 15.03% from its level at the close of trading on December 28, 2017. The main factors contributing to the index's positive performance were the recovery in the Brazilian economy over the year and the market's expectation regarding the possibility of the administration of recently elected President Jair Bolsonaro approving austerity measures and adopting a liberal agenda.

Braskem's common stock (BRKM3) ended the year quoted at R\$45.51, an increase of 9% from the end of 2017. Braskem's class "A" preferred shares (BRKM5) also appreciated from the close of 2017, by 15.3% to R\$47.38. The gain in Braskem's stock was influenced by: (i) the start of negotiations between Odebrecht and LyondellBasell to sell the interest held by the former in Braskem, as per the Material Fact notice of June 15; (ii) the depreciation of the Brazilian real against the U.S. dollar in 2018; (iii) the signs of recovery in the Brazilian economy; and (iv) the good operating and financial performance delivered by Braskem in the year.

In the year, the highest one-day gain in BRKM3 and BRKM5 shares was 12.6% and 21.4%, respectively, in the trading session on June 15, 2018, driven by news reports that Odebrecht, Braskem's parent company, had started negotiations with Dutch company LyondellBasell to sell its stake in Braskem.

The highest one-day loss in BRKM3 in the year was 8.7%, in the trading session of May 28, 2018, in connection with the truck drivers' strike in Brazil. The largest one-day loss in BRKM5 shares was 4%, in the trading session on February 8, 2018.

BRKM3 shares registered average daily trading volume of R\$129,000 in 2018, compared to R\$111,000 in 2017, an increase of 16%. The highest price in the year was R\$59.00, on September 10, 2018, and the lowest was R\$41.15, on May 4, 2018.

In the year, average daily financial trading volume in the preferred stock BRKM5 increased by 41% compared to 2017, from R\$57.3 million to R\$80.7 million. The highest price in the year was R\$61.66, on September 6, 2018, and the lowest was R\$41.12, on June 14, 2018.

For the 14<sup>th</sup> straight year, Braskem stock was included as a component of the Corporate Sustainability Index (ISE), placing it in a select group of companies composing the portfolio for the period from January to December 2018. Created by the B3 in partnership with capital market trade associations, the Getulio Vargas Foundation, Instituto Ethos and the Ministry of the Environment, the ISE reflects the return on a portfolio composed of stocks from companies with a recognized commitment to social responsibility and corporate sustainability and to promoting good practices in Brazil's corporate environment. The new ISE portfolio is formed by 35 stocks of 30 companies that represent 13 industries and total market capitalization of R\$1.73 trillion, which corresponds to 49% of the total market capitalization of listed companies in Brazil.

### § **Level II ADR Program – New York Stock Exchange (BAK)**

In 2018, the ADRs representing class "A" preferred shares gained 6.09% compared to 2017. The highest price in the year was US\$32.42, on January 22, 2018, and the lowest was US\$21.76, on January 14, 2018.

In addition, according to the notices to the market dated May 1, 2018, May 21, 2018, November 9, 2018 and March 8, 2019, it has not yet been possible to file the Form 20-F for the year ended December 31, 2017 ("2017 Form 20-F") with the U.S. Securities and Exchange Commission ("SEC"), considering that the Company has not yet concluded the additional procedures and analyses on its internal processes and controls. The New York Stock Exchange (the "NYSE") granted the Company an additional extension until May 16, 2019 to file the 2017 Form 20-F, which extension is subject to reassessment on an ongoing basis. Pursuant to the NYSE rules, there are no further extensions which may be granted in respect of the 2017 20-F. Accordingly, if Braskem is unable to file the 2017 20-F until this date, the NYSE will, on or about such date, commence delisting procedures and simultaneously halt the trading of Braskem' American Depository Shares (ADS) listed on the NYSE. The Company will continue to endeavor all efforts to be able to comply its filing obligation. The Company, however, cannot assure that it will be able to file the 2017 Form 20-F by May 16, 2019. The continuing delay in filing the 2017 Form 20-F and related potential delisting may have an adverse effect on the Company.

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Braskem adopts a management model based on recognized corporate governance practices to ensure its proper functioning. In addition to its Board of Directors and an Audit Board with duties assigned to it by Law no. 6,404/76, as amended by Law no. 10,303/01, and performing its duties as an Audit Committee, in accordance with the standards of the Securities and Exchange Act of 1934, as amended by the Sarbanes-Oxley Act of 2002 ("SOX"), the company also has four Standing Committees supporting the Board of Directors, namely the Compliance Committee, Financial & Investment Committee, Strategy & Communication Committee and People & Organization Committee. The basic function of the Support Committees is to advise the Board of Directors on pre-established matters.

The evolution in rules and legislation around the world, especially in anti-corruption laws with extraterritorial effectiveness, and their application by regulatory and judicial bodies, has demonstrated the importance of constantly reviewing our policies and other business documents that guide the conduct of our Team Members and serve as the foundation for internal and external relations, with a view to ensuring that Braskem's business activities are conducted lawfully and with independence and integrity.

In this respect, the Company's Board of Directors approved a review of its Charter, as well as the creation of Charters for its Support Committees. Such Charters include duties that seek to reflect the best practice of corporate governance, such as: (i) Performance Review of the Board, its Support Committees and its Executive Administration; (ii) Integration Program for Directors; (iii) Executive Sessions in the Board; (iv) addressing Conflicts of Interest involving the Board; (v) formalizing the succession process for the Chief Executive Officer, Executive Board and Chief Compliance Officer of Braskem, among others.

Also, in 2018, Braskem published the Report of the Brazilian Corporate Governance Code (ICVM 586/2017), a flexible and non-mandatory model through which public corporations are encouraged to provide Corporate Governance information, in accordance with an "adopt or explain" model. In accordance with this model, the Company is not required to follow the recommendations of the Code, but it is required to explain why when it does not.

Braskem's key corporate governance practices follow:

§ Level 1 Corporate Governance segment of the B3 (special listing segment for companies on the B3) since February 13, 2003.

§ Braskem also complies with other requirements of the Level 2 Corporate Governance of the B3 and the Novo Mercado requirements, such as 100% tag-along rights for all Braskem shareholders in the case of transfer of control and a minimum of five directors on the Board and a unified term of up to two years, with reelection permitted, in addition to having seven independent directors, including the Chairman of the Board, and all directors being external.

§ An Audit Board with duties assigned to it by Law no. 6,404/76, as amended by Law no. 10,303/01, and performing its duties as an Audit Committee, in accordance with the standards of the Securities and Exchange Act of 1934, as amended by the Sarbanes-Oxley Act of 2002

("SOX"), particularly: (i) monitoring and analyzing the process for engaging independent auditors and advising the Board of Directors on their selection and compensation; (ii) analyzing the recommendations report drafted by the independent auditors and the reports on internal controls; and (iii) supervising the work of the independent auditors and discussing the scope of the audit services to be developed; among other responsibilities envisioned in its own charter.

§ Corporate Policies, including those related to: the compliance system, anti-corruption, corporate risk management, related parties, dividends, investments, financial transactions, securities trading, sustainability, insurance and guarantees, as well as those related to health, environment and safety, and quality and productivity.

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§ Braskem's Code of Conduct, which applies globally, establishes the values, principles and practices that guide its corporate conduct.

§ Ethics Committee working jointly with the Compliance Committee to register, handle, recommend and/or make decisions to resolve reports received through the Ethics Line, which is an exclusive, confidential communication channel for Team Members, Suppliers, Third Parties, Clients and other stakeholders to securely and responsibly contribute information to maintain a safe, ethical, transparent and productive corporate environment.

§ Private information systems for the Board of Directors and its Support Committees and the Audit Board. Through the Braskem Corporate Governance Portal, directors can access the information they need to perform their roles and responsibilities so that they can ensure security, transparency, fairness and the timely resolution of any issues.

§ The Braskem Director Manual, which supports the exercise of the duties of the directors, compiles in a single volume the main documents that guide Braskem's corporate governance and serves as the basis for the activities of the members of the Board of Directors, its Advisory Committees and the Audit Board.

Structured process for managing all of Braskem's guidance documentation, through which it describes, registers and disseminates the corporate decisions, rules and guidelines of fundamental importance for supporting the work of its Team Members.

### § External Audit

The Company has a formal Pre-Approval Policy for Engaging Services potentially rendered by the independent auditors, which was formalized and approved by the Board of Directors on June 22, 2005 ("Audit Services Policy"), that establishes the services (including examples of certain situations) that are prohibited from being rendered by the independent auditors given the possibility of compromising the objectiveness and independence of the external auditors.

In 2018, services rendered by the independent auditors other than external auditing amounted to R\$1.9 million, representing around 15% of the total fees paid to the auditors, and included: (i) a review of the sustainability content of the Annual Report and greenhouse gas inventory; and (ii) a compliance review of the calculation and use of tax credits, income tax and transfer price of the overseas subsidiary.

In accordance with Article 3 of CVM Instruction 381/2003, the independent auditor, KPMG Auditores Independentes, has declared to the Management of the Company that it rendered the aforementioned services in strict observance of the accounting standards addressing the independence of independent auditors conducting audits and that they do not represent a situation that could compromise the independence or objectivity required to perform the audit services provided to Braskem and its subsidiaries.

Braskem's sustainability actions are structured based on: (i) its Belief & Purpose; (ii) the ten

Macro Goals that encompass the Strategic Pillars of increasingly sustainable processes and products for a more sustainable life; and (iii) the Global Sustainable Development Policy. In this context, the Company conducted various initiatives throughout the year with the goal of strengthening its contribution to sustainable development, with the following highlights:

### **Circular Economy**

Consistent with its purpose of contributing to the transformation of the linear economy into a Circular Economy, effectively demonstrating the Company's commitment to sustainable development, Braskem announced its global positioning to promote the circular economy, entitled "[Braskem's Positioning in the Circular Economy](#)."

Through this positioning, Braskem assumed a voluntary commitment to adopt best practices at all its industrial units for further reducing the loss of pellets (the granules of raw material used to make plastic products, in which form most of the Company's products are sold) in its industrial processes by 2020, and undertook industry commitments to work towards having all plastic packaging reused, recycled or recovered by 2040.

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In the document, the Company also defined eight key global initiatives to achieve these targets: (i) partnerships with clients to develop products that facilitate the recycling and reuse of plastic packaging; (ii) more investments in new biobased resins; (iii) developing and supporting new technologies and recycling methods; (iv) programs on recycling and conscientious consumerism; (v) studies on life cycle assessments and the environmental and climate impacts of plastics; (vi) supporting the measurement and communication of recycling indicators for plastic packaging; (vii) partnerships to understand, prevent and solve the problem of debris in marine environments; and (viii) incentives for policies based on science to understand the origin and prevent debris in the oceans, particularly plastic.

Key initiatives implemented in the year to promote the Circular Economy follow:

**Green EVA:** consistent with the strategy to strengthen its renewable chemicals portfolio, Braskem is launching a biobased EVA resin made from sugarcane. With applications in the footwear, automotive, flexible packaging, transportation and other industries, the launch helped expand the I'm green™ portfolio. Developed in partnership with U.S.-based Allbirds, the new resin is used by our client in a footwear line that combines comfort, design and sustainability and already is available in the United States, New Zealand, Australia and Canada.

**Green PE:** Braskem signed a partnership for the supply of green plastic to the Lego Group. Other applications also were developed, ranging from Nutrella bread packaging and Neutrox beauty products to Unilever's TRESemmé line and others.

**New concept for recycled resins:** launched at the international event Sustainable Brands, which was held in Vancouver, Canada in June, this new resin concept features superior chemical resistance and higher recycled content derived from post-consumer thermoformed packaging made from PE.

**Wecycle platform:** initiative to promote the value of plastic waste across the production chain that works with the goal of disseminating information and good sustainable practices among companies from different backgrounds and sectors. In the year, the main initiatives by the platform were:

§ Philadelphia Eagles: Braskem kicked off a long-term partnership with the Philadelphia Eagles football team to implement a new plastics recycling program at Lincoln Financial Field, the team's stadium in Philadelphia, with the aim of promoting training for youth and recycling at local high schools.

§ Launch of 5 new products with recycled content in partnership with clients:

- Condor: development of a painting kit using recycled PP resin from packaging disposed of by manufacturers of paints and inks.
- Embalixo and Pão de Açúcar: production of two types of plastic bags using recycled plastic material obtained from: (i) materials disposed of at the Pão de Açúcar Unilever Recycling Stations; and (ii) industrial sacks previously used by Braskem to deliver its resins.

○ <Ou>/Martiplast and Leroy Merlin: production of two types of organizer boxes under the brand <Ou>, of Martiplast, using 100% recycled PP from big bags previously used by Braskem to transport its resins. The boxes are sold in 41 stores and on the e-commerce site of Leroy Merlin in Brazil.

§ Reverse Logistics for PP Plastic Cups Program: the program consists of the collection by Dinâmica Ambiental of PP cups. The material collected is then transported to Wecycle partner recyclers and transformed into post-consumer resin, which will be used to make new products such as caps for cosmetic products, housewares and more. The program involves more than 15 companies and, in 5 months, collected 3.6 tons of plastic, corresponding to roughly 2.2 million cups.

**Production of recycled resin:** production of 500 tons of recycled resin from sacks and big bags previously used by Braskem to transport its resins and from domestic post-consumer waste.

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**Braskem Labs:** Braskem's entrepreneurial platform. Formed by 3 programs to encourage the entrepreneurial ecosystem, since 2015, the Company has worked in partnership with several players to accelerate businesses and startups that have a positive impact on society and the environment. In 2018, Braskem organized another edition of Braskem Labs Scale, a program that encourages entrepreneurs to develop innovative solutions that improve people's lives through plastics and chemistry. Ten startups were accelerated during 4 months through dozens of mentorships and business connections. Meanwhile, through the Braskem Labs Challenge, the challenge program of the Braskem Labs platform, 18 challenges were proposed to the startup ecosystem, and various pilot projects are currently being run within Braskem to capture efficiency gains or reduce costs in different areas. Among the projects selected by the Braskem Labs Challenge, one of them focused on improving the color of plastic waste.

**Open Innovation:** Braskem used the Innocentive platform to identify innovative solutions for eliminating the odor barrier in the mechanical recycling of plastics. A total of 154 projects from more than 20 countries were registered on the platform, from which 25 solutions were evaluated and 8 were selected and tested. The winning project was chosen at the end of 2018 and received US\$30,000 from the Company.

**Innovation & Technology:** Braskem created mechanical and chemical recycling platforms for the development of solutions to improve the quality of recycled resin and increase recycling, with 6 full-time and 8 part-time researchers. It also filed for 4 Provisional Patents and, at the end of the year, there were 37 projects in the pipeline for development of recycled resin for clients.

**Ser+Realizador:** present in all states where Braskem operates, this initiative promotes social inclusion and the socio-economic development of recyclable material collectors and cooperative members by promote the development of the national recycling chain.

In 2018, through the partnership with Mãos Verdes, the picking centers (PC) were expanded and 37 cooperatives were accredited in accordance with human rights criteria, including two that were accredited to supply to Braskem's Wecycle program. One of the most important results is the increase of 27% in the monthly income of the people benefited by the project, which is more than twice the target set for 2018.

**Edukatu:** developed since 2013 through a partnership between the Akatu Institute and Braskem, this online learning network aims to encourage the exchange of knowledge and practices on conscientious consumerism and sustainability among teachers and students in elementary and middle schools nationwide through a free and voluntary platform. The project makes available the latest educational content on topics such as climate change and waste management in fun formats and adopts language that appeals to its target public (apps, videos, infographics, games and class plants). In 2018, 14 new learning paths were created, 7 of which on Life Cycle Analysis (LCA) and 7 on the UN Sustainable Development Goals (SDGs). The project also partnered with the Local Education Departments of seven municipalities in the states of São Paulo, Rio de Janeiro and Bahia, and with the São Paulo State Culture Department, which significantly expanded the project's reach.

**Life Cycle Assessment:** Life Cycle Assessment (LCA) is a technique based on standard ISO 14044 that defines the best practices for assessing the environmental impact of a product or service over its complete life cycle, from the extraction of the raw materials to its final disposal. In 2018, a total of 13 complete studies were completed, 4 of which were reviewed externally, and 12 more simplified studies. From 2015 to 2018, a total of 109 studies have been conducted, of which 61 were complete, 13 reviewed and 35 simplified.

Created five years ago and led by Braskem, the Brazilian Business Network for Life Cycle Assessment currently has 55 member institutions, which include 23 companies, 22 academic institutions, consulting firms, research centers, trade associations and other strategic partners.

In 2018, Braskem concluded the life cycle inventory of its operations in Brazil. This allows it to know the specific environmental impact of hundreds of grades of resins and chemicals. The work also makes it possible to identify environmental impact hotspots and to develop a focused improvement program.

**Voluntary Commitments:** In the year, the Company assumed the following commitments to promote the circular economy: (i) Association of Plastic Manufacturers (PlasticsEurope), in Europe; (ii) American Chemistry Council (ACC), in the United States; (iii) National Chemical Industry Association in Mexico; and (iv) Brazilian Chemical Manufacturers' Association (ABIQUIM) in Brazil.



**MANAGEMENT REPORT 2018****Greenhouse gas inventory**

§ For the eighth straight year, the Company was classified in the Gold category of the Brazilian GHG Protocol Program. Braskem registered a 21% decrease in the intensity of its greenhouse gas emissions between 2008 and 2017, which is in line with the target set and was subjected to third-party verification (KPMG). Braskem's avoided emissions amounted to 7.0 million tons of CO<sub>2</sub>, equivalent to the planting of 50 million trees. This year, Braskem was included on the CDP's A Lists for Climate Change and Water Security, which recognize companies that best engage their supply chains in the adoption of new approaches for climate change and water management. In 2017, Braskem reached a historical mark for supplier engagement and was able to engage 66% of the suppliers invited to the Climate module and 76% of those invited to the Water module. The achievement of figuring on both the CDP's A Lists, which recognizes the world's best public corporations, is unprecedented for Brazil's petrochemical industry.

**Water Efficiency:**

§ Braskem's case study on water management was selected by the Brazilian Network of the Global Compact to be presented at "SDGs in Brazil – The Role of the Private Sector," an event held in New York City in 2018 in parallel with the UN General Assembly, in the category water efficiency – SDG 6. The event was an opportunity for the signatories of the Brazilian Network to present their innovative ideas for business sustainability to local and international investors, as well as to representatives of UN agencies. The case studies selected were chosen in an evaluation of the 80 case studies submitted, in a process conducted by a panel of independent judges, based on criteria created by PwC. Braskem's case study for water also was selected as a highlight in a global event to commemorate the 10<sup>th</sup> anniversary of CDP Supply Chain in Las Vegas, in February 2019, which was recognized globally as one of the best initiatives.

§ Braskem supports the project Mogi Mais Água, which is the fruit of the partnership between Instituto Trata Brasil and the Municipal Agriculture Department of Mogi das Cruzes, São Paulo. Braskem covered the costs of the portable sewage treatment stations (GOTA) developed by one of the startups that was incubated in the Braskem Labs program. The stations now are being installed on rural properties in the municipality.

**Renewable Energy**

§ Braskem signed a commitment to enable the expansion of the wind farm of EDF Renewables in Bahia with a view to purchasing wind power over 20 years, through an agreement estimated at R\$400 million. The new renewable energy farm, which is located in the municipality of Campo Formoso some 350 kilometers from the state capital of Salvador, will help place Bahia among the industry's leaders. The project Folha Larga was made possible by contracting long-term energy in government auctions and by Braskem's commitment in the free contracting environment.

§ Since 2017, Braskem has supported the client Ciel & Terre Brasil, a joint venture of French-based Ciel & Terre with Brazil-based Sunlution, to implement its solar power generation technology on floating panels made from Braskem's PE, known as Hydrelío®. The last Project developed was the creation of a floating solar farm on the Sobradinho Hydroelectric Dam, which spans an area of approximately 5 hectares (equivalent to 5 soccer fields), with the capacity to generate 5MWp of power.

§ In 2018, Braskem, in partnership with its key suppliers, was able to classify as renewable energy part of the electricity consumed in the previous year, which represented a reduction in its emissions of around 220,000 tCO<sub>2</sub>e. The initiative is aligned with the Company's efforts to seek development with a clean and sustainable energy profile. The results indicate 84% of total power generated by renewable sources, a percentage that reaches 91.5% considering the Renewable Energy Declarations (the declarations cover 48% of the energy consumed via the national grid).

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The Company also received the following recognitions for its actions to promote sustainable development in the year: (i) remaining a Lead company of the Global Compact for the fifth straight year; and maintained its classification as a Gold supplier in the evaluation conducted by the Ecovadis platform. Braskem is ranked by the platform among the top 5% in best performance in the chemical industry. The platform's goal is to develop social responsibility practices among companies by drawing on their influence in global supply chains.

In 2018, Braskem started to implement its new management system, called Intelius. From the view point of Health, Environment & Safety (HES), the new system, despite seeking to simplify and streamline processes, introduced new requirements and global standards to reinforce Braskem's actions and strategies regarding its HES performance, which is one of its highest priorities.

In terms of Work Safety, the Recordable and Lost-Time Injury Frequency Rate per million man-hours worked, considering both Team Members and Partners, was 1.07, while the Lost-Time Injury Frequency Rate per million man-hours worked, also considering Team Members and Partners, was 0.53, both higher than in 2017. Given these results and its focus on continuously improving its processes, Braskem made progress in its plan to strengthen human reliability aspects and turnaround its performance in 2018. This includes measures ranging from strengthening campaigns to training local teams in methodologies to analyze root causes in the investigation of incidents, with a focus on human factors.

Regarding Process Safety, in 2018, the Company focused on critical analyses of near misses, seeking to learn how to prevent and minimize risks in scenarios of greater significance. The rate of Tier 1 incidents per million hours worked was 0.12, down 14% from the previous year and in line with the Company's expectations and with the average of the six companies in the global chemicals industry considered references in safety.

In Logistics Process Safety, the Company continued with its structured risk assessment program, which involved 19 new products whose operations are classified as medium and low risk, based on the volumes transported and the hazard level. Since it started in 2015, the program has assessed 42 different hazardous products that are produced and handled by Braskem. During this process, a total 25 different freight companies and 289 road routes have been analyzed, 23 of which to international destinations (Mercosur), in addition to 6 loading/unloading bases. An audit also was conducted of 22 bonded warehouses. Another highlight was the adjustment of Logistics HES procedures to support the implementation of Intelius. In maritime transportation, 37 vessels were inspected by the Vetting team. Specific HES assessments also were conducted of 9 different maritime terminals contracted by Braskem and 5 own terminals, all of which based on international standards, such as those of the Chemical Distribution Institute (CDI-t). With this process of identifying risks and defining preventive control barriers, Braskem works to prevent accidents involving its logistics operations.



## MANAGEMENT REPORT 2018

In Chemical Safety, the Company updated, improved and made available to stakeholders all Emergency Datasheets and Safety Datasheets of Braskem's products, in accordance with the applicable international laws. With an increased in its knowledge of products and their final application, Braskem was able to obtain international regulatory approvals and to enter new markets, while ensuring the safety of clients and businesses. Braskem entered into a partnership with key stakeholders (including ABIQUIM, ACC, Plastics Industry Association and Plastics Europe) to identify and mitigate the risks of products to people and the environment, as well as to promote the benefits to society. For the Future Brazilian Chemical Safety Regulations, the Company is advocating for simpler legislation and gradual implementation, which would help Brazil to understand the risk of chemical products, without being overly onerous for the country. As a signatory to the Responsible Care Program®, Braskem is committed to ensuring excellence in health safety and environment to improve people's lives by creating sustainable solutions in chemicals and plastics.

In Health & Hygiene Management, Braskem organized various initiatives to raise awareness on disease prevention and improve quality of life for all Team Members and their families. The Company also implemented improvement projects supported by capital expenditures at certain plants to further reduce any exposure to occupational hazard agents, in accordance with international standards, with the control measures adopting statistical measurements and monitoring activities.

In terms of the Environment, in 2018, Braskem's indicators performed as follows:

- § Wastewater discharge (1.18 m<sup>3</sup>/t) increased 12% from 2017;
- § Solid, liquid and viscous waste generation (2.13 kg/t) was in line with 2017;
- § Energy consumption (10.94 GJ/t) increased 3% from 2017;
- § Water consumption (4.28 m<sup>3</sup>/t) increased 7% from 2017, also influenced by the integration of the Mexico Complex into Braskem's eco-indicators.

Regarding the performance of Braskem's eco-indicators, note that in 2018 we registered atypical events, such as the accident involving the power substation at the Chlor-Alkali Unit in Alagoas and the power outage in Brazil's Northeast region, both of which impacted Braskem's eco-indicators. Braskem's production volume was lower than planned.

Other relevant factors include:

- § More intense precipitation in certain regions where the Company operates, which increased wastewater discharge;
- § Higher temperatures and deterioration in the quality of the water acquired, which increased water consumption and purges in cooling towers (wastewater);
- § Scheduled and unscheduled shutdowns, impacting all indicators;
- § Truck drivers' strike from May to June, creating gap supply problems.

In its management of greenhouse gas (GHG) emissions, Braskem concluded its emissions inventory for 2018, which considers its activities in 2017 and encompasses all of its industrial plants and offices. The Company once again was recognized by the Carbon Disclosure Project (CDP) on its A Lists for climate change and water security. Among the 7,000 companies participating in the CDP survey for 2018, 126 figured on the Climate Change A List, up from 120 in 2017, and 27 made it onto the Water Security A List, compared to 74 in 2017. Some 16 organizations figured on both the Water and Climate A Lists, of which only two were Brazilian, including Braskem. Note that Braskem's inventory once again was classified in the Gold category of the GHG Protocol Brasil program.

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Direct emissions (scope 1) amounted to 10,182,558 tCO<sub>2</sub>e, indirect emissions (scope 2) amounted to 1,072,713 tCO<sub>2</sub>e and other indirect emissions (scope 3) amounted to 20,927,641 tCO<sub>2</sub>e. The intensity of these emissions stood at 0.573 tCO<sub>2</sub>e/t, which represents a reduction of approximately 19% from 2009 to 2017. The goal is to reach 0.600 tCO<sub>2</sub>e/t of product produced by 2020

Braskem believes it has a duty to contribute to the development of the regions where it operates by generating shared value and well-being for everyone. As such, it works supported by pillars that guide its Social Private Investments: (i) local development; (ii) sustainable consumption and post-consumption; and (iii) innovation and sustainable entrepreneurship. The Company understands its role in the world and, together with its Team Members, tries to make a difference.

In 2018, Braskem revised its Private Social Investment (PSI) Strategy drafted in 2012. With the participation of an external consulting firm specializing in sustainable management, the new strategy aims to maximize Braskem's positive socio-environmental impact by forging lasting relationships and contributing to the sustainable development of local communities as well as society as a whole. As a concrete result of this vision, all of Braskem's Private Social Investments must comply with three fundamental objectives: (i) increase the positive socio-environmental impact; (ii) promote the Company as a provider of sustainable solutions; and (iii) establish relationships of trust with local communities and other stakeholder groups.

Through the projects, the Company aims to generate positive social impact and to strengthen its relations with local communities. In 2018, more than 200,000 people were benefited directly in various areas. The highlights follow:

**Ecobarrier:** project developed in partnership with the Safeweb Institute in Porto Alegre that was created with the goal of reducing the volume of debris released in Guaíba Lake. Installed on Arroio Dilúvio in March 2016, the Ecobarrier has been supported by Braskem since 2017, and already has prevented 475 tons of material from being discharged into the lake, or an average of 180 tons per year. After studying the recovered material, it was discovered that only 8.2% is composed of plastic, of which roughly 20% can be recycled. Braskem's investment in 2018 came to R\$78,000, or 56% more than in 2017.

**Honey Fishermen:** Project that aims to teach honey production and hydroponic agriculture to fishermen in 4 regions of the state of Alagoas (Maceió, Barra de São Miguel, Marechal Deodoro and Coqueiro Seco) with the goal of generating additional income for the population during the annual ban on fishing. The honey and propolis produced by the region's bees have unique medicinal properties and help to strengthen local commerce by taking advantage of a local natural resource. The project promotes income generation, social inclusion and the technical capacity of local communities. This project is conducted in partnership with Uniprópolis.

**Som+Eu:** musical education project that offers free music workshops and a permanent calendar of artistic and cultural events, with the goals of socially promoting the growth of

benefited students as citizens and individuals and of social inclusion by occupying the free time of children and teenagers and avoiding their involvement in negative activities. The project includes other initiatives as well, such as the Tubônica Orchestra, which combines music with environmental education by manufacturing musical instruments made of plastic, such as PVC.

Plastianguis: project in Mexico to support recycling and educate the community on identifying, separating and recycling urban plastic waste in the area. Participants exchange their plastic waste for currencies called PlastiPesos, which they can use to purchase cleaning products and food for an amount that is subsidized by Braskem.

Braskem Global Volunteer Program: the Volunteer Drive platform was launched and 15 drives have been successfully completed, 9 of which in Brazil, 3 in Mexico and 3 in the United States. Team Members focused on actions related to post-consumer waste and worked together with 4 waste-picking cooperatives and cleaned 5 areas in 3 participating countries. The platform also helped promote engagement in 4 donation campaigns, with 3 in Mexico and 1 in Brazil.

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## MANAGEMENT REPORT 2018

Developing and attracting people to support Braskem's planned growth is the core strategy of the People & Organization department. During 2018, Braskem invested in various programs focused on integrating, developing and training Team Members and on preparing and developing Leaders.

The main metric monitored by the Company is voluntary turnover, which stood at 2.0% overall. In Brazil, this rate was 1.3%, whereas the rate abroad was 4.5%. Among Leaders, the voluntary turnover rate in 2018 was 2.2%.

To attract young professionals, Braskem maintained close relations with student organizations in order to strengthen its positioning as a company with the capacity to attract young talent. In Brazil, Braskem (i) participated in 5 university fairs, at UFBA (Salvador), URGs (Rio Grande do Sul), Anhembi and INSPER (Business Administration, Economics and Engineering programs); (ii) organized a case study class and an immersion week with FGV students; (iii) organized an Effective Problem Solving Project in partnership with INSPER students; (iv) organized a Pilot Recruiting Day at INSPER; (v) forged a partnership with Aliança, a group of companies that fosters employability among young professionals; (vi) modernized the language in communication materials and campaigns to communicate more effectively with young professionals; and (vii) created an area responsible for university relations to leverage more proactively Braskem's relationship with and attractiveness to young professionals.

In 2018, Braskem received the following awards: (i) most loved company by employees and most loved company by interns, from Love Mondays; (ii) dream company of young professionals, from Cia de Talentos; (iii) best company to launch a career, from magazine Você S/A; (iv) Out & Equal for Promoting Diversity and Inclusion; and (v) Top Workplace in the United States.

The university and technical internship programs received around 35,000 applications in 2018. Applications in these programs increased 32% from 2017, confirming the Company's attractiveness among these stakeholders. For the selection process of the university internship program, a pilot project was held using artificial intelligence during the application phase, as well as group dynamics and online games to ensure the best fit with the desired profile. The Production Worker Training program hired 40 interns and 89 trainees, supporting the strategy to renew the industrial team. In Mexico, 41 interns were hired and 10 were promoted to full-time employees in industrial and support areas as analysts and technicians.

Continuing the process to educate and develop technicians, industrial workers and engineers, the Company registered 6,000 applications to participate in educational actions. Two classes completed the Technical Competencies Development Program (PDCT) for the Operations and Maintenance teams, with 64 Team Members graduating from Bahia and Alagoas. Furthermore, in partnership with the National Industrial Training Service (SENAI) in states where Braskem has industrial sites in Brazil, 13 classes of the technical program in petrochemicals are currently open, offering content that is aligned with the industry's needs and designed to effectively prepare new industrial workers.

As part of its strategy to develop Leaders, Braskem adopts the Leadership Paths, which is a set of programs structured in accordance with the Leader's development stage. In 2018, 58 team leaders graduated from the programs.

In Mexico, around 80 individual development plans were prepared for leaders, in which the main topics were essential dialogues between leaders and team members, international programs, leadership acceleration, strategic planning and coaching sessions. Overall, leaders participated in more than 2,600 hours of training. In 2018, in Mexico, Braskem launched the program to develop new leaders, whose goal is to prepare team members in their first transition to leadership positions. In the United States, 21 leaders participated in development workshops.

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## MANAGEMENT REPORT 2018

In addition to on-site programs, Braskem offers development opportunities through distance learning in three environments: (i) self-development portal; (ii) the Learning Management System (LMS) platform; and (iii) the technical development platform. In 2018, Braskem launched its new Career Philosophy, with the objective of guiding leaders and team members on developing their career path in the Company, aligned with the current scenario and with the Value Proposition. Communication started with Leaders through 10 presentations in which 312 leaders from all regions of Brazil participated.

After designing the Value Proposition in 2017, Braskem started a project to understand what should be the experience of the team member who works at Braskem to enable the delivery of the Company's Value Proposition in their daily activities. In partnership with Ernst & Young, the Company tried to understand what is important to people when interacting with people-oriented processes by interviewing 146 team members and conducting co-creation workshops in which 208 other people from all countries participated, representing engagement by 5% of the company in the project. Team members were invited to reflect and propose changes to Recruiting & Selection, Compensation & Benefits, Performance Management, People & Succession Planning and Training & Development processes. The workshops produced 1,991 insights and transversal directives that will be used in the revision of processes in 2019.

Braskem's mission to help improve society for current and future generations also involves Human Rights. The Company has been striving to become a more inclusive and welcoming company that offers equal opportunities to everyone through the Diversity & Inclusion Program. In addition to actions developed transversally, initiatives are based on five different work fronts to promote inclusion and empower historical minorities: women, LGBTQIA (lesbian, gay, bisexual, transgender, queer, intersex and asexual), black people, socially vulnerable people and persons with disabilities. In Brazil, the focus was on actions to promote awareness and mobilization on the topic. More than 500 leaders were trained in the topic, a network of affinity for LGBTQIA+ team members was created, Braskem promoted the hiring of transgender people and persons with disabilities and organized the Braskem Forum on Diversity and Inclusion, in which approximately 500 team members participated. It also organized the 2<sup>nd</sup> Diversity & Inclusion Week with the topic "Empathy," which featured actions throughout Brazil. Braskem won the Excellence Out and Equal Award for its actions to promote the inclusion of LGBTQIA+ people. In the United States, 2018 was the first year of advancing the local diversity strategy, with a committee dedicated to the topic formed and training sessions conducted at all sites.

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**APPENDIX I**

**Consolidated Statement of Operations**

**APPENDIX II**

**Calculation of Consolidated EBITDA**

(i) Represents the accrual and reversal of provisions for the impairment of long-lived assets (investments, property, plant and equipment and intangible assets) that were adjusted to form EBITDA, since there is no expectation of their financial realization and if in fact realized they would be duly recorded on the statement of operations.

(ii) Corresponds to results from equity investments in associated companies and joint ventures.

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**APPENDIX III**

**Consolidated Balance Sheet**

\*On the reporting date of these Financial Statements, December 31, 2018, certain non-financial contractual obligations were in unremedied breach. As a result, the entire balance of non-current liabilities, in the amount of R\$9,554,476, was reclassified to current liabilities, in accordance with CPC 26 and its corresponding accounting standard IAS 1 (Presentation of Financial Statements). In accordance with the aforementioned accounting standards, reclassification is required in situations in which the breach of certain contractual obligations entitles creditors to request from Braskem Idesa the settlement of obligations in the short term. In this context, note that none of the creditors requested said prepayment of obligations and that Braskem Idesa has been settling its debt service obligations in accordance with their original maturity schedule. Furthermore, Braskem Idesa has been negotiating approval of such breaches with its creditors in order to reclassify the entire amount reclassified from current liabilities back to non-current liabilities. The following amortization schedule presents the original long-term maturities, excluding the reclassification to current liabilities arising from the aforementioned breach of contractual obligations.

\*\* Includes the exchange variation of financial liabilities designated as hedge accounting.

