

# INTEGRATED REPORT 2019

Braskem 





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# MESSAGE FROM THE PRESIDENT

## Dear Readers,

The first quarter of 2020 was marked by a quite challenging global macroeconomic scenario, due to COVID-19 pandemic, which led to a slowdown in the Brazilian economy and in the other countries where we operate, what resulted in a significant demand reduction for the most part of industries, affecting mainly durable goods segments, such as transportation, infrastructure and construction. On the other side, since the beginning of second quarter we have been observing a demand recovery in all sectors at the regions where operate.

With regard to petrochemical sector, the challenges imposed by the pandemic smoothened the down cycle that has been affecting the industry since 2018 given the lower growth of global economy. Additionally, the fall in oil prices at the beginning of the year, caused by the increase in Saudi Arabia production, after tensions with Russia on the context of OPEP discussions, affected positively the petrochemical industry due to competitive prices of raw material. In this respect, the most recent projections by external consulting firms have improved petrochemical spreads in relation of its initial expectations for 2020.

Within this scenario, we have reinforced our commitment to the society, by acting cooperatively in the production of materials for combating the pandemic; to the communities, by donating essential materials; to our clients, by attending their needs with timeliness, resiliency and quality; to our team members, by providing health and safety support; to our shareholders, by preserving our cash position and maintaining our financial robustness;

and to the sustainable development, by advancing in the climate change and circular economy agendas.

## Cooperation and global coordination to face the pandemic

Due to the recent impacts of the pandemic on society as a whole, our central focus has been on the safety of people and reliability of our operations, since our business is deemed essential to fight the pandemic, as we are part of the chain of supply of hospital, hygiene and packaging products. In this regard, we have reinforced our goal of improving people's lives through chemistry and plastic, and adopted collaboration measures for such a delicate moment for our society. Said measures included (i) donating resins and other materials to the manufacture of 60 million masks, 750 thousand liters of gel hand sanitizer and hospital-grade protection masks; (ii) supporting the communities, donating grocery hampers to 1.2 thousand families that work with recycling, and hygiene products to 50 thousand families that live in the areas surrounding our operations, and we have also supported the building of the field hospital in Alagoas; (iii) supporting clients, with a special credit facility for small- and medium-sized companies; and (iv) the safety of our members, with reduced teams for production, lock-in, reinforcement of HSE practices, remote work for members that are part of the risk groups and for those who work at the offices, as well as medical support for suspected and confirmed COVID-19 cases.



## Our results' resiliency

Despite the challenging scenario and the development of the geological phenomenon in Maceió, the strategy defined by the Company, and which has been implemented since 2010, focusing on geographic and feedstock diversification and on competitiveness and productivity, was crucial for the Company to have a free cash generation of R\$ 3 billion in the year, influenced mainly by working capital optimizations, tax credits monetization (PIS/CO-FINS), strengthening client's loyalty thru advanced payments for future sale, and the reduction of payments of Brazilian IR/CSLL taxes. Such effects made up for the decrease of the Company's recurrent EBITDA in Reais, mostly due to the smaller spreads in the international market, especially that of polyethylene.

In 2020, the challenges remain and our results reinforce our business resiliency, as a result of the strategy that we have been developing. The flexibility of our operation allowed us to keep producing and timeliness attending to our clients' needs, by production optimization and capturing synergies among our global units. Besides that, due to the supplier's diversification strategy, we have increased the crackers utilization rate in Mexico, thru the development of Fast Track solution to import ethane from United States.

Furthermore, during this year, we concluded the construction of our new polypropylene plant at La Porte, Texas, which has 450 thousand tons of production per year. The new plant is aligned with our strategy of feedstock diversification and geographical expansion in the Americas, reinforcing our leadership position on polypropylene production at United States.

## Commitment to the environment, the society and corporate governance

In relation to the progress regarding the environment front, we were recognized as an A-List Company for the Water and Climate CDP indexes, for the 2018 management. We have also expanded our I'm green™ brand, which now includes recycled resins from our Circular Economy business, which sold over 1.6 thousand tons of items of recycled origin in 2019. In addition, in 2020 we reached a reduction of 19,3% on GHG emissions intensity, scope 1 and 2, regarding 2008 baseline.

With regard of Circular Economy, we have started studies in partnership with EngePol – Polymers Engineering Laboratory (EngePol) of the Alberto Luiz Coimbra Institute for Postgraduate Studies and Engineering Research of the Federal University of Rio de Janeiro (COPPE/UFRJ) – and with the training institute SENAI CETIQT, through the SENAI Innovation in Biosynthetics and Fibers Institute, to develop the technology needed for chemical recycling, that transforms post-consumption plastic into pyrolysis oil, used as feedstock to produce new polymers. In 2020, we have advanced in this topic, signing a new cooperation agreement to formalize next stages of the research, which target to develop catalysts to improve the quality of products generated by the chemical recycling process.

Besides such advances, we also have signed one more agreement to purchase renewable energy, in alignment with our strategy to expand the use of clean energies in its industrial operations. This is the third agreement for the purchase of competitive renewable energy signed by Braskem, which is nearing the mark of 1 million tons of CO<sub>2</sub> emissions avoided through the use of solar and wind power purchase agreements.

We have also made progress in our relationship with the communities. In 2019, our private social investments, along with the global volunteering program, have benefited over 533 thousand people, which is more than twice the number of beneficiaries in relation to the previous year. Out of this number, 94 thousand people have benefited only from the program, which had a record number of volunteers. All of these achievements are the fruit of our purpose, which is to improve people's lives through sustainable solutions regarding chemistry and plastic.

Moreover, in order to get through all the challenges of the year, achieve our goals and move towards our strategic ambition, the central role played by our members has been and still is fundamental. By sharing respect, responsibility, and an ethical and transparent behavior, we delivered value to all our stakeholders, in a daily and committed work. For such, we have also worked on implementing our BeUx proposal of value, to provide our members with significant experiences aligned with their goals and values. One of the highlights for the construction of said experience was the Diversity and Inclusion Program, which has completed 5 years and achieved

important acknowledgments, such as the Women in Leadership Latin America award, which recognized Braskem as the best Brazilian company in the development of actions to increase representativeness and inclusion of women in leadership, and the bronze category in the Women's Empowerment Principles (WEPs) award of the United Nations, which acknowledges good practices to promote gender equality.

People's safety is a non-negotiable value for us. In 2019, the total recordable injury rate was 1.31, an increase of 20% compared to the previous year. Committed with this value, we have strengthened our human reliability program with initiatives that reinforce the importance of a culture of accident prevention. The enhancement of this culture it is already showing good results, and the total recordable injury rate was 0,92 as of the third quarter of 2020.

Also in 2020, DoJ (Department of Justice), SEC (Securities Exchange) and MPF (Federal Prosecution Office) certified our compliance system, after three years of evaluation and implementation of improvements appointed by the external and independent monitorship. The decision was based on a final report from the independent monitors, who certified that the Company implemented all the recommendations regarding the structure and execution of its compliance program.

During the independent monitoring process, we implemented controls designed to comply with anti-corruption laws and mechanisms to ensure the adequacy and effectiveness of integrity practices, preventing the occurrence of new wrongdoings and giving utmost priority to ethics and transparency in conducting its business, all of which were evaluated in detail and tested by the monitors.

## Safety and support to the families in Maceió

With regard to the geological phenomenon in the City of Maceió, State of Alagoas, we reaffirmed our commitment to the safety of people and the communities in its area of operation, by: (i) permanently shutting down salt mining activities in Maceió and creating protective areas around certain wells, which involves relocating people, vacating properties and adopting addition-

al monitoring activities; (ii) signing an agreement with the Alagoas State Public Defender's Office, the Federal Prosecution Office, the Federal Public Defender's Office and the Alagoas State Prosecution Office for supporting the relocation and compensation of residents in the risk areas through the Financial Compensation and Support for Relocation Program; and (iii) signing an agreement with the Labor Prosecution Office for implementing the Program to Recover Business and Promote Education for residents and workers in the same four districts.

In this sense, and to the best of its knowledge, the Company recognized, at the time, with a provision in the fourth quarter result, the total amount of approximately R\$ 3.4 billion related to the implementation of these actions, which will be spent over the next few years and may be changed due to the development of the topic. At the end of the third quarter of 2020, after updates to the studies regarding the region, the Company had approximately R\$ 7.9 billion in provisions. In relation to our actions in the community, around 2 thousand families have already been added to the agreement and 6.5 thousand families had already been relocated by September of this same year. We continue to constantly collaborate with the authorities to deal with all the impacts of this event.

## Looking to the future, acting in the present

We live in an increasingly globalized, integrated and dynamic world; thus, as the scenarios change and uncertainties increase, we undertook to use our utmost efforts to strengthen our strategy, adaptability and resilience capacity, striving to provide prosperous and consistent results to all our stakeholders. Thus, we stayed on track to achieve our ambition of leading sustainable chemistry at a global level.

I would like to thank our Shareholders once again for trusting Braskem; our Clients, which are fundamental partners for us to continue seeking solutions through chemistry and plastic in order to improve people's lives, and our Members, Partners and Suppliers, for their dedication and competence, which are essential to our achievements and results, for an increasingly global and sustainable Braskem. Lastly, I would like to invite you to read the 2019 Braskem Integrated Report.

# ABOUT THIS REPORT

In the quest to make our capital management and value generation strategy more transparent for all our stakeholders, allowing our investors to allocate capital more efficiently and more productively, Braskem keeps committed with its communication with the market and discloses its second report prepared based on the international structure of the Integrated Reporting of the International Integrated Reporting Council. The information presented in this material was collected and consolidated based on the GRI Standards indicators in the Company's Annual Report, the Annual Financial Statements and the Management Report dated December 31, 2019.





# BUSINESS OVERVIEW

**We are the sixth largest global petrochemical company, leader in the Americas in the production of thermoplastic resins and leader in the production of Green pe globally**

**+ 9.3 million**

tons in annual production capacity of Polyethylene (PE), Polypropylene (PP) and Polyvinyl Chloride (PVC)

**16 commercial**

offices with clients in more than

**100 countries**

**40 industrial**

units (Germany, Brazil, USA and Mexico)

**+ 10 million**

tons in annual production capacity of Chemicals and specialties

**200 thousand**

tons in annual production capacity of Green Polyethylene (leader in production capacity)

**7.940 thousand**

members<sup>1</sup>

<sup>1</sup>Team Members only. Does not include interns

We are convinced that plastic and chemistry, in all their possibilities, contribute to sustainable development, since they make products more accessible and meet the current needs of society in different sectors of the economy.

In 2019, we invested US\$31 million in projects related to the protection of environment, we were responsible for more than 100 socio-environmental projects, impacting positively more than 530 thousand people around the world, and we work in partnership with our Customers and the entire value chain to create chemical and plastic solutions, mainly thru the consolidation of our I'm green™, which now includes biopolymers and recycled resins.

**We seek to improve people's life through chemistry and plastic**

## OUR PRODUCTION CHAIN

### 1<sup>st</sup> Generation

At our first-generation plants in the chemical industry (petrochemical plants), we crack petroleum products and natural gas (naphtha, ethane, and propane), in addition to ethanol. This process is mainly aimed at the production of ethylene, propylene, butadiene, benzene, toluene, paraxylene, cumene, gasoline and caustic soda, among others.

### 2<sup>st</sup> Generation

In our second-generation plants in the chemical industry, we transform ethylene and propylene obtained in the first-generation, as well as those supplied by third parties, into thermoplastic resins: PE, PP and PVC. Our chemicals and thermoplastic resins are sold to Clients that transform them into final products that meet people's needs, such as:

MAIN NEEDS	BENEFIT	END PRODUCTS	MAIN BRASKEM PRODUCTS USED*
Housing and infrastructure	<b>Performance improvement and cost reduction</b>	Pre-molded dwellings	PVC
		Home appliances and electronics	PP and butadiene
		Furniture	PVC, PP, Unilene®, PIB Braskem, Solvents
		Paints and Varnishes	Solvents, Unilene®, Toluene
		Cleaning Products	Chlorine, benzene, solvents, caustic soda, nonene
Water and sanitation availability	<b>Higher efficiency at lower cost</b>	Water and sewer pipes	PE and PVC
		Cisterns and Water Tanks	PE
		Water, sewage and effluent treatment plants	PP
		Water treatment	Chlorine and caustic soda
Health	<b>Greater durability and impact resistance, lower cost and rejection in the human body, less contamination, greater hygiene</b>	Prostheses/Orthoses/Catheters	PP and PVC
		Medical devices (plastic syringes, channels, tubes, connections, serum and blood bags, gloves, nonwoven fabric clothing)	PP, PE and PVC
		Plastic diapers	PP and propylene
		Implants	Propene
		Medical equipment	PP and butadiene
		Vaccines and medicines	PE
Agriculture and food	<b>Increased productivity with less water consumption and reduced food waste</b>	Cleaning and sterilization	Ethylene
		Protected cultivation (nonwoven crop cover, fruit bagging, cover film, mulching and protective screens)	PP and PE
		Grain packaging, horticultural products, agrochemicals, fertilizers, seeds, etc.	PP and PE
		Irrigation (drip irrigation tubes, hoses and other tubes)	PP, PE and PVC
Mobility	<b>More passenger safety, corrosion protection, fuel economy and lower rate of emissions of pollutants into the atmosphere</b>	Protection and storage (bag and wrap silo, for example)	PP and PE
		Spare cylinder, emergency triangle box, anti-gravel protection, windshield water tank, fuel distribution system and fuel tank	PE
		Steering wheel and shock absorber cover, door and instrument panel, bumpers, glove compartment, seat covers, trunk and roof	PP
		Air bag, air intake ducts, gears, injection system connectors and parking brake system	Benzeno
		Seat belts	Paraxylene and/or propylene
		Headlights, taillights, instrument panel	Benzene e/or cumene *

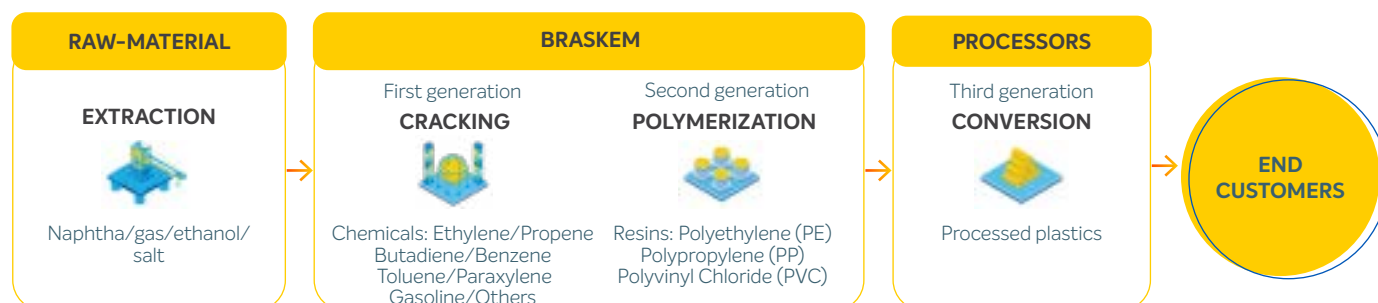
\* Our main products are considered, but not limited to them.



## GLOBAL PRESENCE

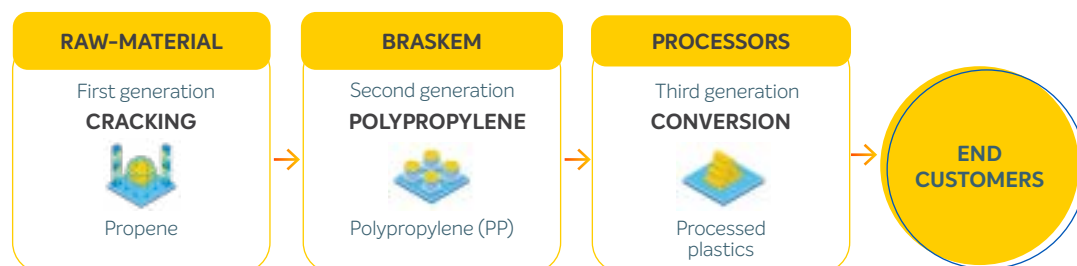
### In Brazil, we are a petrochemical Company with first and second generation integrated

We have 28 industrial plants located in the following states: Bahia, Alagoas, Rio de Janeiro, São Paulo and Rio Grande do Sul. In the four petrochemical plants (first generation) and the green ethylene plant, we have an annual production capacity of 3,952 thousand tons of ethylene. In the 24 second-generation industrial units, we have an annual production capacity of 3,055 thousand tons of PE, 200 thousand tons of Green PE, 1,850 thousand tons of PP, 710 thousand tons of polyvinyl chloride (PVC), 460 thousand tons of caustic soda and 400 thousand tons of chlorine.



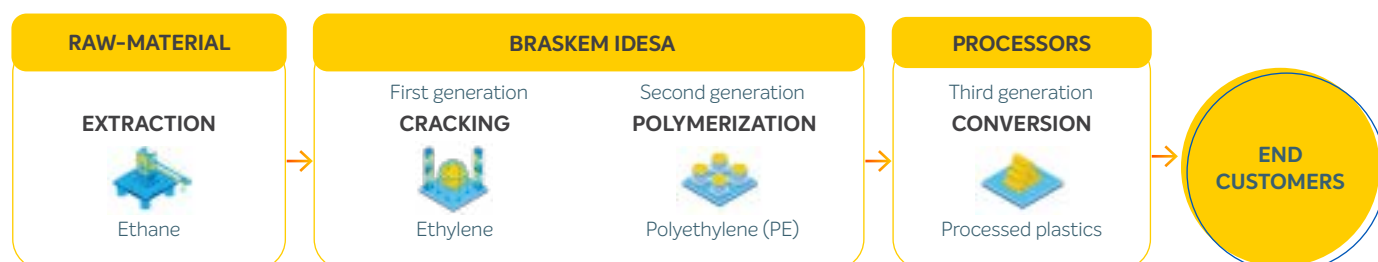
### In the United States, we are the largest producer of PP and, in Europe, we are the sixth largest PP producers

With six industrial units located in the states of Texas, Pennsylvania and West Virginia, we have an annual production capacity of 1,570 thousand tons of PP in United States. In 2020, 100% of the construction of the new PP plant in La Porte, Texas, was completed, adding an annual production capacity of 450 thousand tons to the region. In Europe, we have two plants located in Wesseling and Schkopau (Germany), with an annual production capacity of 625 thousand tons of PP. In these regions, we are not integrated into the chain and we purchase propylene, the main feedstock, from refineries and petrochemical plants. In addition, for our plants in the United States, Braskem also acquires propylene from propane dehydrogenation (PDH).



### In Mexico, Braskem Idesa is the largest producer of PE

With a petrochemical plant and three PE plants located in the state of Vera Cruz, the annual integrated production capacity is 1,050 thousand tons of PE, with 100% being ethane-based. The company is formed by a joint venture in which we own 75% of the capital and the Mexican group Idesa owns the other 25%.



## OUR OPERATIONAL FOOTPRINT



### USA (KT/A)

5 PP plants: **2,020**  
(Start up of 450kt in 2020)  
1 UTEC plant



### MEXICO (KT/A)

1 petrochemical complex: **1,050**  
3 PE plants: **1,050**



### BRAZIL (KT/A)

4 petrochemical complex: **9,468**  
1 green ethylene plant: **200**



### EUROPE (KT/A)

2 PP plants: **625**

We build our company through a strategy for growth and internationalization through diversification of geography and raw material, which allows us to become the 6<sup>th</sup> largest petrochemical company in the world

-  Industrial Units
-  Headquarters
-  Technology Centers
-  Commercial Offices
-  Sales Teams

## TIMELINE

2002

### CREATION

Braskem was established on August 16, 2002, as a result of the integration of companies Copene, OPP, Trikem, Proppet, Nitrocarbano and Polialden

2016

### BECOMING THE SIXTH LARGEST PETROCHEMICAL COMPANY IN THE WORLD

start of operations at Braskem Idesa petrochemical complex in Mexico

2007

### LEADERSHIP IN BRAZIL

acquisition of the Ipiranga Group's chemical and petrochemical assets, including control the of Copesul

2017

### STRENGTHENING ITS LEADERSHIP POSITION IN THE UNITED STATES

approval by the Board of Directors of the construction of the new PP plant in the United States and start up of UTEC plant

2010

### LEADERSHIP IN THE AMERICAS AND LEADERSHIP IN BIOPOLYMERS

acquisition of Quattor in Brazil and PP assets of Sunoco Chemicals, in the USA; and inauguration of the ethylene/green PE plants in Rio Grande do Sul, Brazil

2018

### CONTINUING THE STRATEGY TO MAINTAIN THE COMPETITIVENESS OF ITS ASSETS

start of the flexibility project of the Camaçari petrochemical complex, in Bahia (Brazil)

2011

### LEADERSHIP IN THE NORTH AMERICAN PP MARKET

acquisition of Dow Chemical's PP assets in the USA and Europe

2020

### ORGANIC GROWTH AND LEADERSHIP POSITION IN THE UNITED STATES

expected start of operations for the new PP plant in the United States

2012

### ORGANIC GROWTH

inauguration of the new PVC production unit in the state of Alagoas and the new butadiene plant in Rio Grande do Sul, both in Brazil

2030

### MACRO OBJETIVOS 2030

pursue the 2030 macro goals for sustainable development, among them, the carbon emission and circular economy goals

2050

### CARBON NEUTRALITY

achieve carbon neutrality by 2050





## OUR ORGANIZATIONAL CULTURE

We work to achieve this goal, which is based on 7 pillars:



### YOU ARE THE PROTAGONIST

relationships based on trust are the key to transformation – our Team Members are encouraged to make a difference every day



### CHALLENGE AND BE CHALLENGED

we inspire our Team Members to question common sense and challenge each other – so we are always learning and evolving



### CO-CREATE YOUR IDEAS

innovation comes to life when we work as a team – if a member has an idea, we encourage them to share, connect and make it happen



### BUILD YOUR PATH

we believe that there are many paths to success – all Team Members are encouraged to chart their own paths



### GROW WITH US

growth opportunities are great – Team Members are part of an ethical, transparent and prosperous company, which always seeks to go further



### FEEL PROUD OF WHAT YOU DO

participating in sustainable solutions that improve people's lives



### YOU ARE FREE TO BE YOURSELF

diversity and respect are essential – we value our Team Members for being who they are, offering equal opportunities for everyone, without exceptions

**With creativity, innovation and resilience of our team members, we go further.**

# OUR VALUE GENERATION THROUGH 6 CAPITALS

**We are** a global chemical company, oriented towards the human being and with a view towards the future

**With the ambition** to lead sustainable chemistry in the world

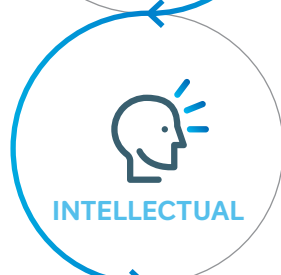
As we are **convinced** that chemistry and plastic make life better

Thus, we use several sources of **valuable capitals.**

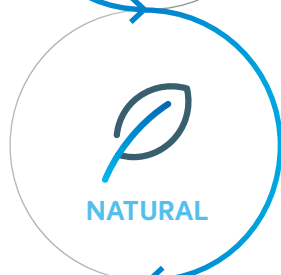
It is our members, their attitudes, their skills and knowledge that, together with our industrial assets, proprietary and licensed technologies, raw materials, financial resources and bonds of trust built with our stakeholders, move us forward to achieve our goal of creating sustainable chemical and plastic solutions.



**People** who, with **diversity, multiculturalism and skills**, conduct our business in a more diverse, inclusive and humane manner, with a **commitment to applicable laws and industry standards on health and safety**, who embrace the **spirit of integrity** and **identify ethical** behavior as a **competitive advantage** and doing it right out of conviction.



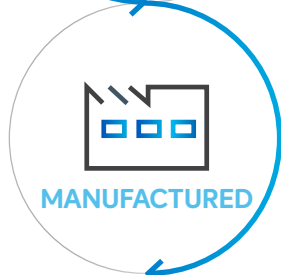
The set of **knowledge** (know-how), such as patents, technologies, systems, platforms, trademarks and copyrights, which **allows us to innovate and seek the technological development of more competitive and sustainable products and processes**.



We **transform our main raw materials** (naphtha, ethane, propane, propylene, ethanol), as well as **water and electricity**, and offer **solutions** along with the customer **chain so that society's life is increasingly sustainable**.



The **bonds of trust built with our stakeholders** that allow us to conduct our business, **expand our positive socio-environmental impact** and contribute to the sustainable development of the communities where we operate.



Our **fixed assets** (industrial units, pilot plants, innovation and technology centers, technical laboratories, logistics warehouses, train cars and cargo terminals), which **we use for the development, production and distribution of our products**.



Cash **generated by our operations**, bank loans and **financing**, and **funds raised in the capital market**, which we use to **finance our business**.



To produce a **wide and diversified portfolio** of chemicals, specialties, thermoplastic resins, biopolymers and recycled products

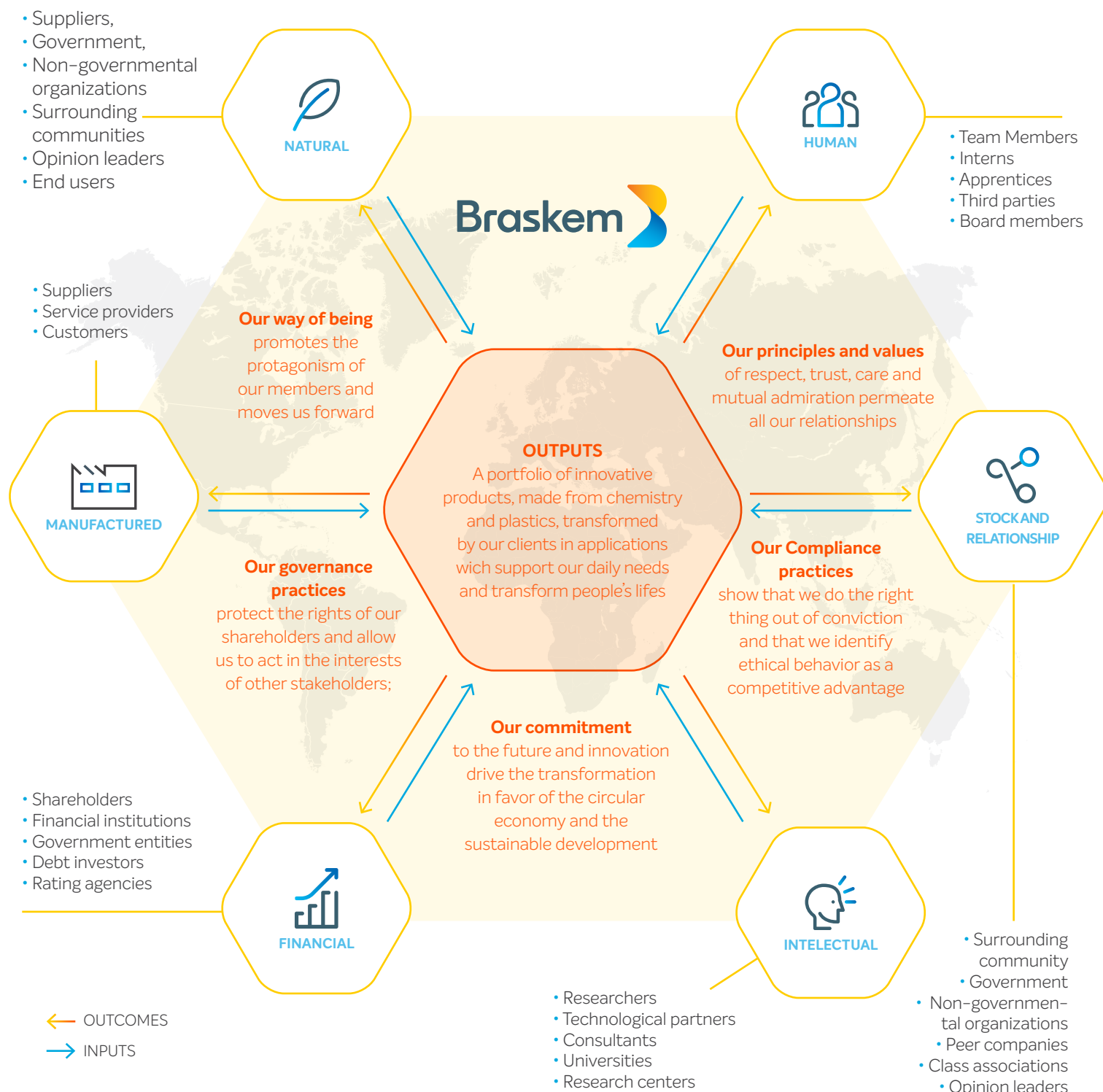
**Transformed by our clients into applications** that meet daily human needs and make **people's lives better**

Thus, we move forward in line **with our purpose** of improving people's lives based on sustainable solutions from chemistry and plastic.

## OUR BUSINESS MODEL

The search for this purpose is based on five pillars: our values and principles, which aim to share respect, trust and mutual admiration; the empowerment of our team members to move us forward; our governance system which ensures our shareholders rights simultaneously attending to all of our stakeholders' interests; our way to conduct business with responsibility, respect, ethic and transparency; and our commitment to the future, thru innovative solutions, encouraging transformation towards a circular economy and the sustainable development.



### Like chemical bonds, we connect with the whole to transform life



# GOVERNANCE

We believe that governance goes beyond complying with regulatory rules – it is a way to keep our business environment more transparent, safe, predictable and complete, with the purpose of ensuring our value generation today and in the future, thus safeguarding the rights of all our shareholders while allowing us to serve the interests of our other stakeholders.

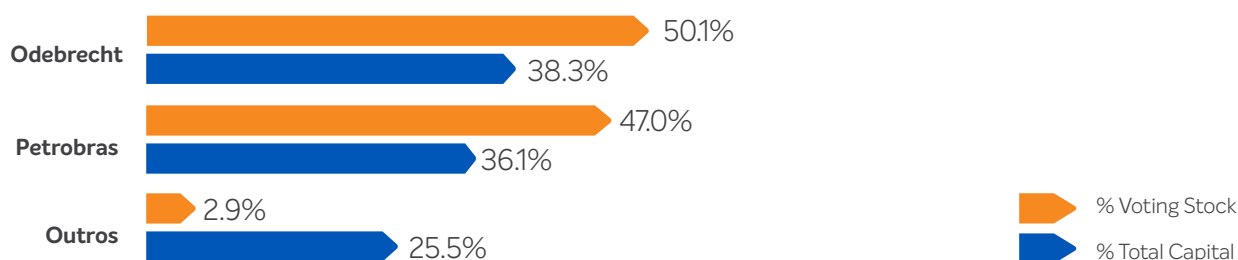
## OUR CORPORATE STRUCTURE

MARKET				
<div> <div>  </div> <div>  </div> </div>				
GOVERNANCE LEVEL				
LEVEL 1				
TICKER SYMBOL	ON BRKM3	PNA BRKM5	PNB BRKM6	ADR BRKMY
PRICE	BRL	BRL	BRL	USD
12/31/2019	31.54	29.85	24.00	14.80
12/31/2018	45.51	47.38	48.00	24.46
12/31/2017	43.50	42.87	45.89	26.26
QUANTITY (EXCEPT IN TREASURY)	451,668,652	343,823,073	500,230	-
SHAREHOLDER RIGHTS	<ul style="list-style-type: none"> <li>• Right to full vote</li> <li>• 100% Tag Along</li> <li>• Only if there are leftovers after the payment of the minimum dividend for holders of PNAs and PNBs</li> <li>• If, after the foregoing, there are still profits remaining, PNA shares compete on equal terms with ON shares</li> </ul>			
	<ul style="list-style-type: none"> <li>• Right to restricted vote</li> <li>• 100% Tag Along</li> <li>• Minimum, non-cumulative dividend of 6% over its par value (1), according to profits available for distribution</li> <li>• If, after the foregoing, there are still profits remaining, the PNA with ON shares</li> </ul>			
	<ul style="list-style-type: none"> <li>• 2 PNB's = 1 PNA</li> <li>• Right to restricted vote</li> <li>• 100% Tag Along</li> <li>• Minimum, non-cumulative dividend of 6% over its par value (1), according to profits available for distribution</li> <li>• Do not participate in the distribution of remaining profits</li> </ul>			
	<ul style="list-style-type: none"> <li>• 1 ADR = 2 PNA's</li> <li>• They have the same rights as shareholders holding PNAs in Brazil</li> </ul>			

<sup>(1)</sup> Unitary Stock Value = share capital/total stocks outstanding



## SHAREHOLDERS' COMPOSITION



## OUR GOVERNANCE PRACTICES

Since 2003, we have adhered to Level 1 of the B3 Listing Segment and have spontaneously met some requirements of Level 2 and Novo Mercado, such as the unified Board of Directors' term of office of up to two years, reelection permitted, and with at least 20% of independent board members, and 100% tag along concession for all shares, including.

In this sense, with the objective of becoming a reference in governance and compliance, we have a governance system composed of institutionalized decision-making bodies and guidance documents, which have been constantly strengthened to meet the best market practices and applicable standards, laws and recommendations:

### Our practices of the Brazilian Corporate Governance Code

- Codes of Conduct for Members and for third parties
- Availability of the Shareholders' Meeting Manual with the rules for participating in the Shareholders' Meetings of the Company
- Prohibition against accumulating the positions of Chief Executive Officer and Chairman of the Board of Directors by the same person
- Maintenance of the Board Members' Onboarding Program
- Internal Regulations for the Board of Directors, Fiscal Council and Statutory Management
- Forecast of Executive Sessions of the Board of Directors, without the participation of guests
- Annual Calendar of Ordinary Meetings of the Board of Directors, with pre-defined basic agendas
- Internal Audit Area reporting to the Board of Directors
- Implementation of the annual performance evaluation process of the Board of Directors, Support Committees and BoD Secretariat
- CEO Succession Plan
- Evaluation of the CEO by the Board of Directors
- Independent whistleblowing channel (Ethics Line)
- Approval authorities for approving transactions with related parties provided for in our Company Bylaws and in the Related Party Policy
- Policies for Allocation of Results, Risk Management, Disclosure of Information, Trading of Securities, Hiring of Extra Audit Services, Compensation and Transactions with Related Parties



See more information on Bylaws and corporate policies available on <https://www.braskem.com/RI/bylaws-and-policies>, internal rules on <https://www.braskem.com/RI/councils-and-board> and Brazilian Corporate Code on <https://www.braskem.com/RI/annual-reports>.

## OUR GOVERNANCE STRUCTURE

SHAREHOLDERS (SHAREHOLDERS' MEETING)

### PERMANENT BoD SUPPORT COMMITTEES

#### STRATEGY & COMMUNICATION COMMITTEE

Monitoring of our Business Plan and the communication strategy with all stakeholders

#### PEOPLE AND ORGANIZATION COMMITTEE

Monitoring of strategic projects related to our Team Members, the succession plan of the Chief Executive Officer, the Members linked to him and the Person Responsible for Compliance, and proposing the criteria for the annual assessment of the Board of Directors (BoD) and its Support Committees, such as the BoD Secretariat

#### FINANCE AND INVESTMENT COMMITTEE

Monitoring of our financial strategy, including quarterly and annual financial results

#### COMPLIANCE COMMITTEE

Support for matters related to our commitment to act in an ethical, uprightly and transparent manner

#### RESPONSIBLE FOR COMPLIANCE

Acting in partnership with the other areas to ensure that the Compliance System is followed by all members

#### BOARD OF DIRECTORS (BOD)

Approval and monitoring of our business plan, policies and other subjects contained in the Company's Bylaws and in its own Internal Rules

#### CHIEF EXECUTIVE OFFICER

Definition and coordination of the performance of the executive officers, submission of our Business Plan for approval by the BoD

#### EXECUTIVE MANAGEMENT

Management of the business and our functional areas, and implementation of our general policies and guidelines as set by the Board of Directors.

#### FISCAL COUNCIL

Fiscalization of Management acts, Financial Statements certification (quarterly and annually), and approval of internal and external audit jobs

#### INDEPENDENT AUDIT

## Board of Directors

Our Board of Directors (BoD) is composed of up to 11 members, and their alternates, of which at least 20% are independent, including the Chairman of the Board of Directors, being all external members, with a unified mandate of up to 2 years, reelection being permitted.



To see more details of the independence of the board members definition, accesses:

<https://www.braskem.com/RI/overview>

## Fiscal Council

Our Fiscal Council (FC) operates on a permanent basis and is made up of up to five members, and their respective alternates, with a mandate of up to one year, reelection being permitted.

## Supporting Committees of the Board of Directors

We have four permanent committees to support the Board of Directors, one of which is statutory (Compliance Committee), with the purpose of analyzing matters to support its resolutions, with none of them having a resolute character. Our committees are composed of a minimum of three and a maximum of five members, chosen by the Board of Directors itself, as indicated by the Chairman of the Board. The Compliance Committee is composed of at least 3 members independent from the BoD, among which at least one must have recognized experience and knowledge in the areas of corporate accounting and accounting and financial auditing.



See more information on

<https://www.braskem.com/RI/councils-and-board> and

<https://www.braskem.com/RI/bylaws-and-policies>



## Executive Management

Our management is composed of six (6) officers, including the Chief Executive Officer, the Chief Financial Officer and the Chief Investment Officer, with a unified term of office of three years, with renewal being permitted.

## Compensation

We have adopted a competitive and transparent compensation strategy, which seeks to attract, develop and retain the best professionals and compensate our administrators based on market practices, according to their duties and responsibilities in the effective conduct of business. The practice of variable compensation allows to strengthen the alignment of interests of our shareholders with those of our administrators in obtaining and exceeding short- and long-term results.





## STATUTORY MANAGEMENT

### Fixed Compensation

- Monthly fees linked to the evaluation and classification of the position in the salary structure and comparative market, as well as individual performance (meritocracy) and salary re-composition, according to a study on annual inflation.
- They receive the same benefits that we offer at other levels: medical and dental assistance, meal vouchers, life insurance and private pension.

### Variable Compensation

- Short-Term Incentive (ICP) – annual program with payment subject to the assessment and fulfillment of individual goals and to the operational and economic performance of our company in the year in question, considering the operating EBITDA.
- Long-Term Incentive Program (ILP) – long-term program based on actions, aimed at retaining participants and with the main objective of converging interests in the generation of long-term wealth among Members in strategic programs and shareholders.

## BOARD OF DIRECTORS

### Fixed Compensation:

- Monthly fees, without benefits, determined from market research, taking into account the duties and responsibilities for the exercise of the function.

### Variable Compensation

- Does not exist.

## FISCAL BOARD

### Fixed Compensation

- Monthly fees, without benefits, determined from market research, taking into account the duties and responsibilities for the exercise of the function.

### Variable Compensation

- Does not exist.





# COMPLIANCE

For us, compliance is more than simply complying with laws, standards and guidance documents and avoiding, detecting and treating any deviation or non-compliance that may occur, but it means embracing the spirit of integrity, identifying ethical behavior as a competitive advantage and making what is right out of conviction.

Conducting our business with ethics, transparency, integrity and in compliance with applicable laws is one of our main values as a company, which must be reflected in all our actions and interactions with all our stakeholders.

**Between 2016 and 2020, our compliance system was subjected to the external and independent monitor's evaluation. During this process, more than 80 corporate policies and directive guidelines were reviewed, as well as more than 40 process.**

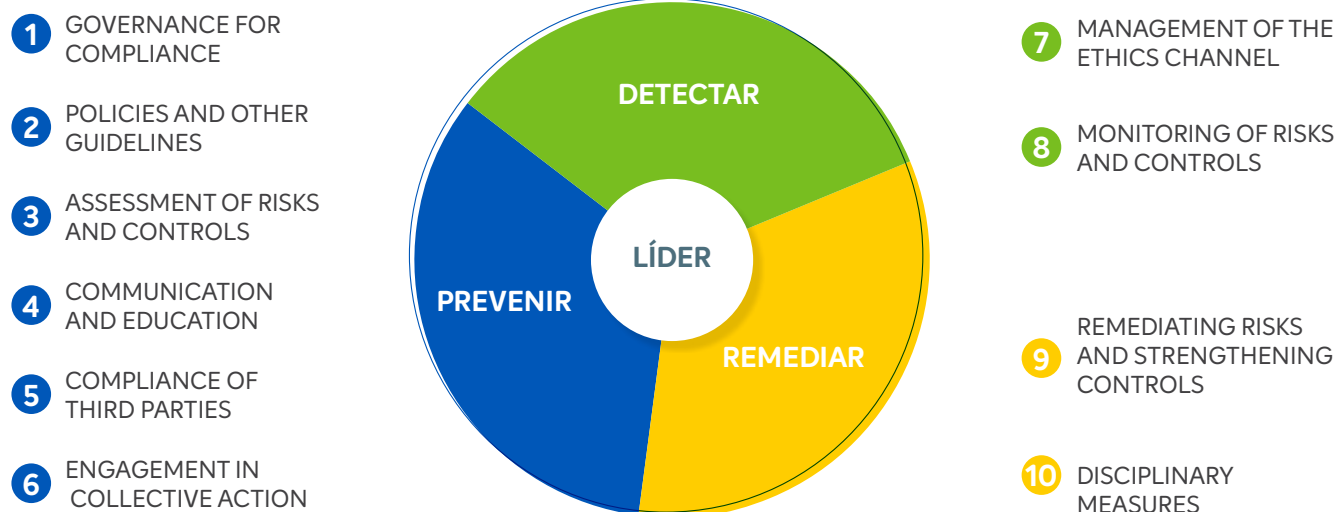
## OUR COMPLIANCE SYSTEM

Since 2016, we have invested and strongly improved the construction of a system capable of leading our organization along a path of compliance with applicable standards, and worldwide best governance practices, in addition to ensuring conduct based on ethical principles and values that protect and strengthen the company and all of our stakeholders.

Our Compliance System is, therefore, a set of measures that aim to prevent, detect and remedy, in a systemic way, the occurrence of unethical, illegal and misaligned conduct with laws, rules and guidance documents, favoring an environment of commitment with what is right, where incompatible attitudes are not tolerated. It is based on 10 measures, structured on three pillars: Prevention, Detection and Remediation.

We understand that governance and compliance practices must be constantly updated and improved. Thus, the search for best practices and the implementation of our global compliance system resulted in significant changes in our business management structure.

## OUR COMPLIANCE SYSTEM



**In 2020, after the implementation of monitors' recommendations, MPF (Federal Public Prosecutor's Office), SEC (US Securities Exchange Commission) and DoJ (US Department of Justice) certified our compliance system.**

## CORPORATE GOVERNANCE

	BEFORE <sup>(1)</sup>	AFTER <sup>(1)</sup>
Independent Members	2	5 independent members <sup>(2)(3)</sup>
Compliance Committee	No	Creation of a committee foreseen in the Bylaws with at least 3 independent members
Chief Compliance Officer	No	Direct report to the Compliance Committee, with independence of management
Compliance Department	Report to the Legal Department	Report to the board of directors via Compliance Committee
Compliance Team Members	8 (Brazil only)	48 (Global, Compliance Officers for South America, Mexico, North America, and Europe)
Ethics Line Channel	Internal management	Outsourced management
Compliance Targets	No	Targets applied to all Company's leaders
Internal Audit	No	Internal Audit Team reporting to the Board of directors, CCO and to the compliance committee
Compliance Monitorship	Independent Monitorship	Conclusion of the independent compliance monitorship at Braskem

<sup>(1)</sup> Before and after the Leciency Agreement, in 2016

<sup>(2)</sup> +4 board members who are not independent at Braskem because they are independent Board Members at PETROBRAS and Odebrecht

<sup>(3)</sup> As of August 2020



## COMPLIANCE SYSTEM EVOLUTION

### Establishment & Implementation

- Baker McKenzie & Grant Thornton Assessment
- Global Compliance Program
- Compliance and CCOs Committee



- Baker McKenzie Investigation
- Compliance area reporting directly to the BoD
- Global Leniency Agreement (DOJ/SEC/MPF)

### Implementation & Execution

- 1<sup>st</sup> Monitoring Evaluation
- 1<sup>st</sup> Global Internal Audit
- Improvements in the procedure for sponsorships, donations and supplies



- New process: Due Diligence for Suppliers (KYS)
- Outsourcing of the Ethics Line
- Update of the Code of Conduct
- Implementation of the 1<sup>st</sup> improvement package recommended by Monitoring

### Execution & Improvements

- New Due Diligence process for Members (KYE)
- Improvements in financial controls
- 2<sup>nd</sup> Monitoring Evaluation



- Improvements in internal investigations
- New Anti-Corruption Policy
- Implementation of the 1<sup>st</sup> and 2<sup>nd</sup> improvement packages recommended by Monitoring

### Execution & Effectiveness

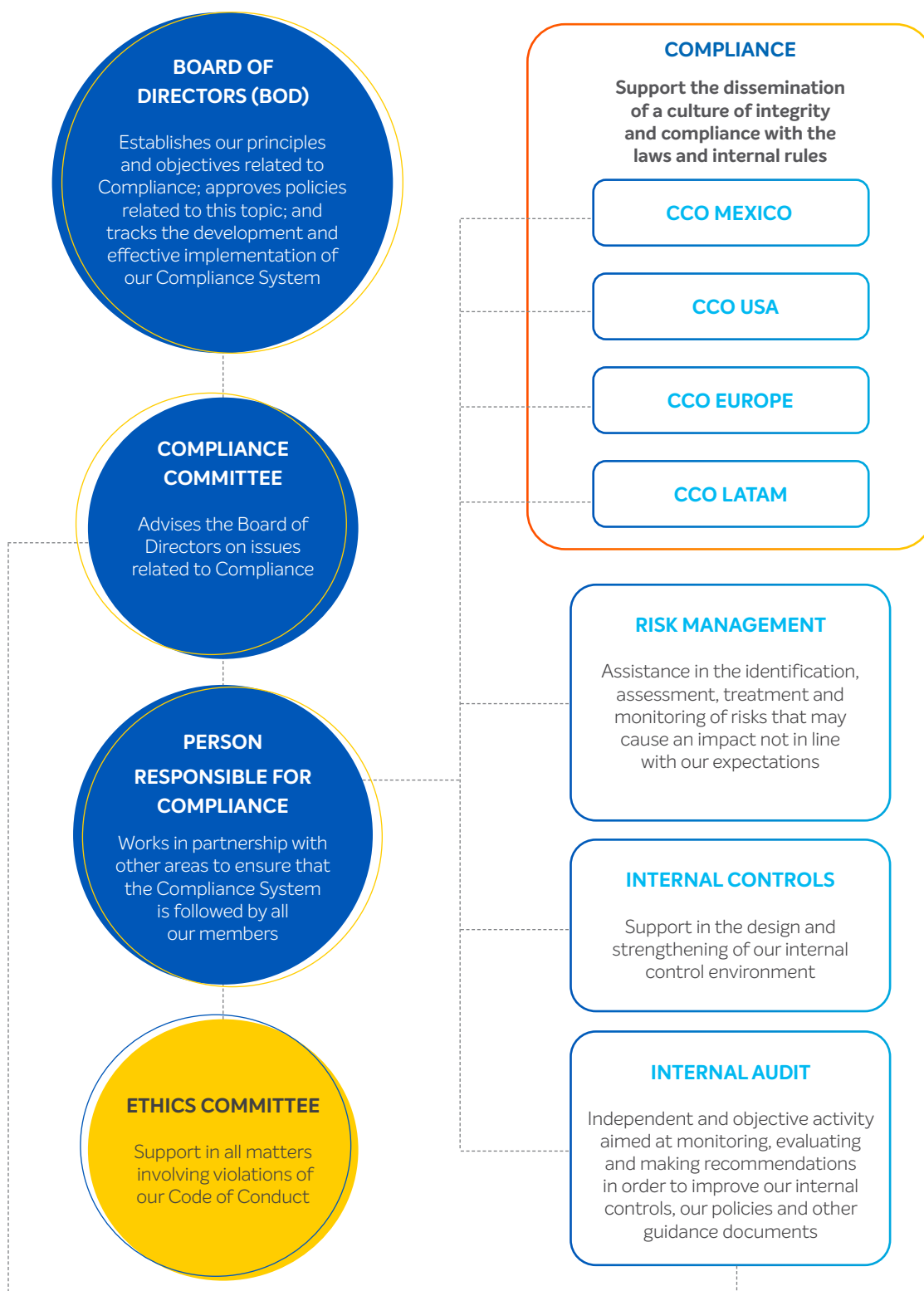
- Leniency Agreement with the Office of the General Counsel for the Brazilian Federal Government (AGU) and Office of the Brazilian Federal Controller General (CGU)
- 3<sup>rd</sup> Monitoring Evaluation



- Update to the Legal Services Policy
- New Due Diligence process for customers (KYC)
- New ABAC Matrix
- Implementation of the 3<sup>rd</sup> improvement package recommended by Monitoring

## OUR COMPLIANCE GOVERNANCE

Our commitment to an ethical, integral and transparent performance starts with our Board of Directors and extends to all our Members, Customers and Suppliers. Our compliance governance is structured as follows:



Our Compliance Team reports directly to the Board of Directors, which must contain at least 20% of members considered independent.

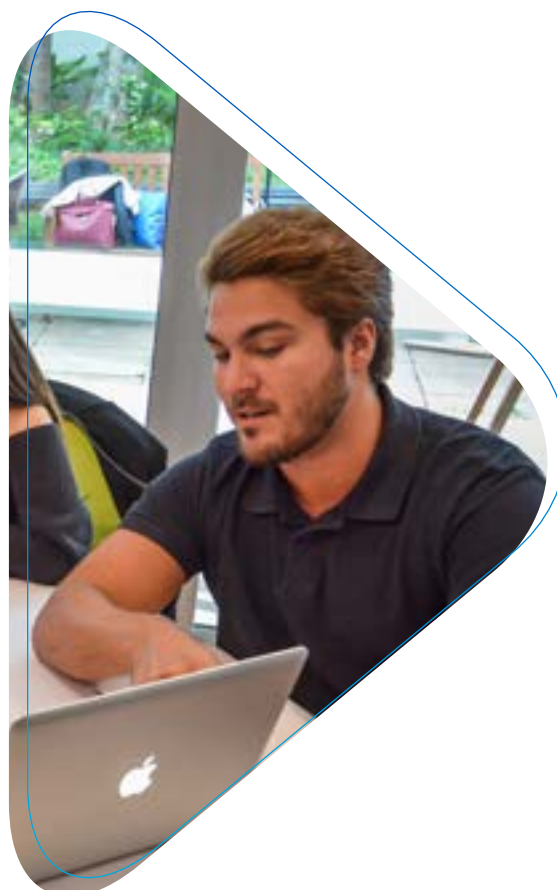
# RISK MANAGEMENT

Our business is susceptible to risks that can prevent, or even destroy, the search for our purpose of “improving people’s lives by creating sustainable solutions from chemistry and plastic.” That is why we are committed to identifying, assessing and addressing risks so that we can extend our positive impact to all of our stakeholders.

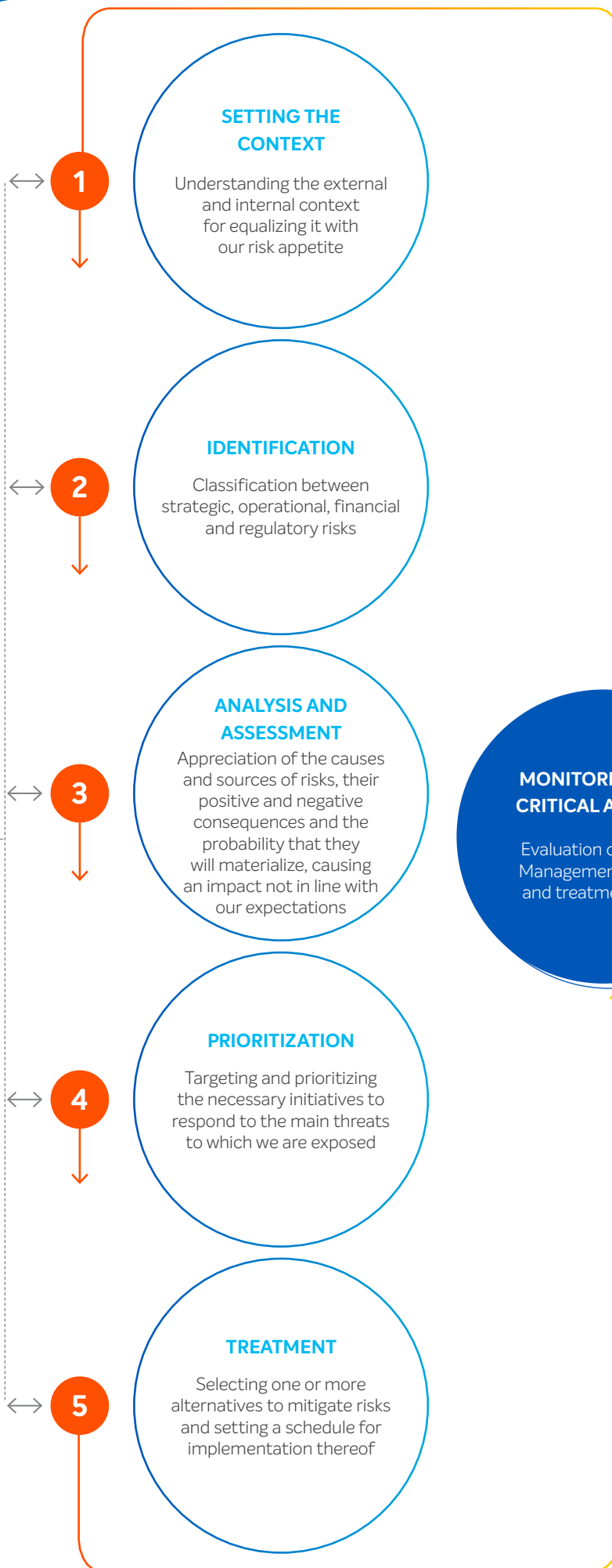
## OUR RISK MANAGEMENT PROCESS

Our global risk management methodology is cyclical and identifies, understands and responds to risks based on international references (ISO 31000 and COSO ERM) with adaptations to specific situations, considering our culture.

This methodology aims to ensure that our decisions are made based on timely and sufficient information regarding the risks to which we are exposed, thus increasing the probability of reaching our objectives and reducing risks to acceptable levels. It also seeks to preserve our tangible and intangible assets, the safety of people and the integrity of the environment and communities.



Based on a sound risk management, our decisions are made based on timely and sufficient information regarding the context of our business





## RISK DICTIONARY

Strategic Risks	Associated with strategic decisions to achieve our business objectives and/or resulting from our lack of capacity or ability to protect ourselves or adapt to changes in the environment. Examples: Risks of market share losses ("Market Share"), commodity price conditions, purchases and acquisitions of companies, etc.
Operational Risks	Due to the lack of consistency and adequacy of the information, processing and operational control systems, as well as failures in the management of resources, and in the internal controls or frauds that render improper the performance of our activities. Examples: producing and distributing products in disagreement with the established conditions and deadlines, exposure to labor claims in plants or lack of formalization of contracts with third parties.
Financial Risks	<p>Associated with financial decisions arising from the financial market, credit and liquidity to honor commitments. Examples:</p> <p>Market Risks: arise from the possibility of losses that may be caused by changes in the behavior of interest rates, foreign exchange rates, the prices of our shares and the prices of commodities.</p> <p>Credit Risks: defined as the possibility of loss resulting from the uncertainty regarding the receipt of amounts agreed with borrowers, contract counterparties or issue of securities.</p> <p>Liquidity Risks: possibilities of loss resulting from the inability to carry out a transaction in a reasonable time and without significant loss of value or the possibility of lack of resources to honor the commitments assumed due to the mismatch between our assets and liabilities.</p>
Regulatory Risks	Those risks associated with the regulatory environment that may result in legal or regulatory sanctions, financial or reputation losses due to failure to comply with laws, agreements, regulations, Code of Conduct and/or Braskem's guidance documents. Example: Customers or suppliers that deviate from the laws and that may put the Company at Risk.

## OUR RISK MATRIX

In the Risk Analysis and Assessment phase, our leaders are responsible for assessing the causes and sources of risks, their positive and negative consequences and the likelihood that they will materialize and cause an impact that is not in line with our expectations. In the next phase, we select the risks that require targeting and prioritizing the necessary initiatives to respond to the main threats to which we are exposed. The result of the risk impact assessment, its probability of occurrence and the prioritization allows the classification of risks as very high, high, medium and low, and the subsequent positioning thereof in our Priority Risk Matrix.

Very High	Both require a priority action plan to manage the causes and risk factors. These plans are independently monitored and reported to our Board of Directors every four periodically.
High	
Medium	They represent situations that are normally inherent to the operations or incorporated to our operating cost, but require close monitoring. Our Business Areas are responsible for prioritizing and monitoring these risks and reporting them every four months to the vice-president of the business unit involved.
Low	They are considered acceptable, with no need for monitoring or mitigation actions.



See more detail of our Risk Management on:

<https://www.braskem.com/RI/detail-bylaws-and-policies/braskems-governance-and-compliance-policies>

## MAIN RISK FACTORS IDENTIFIED

The risks described here are classified as strategic risks, with high probability of occurrence and priority action.

### Disposal of Plastic

One of our mapped risks is the consumption trend that has been installed to avoid the use of plastic, due to the impacts that its improper disposal can cause to the environment. This trend has been supported by governments and law-makers, as well as guided investments in collection and recycling by petrochemical companies and other members of the plastic chain. Thus, the growing concern with the use of plastic brings potential risks of substituting the use of this product, which would directly impact Braskem's results.

#### Our actions

With this in mind, in 2018, Braskem positioned itself in favor of the "Circular Economy" (reuse of resources within the economy), establishing 8 strategic pillars for its operations



See more details on:

<https://www.braskem.com/principal/circulareconomy>



### Cyclicality in the Petrochemical sector

The petrochemical industry, including the global markets in which we operate, is cyclical and sensitive to global changes in supply and demand.

Historically, the international petrochemical product markets have undergone alternating periods of limited supply, which has led to increased prices and profit margins, followed by expansion in production capacity, resulting in excess supply and decreased prices and profit margins. Prices in the petrochemical sector follow the global petrochemical sector, and the prices of our products sold in Brazil, Latin America, the United States and around the world are set with reference to international market prices. Therefore, our net sales revenue and our gross margin are increasingly related to conditions in the global industry, over which we have no control, which may have an impact on the Company's operating results and financial condition.

#### Our actions

Over the time and within our business strategy, we have been working in several actions that allowed us to mitigate risks arising from down cycles in the petrochemical industry, mainly supported by three pillars of risk diversification: (i) feedstock diversification; (ii) suppliers diversification; and (iii) geographic diversification.

## Climate Change

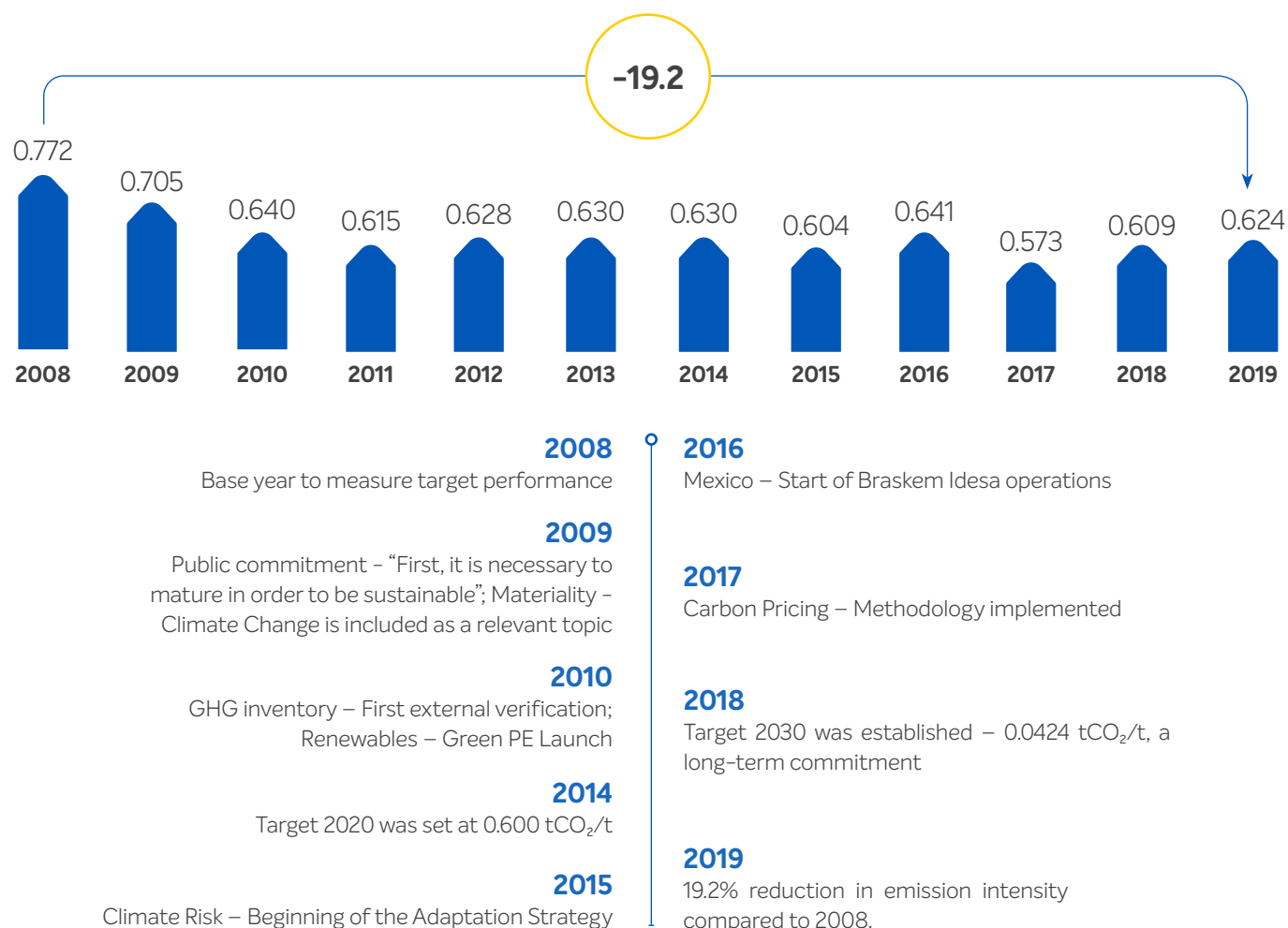
The issue of climate change, which is related to the emission of greenhouse gases into the atmosphere, is treated as a potential risk for Braskem, since it can cause possible situations of stress in relation to the natural resources used in our production, such as water resources, and also by increasingly demanding regulations regarding the intensity of emissions of carbon dioxide and the like.

### Our actions

However, the Company has been working on this front since 2008, when we launched our Climate Change Adaptation and Mitigation plan, which consists of detect-

ing potential risks and business opportunities related to climate changes. Since then, within the scope of mitigation, we carry out an annual inventory of greenhouse gas emissions, verifying scopes 1, 2 and 3, that are applicable to our business, which serves as a basis for implementing initiatives to reduce the emission of these gases in our operation. In this sense, we have adopted reduction targets by 2030.

**Since 2008, we have reduced the intensity of scope 1 and 2 emissions in our operations by approximately 19.2%.**



With regard to adaptation, we mapped all climate risks in the regions where we have operations and adopted action plans to mitigate and reduce the most significant ones. About 58 high risks have been identified, with a potential financial impact of US\$ 175 million by 2040. The plan is to reduce these high risks to zero by 2023.



See more information on mapped risks on 20F Form: <https://www.braskem.com/RI/annual-reports>

# EXTERNAL ENVIRONMENT

## THE WORLD IN 2019

The year was marked by the deepening in trade tensions between China and the United States, the two largest economic powers in the world, which began in the first half of 2018. These tensions influenced world trade as a whole, due to uncertainties and challenges imposed by protectionist measures in both countries – there was a negative impact on investment and demand for capital goods. Additionally, the slowdown in the Chinese economy, the contraction of the European automotive industry, the uncertainties related to Brexit and the political instability in the main emerging markets, such as Brazil and Mexico, resulted in lower growth in the industrial sector and international trade in 2019.

### 2019 GDP GROWTH (IMF)



**LOWEST PERFORMANCE IN THE LAST THREE YEARS**  
**GDP +2.3%**



**LOWEST GROWTH IN 29 YEARS**  
**GDP +6.1%**



**ECONOMIC STAGNATION**  
**GDP +1.1%**



**CONTINUED DECELERATION**  
**GDP +1.2%**



**RECESSION**  
**GDP -0.1%**

## THE PETROCHEMICAL INDUSTRY IN 2019

The trade war between the United States and China influenced the global demand for chemicals and thermoplastic resins, which affected said demand throughout the year, but below the initial expectation of players and consultants in the petrochemical sector for 2019. In this context, the spread of polyethylene and chemicals in the world was also pressured by the entry of new integrated capacities of shale gas, ethane-based polyethylene in the United States and new refineries in Asia. On the other hand, the US PP market continued with healthy spreads, due to the growth of the US economy and the large availability of raw material propylene in the region.

Since 2018, it was expected that the polyethylene market would enter a phase of low prices, due to the entry of new refineries in Asia and, mainly, by the entry of new capacities of shale gas, ethane-based polyethylene in the United States.

**Since the beginning of 2020, the expectations on petrochemical spreads for the year have increased, due to lower supply caused by the downturn in the global economy, which was affected by the pandemic scenario.**





# CAPITAL PERFORMANCE

One of the purposes of this report is to clarify how we create value for our shareholders and stakeholders. To this end, we present below the capital performance and what we are doing to generate/expand our positive impacts and mitigate/control any negative impacts for all our stakeholders today and in the future. To describe this, we are using financial and non-financial indicators.

**Capitals are valuable resources in which we connect to create value to all our stakeholders.**





## HUMAN CAPITAL

From the passion for transformation, the ethical and upright commitment and the non-negotiable value for safety, all the people involved in our business are important for 2019 deliveries. This is due to a lasting relationship and prosperous results that we have established with more than 7.5 thousand Members and more than 16 thousand outsourced professionals.

### People who move us forward

MEMBERS PER COUNTRY	2019 (A)	2018 (B)	A/B
Brazil	6,050	6,173	-2%
USA	759	754	1%
Mexico	830	812	2%
Germany	202	188	7%
International Offices	99	81	22%
<b>TOTAL</b>	<b>7,940</b>	<b>8,008</b>	<b>-1%</b>

CONTRACTORS	2019 (A)	2018 (B)	A/B
Contractors*	16,231	14,759	10%

\* Information includes only industrial units and offices in Brazil

EXPENSES WITH PERSONNEL US\$ MILLION	2019 (A)	2018 (B)	A/B
Direct Compensation	333	339	-2%
Benefits	74	72	3%
FGTS	21	17	24%
<b>TOTAL</b>	<b>429</b>	<b>428</b>	<b>0%</b>

## Our way of being BeU<sup>x</sup>

In order for the people involved in our business to be motivated and inspired by our belief, our purpose and our ambition, and so that they can build innovative and sustainable chemical and plastic solutions with us from non-negotiable values, constant work is necessary of immersion and development of the members and leaders in relation to our way of being Braskem.

It is our way of being that moves us forward. It is the key that establishes relationships based on trust and admiration; that creates a diverse, humane, inclusive and innovative environment that encourages protagonism in each one of us, while it makes us grow together; which strengthens and encourages ethical behavior, the zeal for safety and health, and the passion for transforming in all our actions, and that provokes us to think further, with technology as an ally of our transformations and our path to the future.

### BeU<sup>x</sup>

The world is in transformation: more connected, informed, accessible and demanding more protagonism from people. Such changes have transformed the needs of Team Members in the work environment. At Braskem, we are aware of these changes because we want to be the company people choose today and in the future.



Thus, in 2018, we unified our way of being in a Value Proposition, which permeates the entire journey of the member at Braskem: BeU<sup>x</sup>. With this, we aim to create a link between people and the organization, providing our Team Members with a workplace where they feel good, where they can build their own path, have meaningful experiences and access to new development tools.

We have worked in continuous improvements of our team members' journey into our way of being. This journey includes Talent Attraction, Integration of new team members, Career Development, and their Exit from the Company.

For each stage, we obtained advances over 2019. We highlight the continuity of our Internship and Young Operators programs, and the advent of the new Recruitment and Selection tool, Gupy, which has potential to expand diversity among our team members and to reduce the negative impact of unconscious bias in the selection of candidates.



Besides that, we worked in the layout transformation of our offices aiming to provide a more collaborative, creative and cozy environment to our team members. Other 2019's highlight was Boomerang program, which offered team members at initial stage of their careers an opportunity to immerse in our global operation thru short assignments in several locations.





INVESTED IN TRAINING US\$ MILLION	2019 (A)	2018 (B)	A/B
Invested in Training	8	7	2%
Quantity of Trained Members	7,652	6,825	12%

VOLUNTARY TERMINATION RATE	2019 (A)	2018 (B)	A-B
	3.9%	2.6%	-1.3 p.p.
	2.1%	1.8%	-0.3 p.p.
TOTAL	2.5%	2.0%	-0.5 p.p.

## Diversity

We believe that, by valuing a work environment with diversity, we create space for collaboration and development. For this reason, in 2017, we deepened our performance and created a Diversity Program formed by five work fronts focused on the inclusion and empowerment of historically minority groups, with the purpose of promoting equity and social inclusion. The program aims to generate a more diverse, representative and inclusive work environment, to make Braskem recognized as an inclusive company and to collaborate in building a society that respects and values diversity and inclusion.

MEMBERS BY GENDER	2019 (A)	2018 (B)	A-B
	23%	23%	0.0 p.p.
	77%	77%	0.0 p.p.

DIVERSITY	2019 (A)	2018 (B)	A-B
	23%	23%	0%
 in Leadership	25%	27%	-7%
 of Blacks in the Total Members in Brazil	29%	30%	-3%
 of Blacks in Leadership	12%	13%	-8%

GENERATION DIVERSITY	2019 (A)
Baby-Boomers Members -> 56 years old	8%
Generation X Members - 37-56 years old	50%
Generation Y Members - 27-36 years old	35%
Generation Z Members - 18-26 years old	7%

**In 2019, we celebrated 5 years of our Diversity and Inclusion Program and, to celebrate it, we launched a manifest video about our purpose in working on the theme.**



You can access the full Code of Conduct at:  
<http://www.braskem-ri.com.br/esg>



## Commitment to ethical, upright and transparent performance

It is through ethical commitment, transparency, integrity and compliance with applicable laws that we strive to create sustainable chemical and plastic solutions. These values permeate the conduct of our daily activities on behalf of Braskem in any location – each director, officer, member and third party. These are values that we consider non-negotiable in our way of being, as we understand governance and compliance as factors of competitiveness to achieve our ambition to be leaders in the sector.

### Code of conduct

We consider it essential that all our Members follow our Code of Conduct, doing the right thing and participating effectively in strengthening our organizational culture.

The Code was adopted by Braskem's Board of Directors to establish a set of corporate conduct standards that we must adhere to in the exercise of our professional responsibilities and interaction with Braskem's customers, shareholders, suppliers and business partners.

To preserve corporate security, we rely on each Member to report in good faith any potential concerns or violations, the conduct of which they believe is not consistent with our Code.

The global Code of Conduct, therefore, presents the principles, values and practices that guide the corporate conduct of our Members both in internal and external relations, in an unrestricted manner, that is, without any room for concessions, exceptions or waivers. In 2019, all Members received training on the Code of Conduct, as did the members of the Board of Directors.



You can access the full Code of Conduct at:  
<http://www.braskem-ri.com.br/esg>

RECOGNITIONS	2019 (A)	2018 (B)	A/B
Integrity, Prevention and Bribery Combat of Ethos Institute	9.3	8.7	7%

### Ethics Line Channel

Since 2017, our Ethics Line Channel has been managed by an outsourced and independent team, which receives, evaluates and forwards all complaints received in a personalized and impartial manner. Internally, these complaints are evaluated by the specialized Compliance Investigation team. In addition to the on-line channel, telephone service is available seven days a week, 24 hours a day, conducted in four languages (Portuguese, English, Spanish and German).



See Ethics Line Channel results on 2019 Sustainability Report on:  
<https://www.braskem.com/RI/annual-reports>

### Improvement of our governance and compliance systems

Over the past few years, we have put in place new routines, new controls and reviewed various policies in order to improve compliance processes and make them applicable globally for a diverse and multicultural team, with positive results for all our stakeholders.

### External recognition

As a result of our efforts to seek continuous improvement in our governance and compliance processes, we achieved a score above the market average in the evaluation of the Thematic Guide: Integrity, Prevention and Fight against Corruption of the Ethos Institute. From the 13 selected integrity indicators, which assess the extent to which aspects of sustainability and social responsibility have been incorporated into the business, and helped define strategies, policies and processes, we have reached an overall score of 9.3.



**In 2019, we saw an evolution in the assessment of the Ethos Institute's integrity indicators, with an increase of approximately 7% in relation to the 2018 score.**

## Safety is our focus

The safety and health of everyone is a priority for us and requires continuous improvement. Thus, in 2019, we advanced in initiatives to improve our process management by continuing the implementation of Intelius, our management system, which went through the process of auditing the most critical requirements and global standards of our plants, evaluated during the Gap Assessment of 2018.

In addition, in the quest to achieve better results related to Health and Safety, we have carried out several actions aimed at reducing process safety risk scenarios and others focusing on human reliability, such as: training sessions for the PUMA and ABC tools, applied methodologies such as root cause analysis in the investigation of incidents, focusing on human factors;

development and application of games and videos, with the aim of disseminating the culture of human reliability. We also developed a pilot for the analysis and identification of behavioral factors that can contribute to the accident profile in one of our regional offices in Brazil.

In 2019, the Accident Frequency Rate with and without leave, considering members and third parties per million hours worked, was 1.31, above what was recorded in 2018.

Regarding the indicator of New or Aggravated Cases of Occupational Disease, 3 cases were registered in 2019: being one in the USA and two in Brazil, all due to acute exposure, motivated by occasional emergency situations.e emergência pontual.

OCCUPATIONAL SAFETY	2019 (A)	2018 (B)	A/B
Total Recordable Injury Rate (WLT + W/OLT)*	1.3	1.1	22%
Severity rate**	59.9	183.0	-67%
Number of fata accidents*	0.0	0.0	n.a.
Occupational illnesses Frequency Rate**	0.1	0.1	20%

\* Accidents per million worked hours, considering Team Members and contractors

\*\*Braskem employees

EXPENDITURES AND INVESTMENTS US\$ MILLION	2019 (A)	2018 (B)	A/B
Occupational Safety	12	5	169%
Process Safety	35	31	14%
Health	2	2	44%
TOTAL	50	37	34%



## INTELLECTUAL CAPITAL

Innovation is a way of thinking and acting that is part of our essence. We dedicate ourselves every day to make it the engine for the growth of our businesses to shape the chemistry of the future, providing technological solutions to improve people's lives. We encourage all Team Members worldwide, and not just those dedicated to innovation, to share their experiences, ideas and knowledge, as we believe that this enables the co-creation of innovative solutions, making our company more agile, efficient, collaborative and competitive.

**In 2019, the total amount invested in research and development was US\$ 17 million, 43% greater than in 2018.**

### Innovation and Technology

#### Profile

- 2 Innovation & Technology Centers, one located in Triunfo/RS – Brazil and the other in Pittsburgh/PA – USA;
- 1 Research Center for Renewable Chemicals in Campinas/SP;
- 1 Development Center for Process Technology in Mauá/SP;
- 2 Technical Centers focused on polymers, one in Wesseling in Germany and the second in Coatzacoalcos in Mexico;
- 7 pilot plants.

US\$ MILLION	2019 (A)	2018 (B)	A/B
R&D OPEX	63	55	14%
R&D CAPEX	17	12	43%

	2019 (A)	2018 (B)	A/B
I&T Team Members	301	307	-2%

	2019 (A)	2018 (B)	A/B
Number of projects to develop new process and products	258	308	-16%

#### 2019 (A)

Number of new patents requests	34
Number of patents extension requests	152
Number of patents granted	282

#### 2019 (A)

#### 2018 (B)

#### A/B

Quantidade de novos grades lançados	21	27	-22%
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#### 2019 (A)

#### 2018 (B)

#### A/B

Quantidade de Clientes apoiados pelos nossos Centros de I&T	513	495	4%
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## Highlights

Projects related to the mitigation of climatic risks, seeking to develop products that contribute to capture CO<sub>2</sub> and reduce the dependence on fossil raw materials:

- Advances in research on renewables in Campinas, focusing on proofs of concept of fermentative routes for production of solvents and plastics of green origin, in order to replace the petrochemicals used today.
- Operation of a scale plant to demonstrate a catalytic route for production of PET monomers from sugar, in Denmark;
- 6 new grades of recycled products added to the portfolio in 2019.



See details of new products released on 2019 Sustainability Report on:  
<https://www.braskem.com/RI/annual-reports>





## Digital transformation

CENTRO DIGITAL	2019 (A)	2018 (B)	A/B
Number of Team Members in the Digital Center	28	33	-14%
Number of Initiatives of the Digital Center*	16	50	-68%
External Partnerships of the Digital Center <sup>1</sup>	42	34	32%

\* In 2019, only initiatives which Digital Center fully supported was considered. In 2018, the number includes initiatives that receiver partial support from Digital Center

In line with our ambition to lead and be the best in what we do, we are always attentive to innovations and changes that can offer new opportunities to generate value for our stakeholders. Digital transformation is one of these opportunities to transform some of our processes and operations, thus increasing our performance and generating sustainable competitive advantages. We believe that our culture of agility, entrepreneurship, co-creation of ideas and of challenging and being challenged places us in a strong position to lead the digital evolution in the chemical industry. For this reason, in 2019, we launched an action plan that put us one step ahead of this digital transformation. .

We have implemented a series of tools to transform strategic parts of our operations and processes in order to improve business performance and reshape work practices.

The roadmap outlined included opportunities to create value in critical areas such as production, supply chain, marketing and sales, purchasing, maintenance, corporate functions such as legal and financial, among others. This plan aims to strengthen our position as a leader in the petrochemical sector and create added value for businesses, shareholders, customers and members.

Among the obtained results, we stand out the following: (i) strengthening quality control of our products and industrial process, using laser sensors and analytical tools and (ii) preventive maintenance of equipment, using digital apps, internet of things and other digital tools. Besides that, we implemented the processes “Push and Pull” which aims to identify potential improvements to Braskem and develop it thru several partnerships that boost innovation outside in.

**13 initiatives had their minimum viability tested and 10 of them proved their capacity to generate value and expand our leadership position in the digital transformation of the chemical industry. Starting in 2020, these 10 initiatives may represent gains of more than R\$ 40 million per year, a number that should grow exponentially as these solutions are scaled.**

### Braskem 5.0

To support our digital transformation process, we re-organized our Information Technology team and created the Braskem 5.0 Program, an initiative that aims to align the main business challenges with opportunities to adopt new technologies and processes in a sustainable and scalable way. The program includes seven pillars, namely Supply Chain and Logistics, Digital IT, New Business Models, People, Industry 4.0, Enterprise 2.0 and Customer Experience. Among its main achievements, some stand out, as follows:



- We made it possible for our Sales team to have greater mobility and productivity through the implementation of different tools, such as CRM, among others.
- We increased our infrastructure to guarantee Members' remote access to the entire Braskem network, from anywhere in the world, with quality and security.
- We increased the productivity of our Supply Chain by automating transport functions, improving processes and providing valuable information about logistical data through visual panels.
- We have evolved our back office operations through automated and intelligent processes.
- We implemented the COBIT1 model of governance and change management in order to support the organization in the areas of regulatory compliance and compliance with audits.

## Open innovation

The way companies innovate has changed globally and we are part of that change. As a way to complement the internal development of technological solutions, we form partnerships with technology institutes, universities, startups and partner companies. We believe that open innovation allows access to knowledge and technological resources that are not available internally, in addition to allowing greater agility with cost reduction in our technological development process. In 2019, we formed partnerships with 57 startups, 48 universities and 61 partner companies.

## Braskem labs

In order to contribute to the innovation ecosystem, generate a positive socio-environmental impact and solve the challenges of our business, we created the

**The Open Innovation and Braskem Labs programs maximize our ability to deliver sustainable and innovative solutions regarding chemistry and plastic by means of innovation and entrepreneurship. In 2019, US\$ 459 thousand were invested in start-up companies through Braskem Labs.**



Braskem Labs platform, an entrepreneurship platform that accelerates ideas and business for people who believe in their potential to transform the world. The platform consists of 3 programs:

Braskem's entrepreneurship platform focused on its acceleration programs, Scale and Ignition, both carried out in partnership with accelerator Quintessa. The 5th edition of the Braskem Labs Scale accelerated 12 mature startups with innovative and sustainable chemical and plastic solutions, while the Braskem Labs Ignition program, aimed at initial startups, accelerated 10 solutions with innovative and sustainable potential. In all, 22 startups received 4 months of acceleration with dozens of mentoring and business connections. Since 2015, the Braskem Labs platform has accelerated a total of more than 70 startups that have a positive impact through chemistry and plastic.

US\$ THOUSAND	2019 (A)	2018 (B)	A/B
Investment in Braskem Labs	459	546	-16%



See more details in 2019 Sustainability Report on: <https://www.braskem.com/RI/annual-reports>



## CAPITAL NATURAL

As a raw material and part of the process of our manufacturing, logistical and support operations, natural resources are essential to create innovative and sustainable solutions from chemistry and plastic. It is through the conscious and responsible use of these resources that we transform people's lives for the better. As a company in the chemical sector, we see ourselves as part of the solution to address the challenges related to climate change and the inappropriate disposal of plastic in the environment.

### Circular Economy

So, **our look to the future moves** us today towards **circular economy**, so that **the resources and processes that feed our operations are used and conducted in a circular and efficient manner**, using more and more sources of **renewable and recycled resources, committed to the reuse and adequate and sustainable return of the products of this transformation to nature.**

Some of our commitments:

- Alliance to End the Plastic Waste;
- Operation Clean Sweep;
- PlasticsEurope;
- ABIQUIM;
- ANIQ;
- Plastvida;
- American Chemistry Council.

**Recycling Platform:** includes the Company's efforts in Chemical Recycling, which allows transforming post-consumer plastics into raw materials and chemicals, closing the circular economy cycle, and also in Mechanical Recycling, to improve the quality of recycled resins, both in application properties as in organoleptics. It also aggregates carbon recycling efforts with emerging technologies to turn CO<sub>2</sub> into chemicals.

**Development of technologies in chemical recycling:** the Company entered into a partnership with EngePol - COPPE/UFRJ Polymer Engineering Laboratory (Alberto Luiz Coimbra Institute for Graduate Studies and Engineering Research at the Federal University of Rio de Janeiro), SENAI Institute for Innovation in Biosynthetics (SENAI CETIQT) and Cetrel (an environmental service company that started operations in 1978, together with the Camaçari Petrochemical Complex industries), with tests at its petrochemical plant scheduled for the first quarter of 2020.



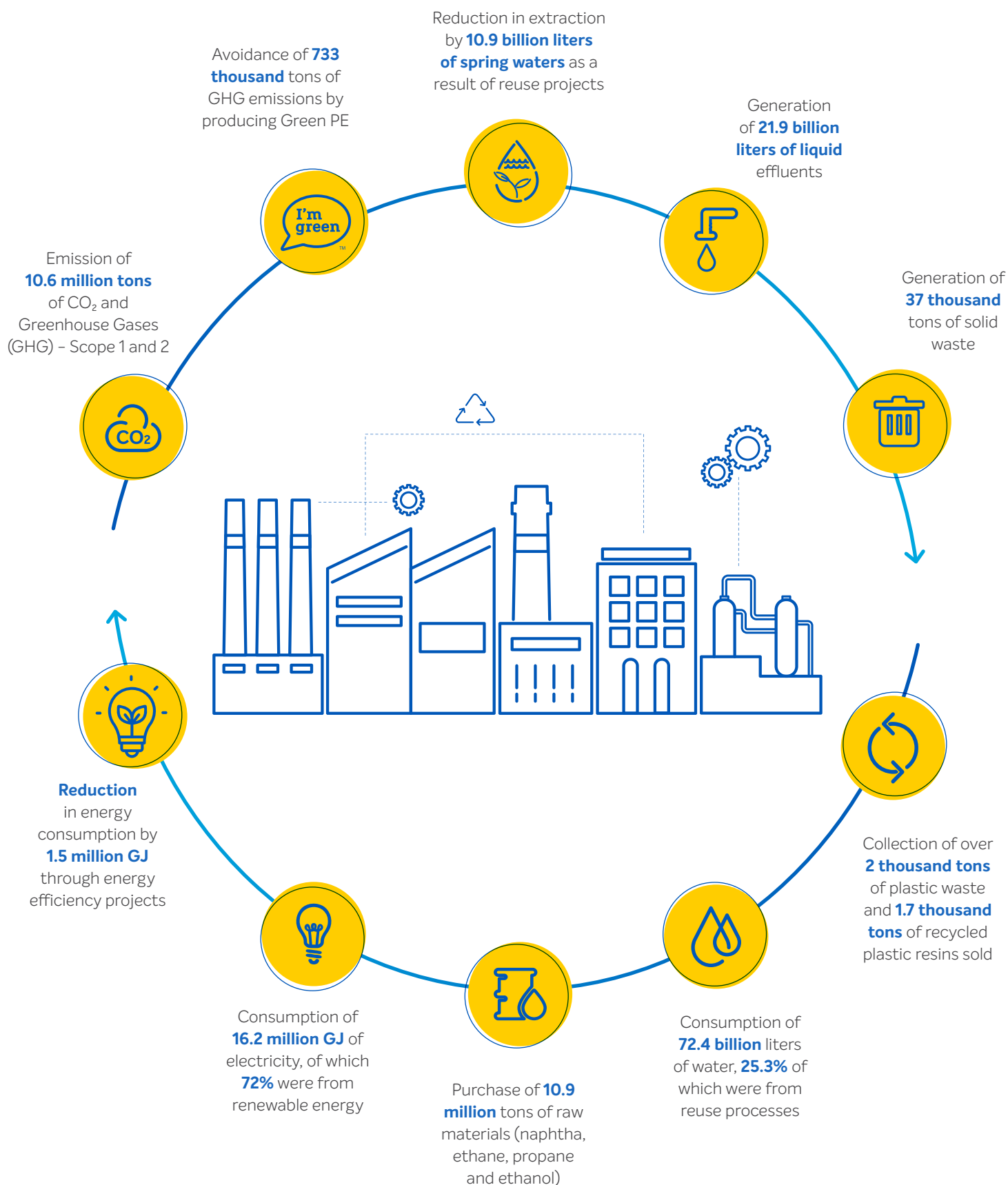
## Mitigation and Climate Adaptation

Also committed to the future, we seek to invest in projects, initiatives and partnerships that mitigate the adverse effects that contribute to climate change, that adapt our operations to potential future risks arising from this issue and that promote efficiency in the use of natural resources in our plants and in all our processes, also in line with our commitment to circular economy.

**A strategy oriented towards human beings and the future requires the commitment to actions aimed at Circular Economy and Climate Change. Thus, we seek to constantly improve our use of natural resources, work towards mitigating potential risks arising from said matters, and focus on taking advantage of business opportunities that generate value to all our stakeholders.**

INVESTMENTS IN ENVIRONMENTAL PROTECTION US\$ MILLION	2019 (A)	2018 (B)	A/B
Environment	<b>1.86</b>	2.79	-33%
Treatment of Liquid Effluents	<b>14.45</b>	16.45	-12%
Waste Management	<b>12.15</b>	22.44	-46%
Emissions Management	<b>1.98</b>	1.83	8%
Environmental Licenses	<b>0.36</b>	0.30	19%

## PERFORMANCE





## ABOUT OUR BUSINESS

### Our Energy Strategy

We have the ambition to be a reference in the global chemical industry in sustainable energy, focusing on energy efficiency and renewable energy in our operations. For this, we have a specialized team to conduct our energy consumption strategy, which is based on four pillars:

1

#### Competitiveness:

contracting increasingly competitive sources of energy in terms of cost;

2

#### Flexibility:

diversification of energy sources;

3

#### Reliability:

maintaining the reliability of adequate power supply for the performance of our operations;

4

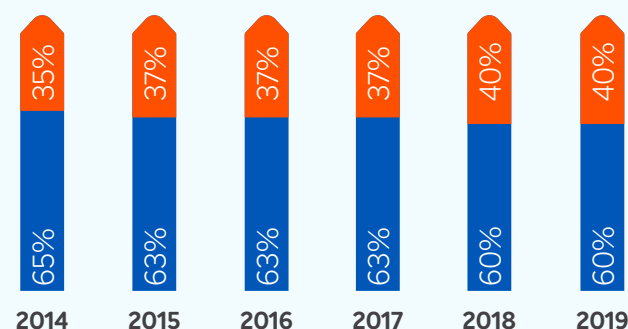
#### Sustainability:



contracting increasingly renewable and developing process and technologies more energy efficient

Thus, we have been working to acquire increasingly sustainable and competitive energies. Throughout 2019, the following fronts stood out:

- **Energy efficiency project for the ABC petrochemical complex:** partnership between Braskem and Siemens for the modernization of the thermoelectric system at the ABC Complex unit reached a progress of approximately 11% with a total investment of US\$ 13.3 million already made. With the combined co-generation of electricity and gas, the unit will consume less energy and emit less greenhouse gases. The estimate is for a reduction of 11.4% in water consumption and 6.3% in CO<sub>2</sub> emissions of the unit.
- **Solar-based distributed generation plant:** investing in the diversification of the energy matrix, Braskem started the operation of this plant, in Bahia, which will work from distributed generation, a process that allows the customer to install renewable source generators, and will supply 35% of the energy used in Braskem's office in Savior. The energy produced within a month is transformed into credit, providing a reduction in the amount due;
- **Renewable Energy Purchase:** a long-term agreement was signed with multinational Voltalia for the purchase of solar energy, for a period of 20 years. This way, Braskem adds a competitive energy source to its portfolio and invests in a clean and sustainable matrix. The Company will reduce the amount of CO<sub>2</sub> emissions by 130 thousand tons over the period of the contract.

### ENERGY SUPPLY (% OF TOTAL ENERGY CONSUMED)



 Purchased energy  
 Residual process energy

## Eco-indicators

In the year, the performance of eco-indicators was impacted by lower global production and the stoppage of chlor-alkali and dichloroethane plants in Alagoas.

ECO-INDICATORS PERFORMANCE	2019 (A)	2018 (B)	A/B
Water consumption (m <sup>3</sup> /t)	<b>4.31</b>	4.28	1%
Generation of liquid effluents (m <sup>3</sup> /t)	<b>1.31</b>	1.19	10%
Energy consumption (Gj/t)	<b>11.09</b>	10.94	1%
Waste generation (Kg/t)	<b>2.20</b>	2.13	3%
Intensity of GHG emissions (scope 1+2, tCO <sub>2</sub> e/t)	<b>0.62</b>	0.61	2%

Some events that also influenced the performance of the indicators:

- (i) periods of more intense rain in some regions where the Company operates, which increased the generation of effluents;
- (ii) higher temperatures and a worsening in the quality of the water acquired, which caused an increase in the evaporation rate of cooling towers and in the consumption of fire water for cooling equipment in the summer;
- (iii) equipment maintenance and cleaning procedures;
- (iv) delays in scheduled shutdowns and occurrence of unplanned shutdowns in our plants, which impacted all indicators; and
- (v) loss of efficiency in units and equipment. These effects were partially offset by the lower generation of waste, due to the postponement or improvement of maintenance and cleaning activities, and by the internal use of waste streams as fuel.

## Recognitions

- For 6<sup>th</sup> consecutive year (2014–2019) we were selected for the RobecoSAM Yearbook;
- In March, Braskem was recognized as A List in the CDP Climate, CDP Water, and CDP Supply Chain, for the year 2018;
- We remain listed in the period from 2016 to 2019, as a gold-class supplier on the Ecovadis platform;
- We were listed in the 15th consecutive portfolio of the ISE B3 Sustainability Index, being part of the select group of 7 companies that have remained listed since the launch;
- Braskem's recognition for the 8th consecutive year as a Leading Company in Sustainable Development by the UN Global Compact;
- Gold seal of the Brazilian GHG Protocol Program for the ninth consecutive time.

## Highlights:

### Circular economy

- **Reverse packaging logistics:** the initiative encourages customers to return resin packaging for Braskem to reprocess and transform it into recycled resins. Thus, we aim to foster the circular economy together with Customers and society and support recyclers and the value chain
- **Operation Clean Sweep:** in 2019, we signed Braskem's commitment to Operation Clean Sweep (OSC) and reached 70% of implementation of the OSC Blue program, reaffirming our commitment to Circular Economy of zero pellet loss.
- **Carbon Credit Certificate:** obtainment of the first certificate regarding proof of use of renewable fuel (ethanol) to replace fossil fuel (gasoline), by at least 95% of São Paulo's own vehicle fleet, between July 1, 2017 and June 30, 2018;
- **CEO Water Mandate membership:** an initiative by the United Nations and the UN Global Compact to promote the sustainable use of water in the world. Through membership, Braskem joined more than 150 companies from different countries in its commitment to preserve the natural resource.

### Climate change

- **Climate risk management:** Braskem's Adaptation Plan, which aims to reduce climate risks classified as high by 2023 to zero and maximize business opportunities, has evolved positively and the projects implemented so far have reduced potential physical impacts quantified by approximately US\$ 40 million;



See more details in 2019 Sustainability Report on:  
<https://www.braskem.com/RI/annual-reports>





## SOCIAL AND RELATIONSHIP CAPITAL

### Local Communities

We believe that our duty is to contribute to the development of the regions where we operate, generating value shared and well-being for all. Thus, by means of Private Social Investments of the Volunteer Program of donations and sponsorships, we focus on building lasting relationships and permanent dialogues with the communities around our facilities, providing sustainable solutions to local and global challenges.

Our actions have as a priority the causes of sustainable consumption and post-consumption, innovation and sustainable entrepreneurship and local development, with the objective of expanding our positive socio-environmental impact, in partnership with the communities and contributing to transform their realities.

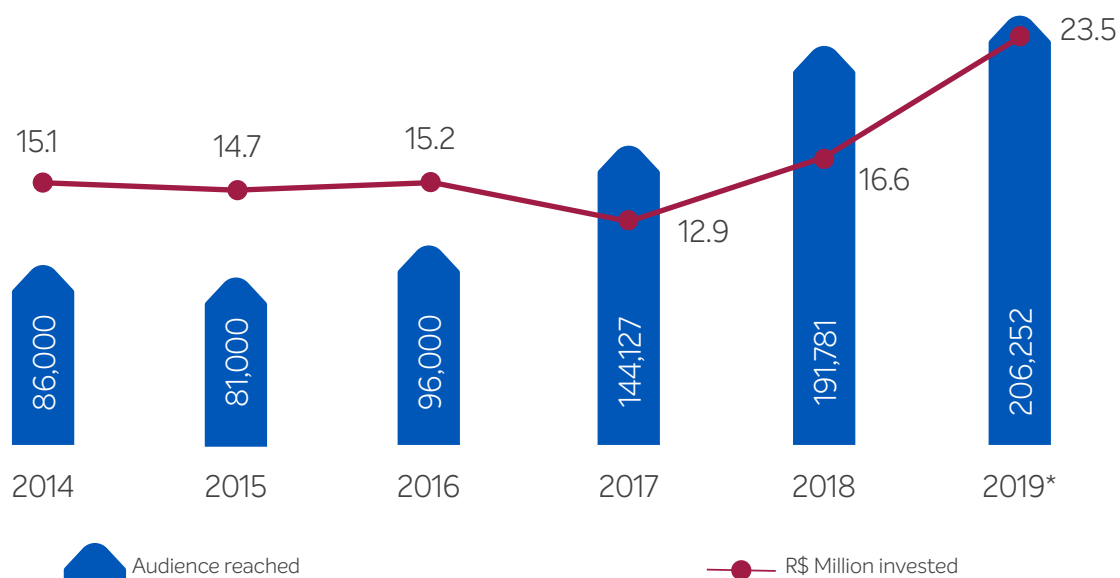
To strengthen our role as agents of transformation, we have teams of institutional relations and Private Social Investment dedicated to the relationship with communities in all regions and countries where we operate. We also provide a channel for the community to send us their projects to request donations and sponsorships available at <https://www.braskem.com.br/comunidades>.

This way, we aim to be recognized by the community around our facilities and by society in general for our contribution to improving human development.



**Since its creation, Braskem has undertaken to strive for a growing integration with the communities where it operates, preserving the environment and fostering regional aptitudes.**





## RESULTS

	2018	2019
Direct Beneficiaries	199,281	533,447
Number of PSI Projects	32 (28 BR, 4 MX)	101
Number of Donation Projects	53 (1 EUR, 27 BR, 13 U.S. e 12 MX)	75 (3 EUR, 21 BR, 42 U.S. e 9 MX)
Sorted waste (kg)	31,968 (Ser + Realizador)	28,120
Plastic waste collected and re-destined (ton)	28 (Plastianguis)	71.68
Students benefited	5,388	35,066
Teachers benefited	2,095	2,347
Schools benefited	523	858
Items donated	32,010	54,198



## Sustainable Consumption and Post-Consumption

### Our Performance

Leading education practices for sustainable consumption and scale sustainable solutions, considering the life cycle of products, especially plastic, through actions to promote the 4Rs: rethink, reduce, reuse and recycle.

PROJECT	PLACE	PURPOSE	2019 (A) US\$ THOUSAND	2018 (B)	A/B
Edukatu	Brazil	Environmental education program and concepts of sustainability and conscious consumption at schools.	130	129	1%
Ser +	Brazil	Promote social inclusion and socioeconomic development of those responsible for sorting recyclable material and cooperative members by fostering the development of the recycling chain. In 2019, we continued with a solid national performance of the project, covering all regions where we operate.	228	465	-51%
Plastinaguis	Mexico	Encourages recycling and helps educate the Community to identify and separate plastic waste, which is exchanged for coins called PlastiPesos.	104	62	68%



## Innovation and Sustainable Entrepreneurship

### Our Performance

Empower people to develop businesses with a positive impact on society and the environment.



### Braskem Labs

- Since 2015:
  - 73 accelerated companies, being 22 in 2019;
  - +120 business connections made;
  - 50% of the companies did business with Braskem;
  - 40% of companies received investment;
  - Only 4% of the companies that went through the program until today have already died (reduction of 2 pp compared to 2018)
- In 2019:
  - 40% of companies received investment;
  - 16% of companies have become Braskem's customers or suppliers
  - 100% of the companies stated that the program contributed to its growth.



## Local Development

### Our Performance

Promote and actively participate in actions aimed at the socio-environmental development of the locations impacted by Braskem

INVESTED AMOUNT US\$ THOUSAND	PLACE	PURPOSE	2019 (A)	2018 (B)	A/B
Braskem Volunteering Program	<b>Brazil, Mexico and USA</b>	Volunteering program carried out by our members	243	261	-7%



See more details in 2019 Sustainability Report on: <https://www.braskem.com/RI/annual-reports>

## BRASKEM WOMEN ENTREPRENEURS

In 2019, in partnership with Rede Mulher Empreendedora, we launched the “Braskem Women Entrepreneurs” program, which aims to train residents in the region close to the Greater ABC Region (SP) and Duque de Caxias (RJ) Petrochemical Complexes to generate and increase income through employability, in addition to encouraging the promotion of businesses led by women. The program is aimed at women who wish to undertake or are already in this process, formally or informally, and who have not had access to any type of training and are looking for professional and personal growth. In 2019, two classes were held that trained 57 women and five new businesses were created.

## Alagoas

In the beginning of 2018, three neighborhoods in the city of Maceió – Pinheiro, Bebedouro and Mutange – registered cracks in buildings and sinking on public roads. In March of that year, there was an earthquake of 2.4 degrees on the Richter scale in these neighborhoods where Braskem has 35 salt extraction wells, where it has been present for over 40 years. In respect to this long relationship in the region and to our ethical principles, we have adopted, since the beginning, a responsible, transparent and active posture, collaborating with the authorities to understand the geological phenomenon and seeking to identify its causes.

Thus, the Company:

- (i) Definitively closed the salt extraction activities in Maceió, and created protection areas around certain wells, which involved the relocation of people, the eviction of properties and the adoption of additional monitoring measures;
- (ii) Signed an agreement and an amendment thereto with the Public Defender's Office of the State of Alagoas, the Federal Public Prosecutor's Office, the Federal Public Defender's Office, and the Public Prosecutor's Office of the State of Alagoas to support the eviction and compensation of residents in risk areas, defined according to their criticality based on technical criteria of the Civil Defense, through the Financial Compensation and Relocation Support Program;
- (iii) Signature of an agreement with the Labor Prosecution Office for the implementation of the Program for Business Recovery and Promotion of Educational Activities for residents and workers in these same areas.

In 2019, we recognized, with a provision in the fourth quarter result, the total amount of approximately R\$ 3.4 billion related to the implementation of these actions, which will be spent over the next few years and may be changed due to the development of the topic, including:

- (I) Support in eviction and compensation for residents in risk areas: R\$ 1.7 billion;
- (II) Closure and monitoring of salt wells: R\$ 1 billion;
- (III) Other measures not covered by the agreement: R\$ 700 million.

In July 2020, the Company entered into an amendment to said agreement with the authorities in order to include support measures to be adopted for the eviction in the new risk areas, according to the Map of Damage Sectorization and Priority Action Lines updated by the Civil Defense of Maceió, which incorporated about 2,000 properties into the agreement signed in January this year.

Thus, the total amount of the provision for the geological event in Alagoas was R\$ 4.58 billion, of which R\$ 2.61 billion was recorded in the short term and R\$ 1.97 billion in the long term.

The Company continues to collaborate with the authorities by hiring specialists and academic institutions in the area of geology and seismology, from Brazil and abroad, to identify the causes of the geological phenomenon.



See more details in 2019 Sustainability Report on: <https://www.braskem.com/RI/annual-reports>



### Collaborative Actions

In order to better serve the families covered by the Financial Compensation and Relocation Support Program, the Company set up the 'Central do Morador' ['Resident Center'] with a team from Braskem and contracted specialists that includes: (i) banking service points; (ii) moving services; (iii) furniture storage; (iv) accommodation of pets; (v) psychological support; (vi) space for families to meet with their lawyers; (vii) single registration point of the Municipal Department for Social Assistance; and (viii) a Public Defender's traveling truck.

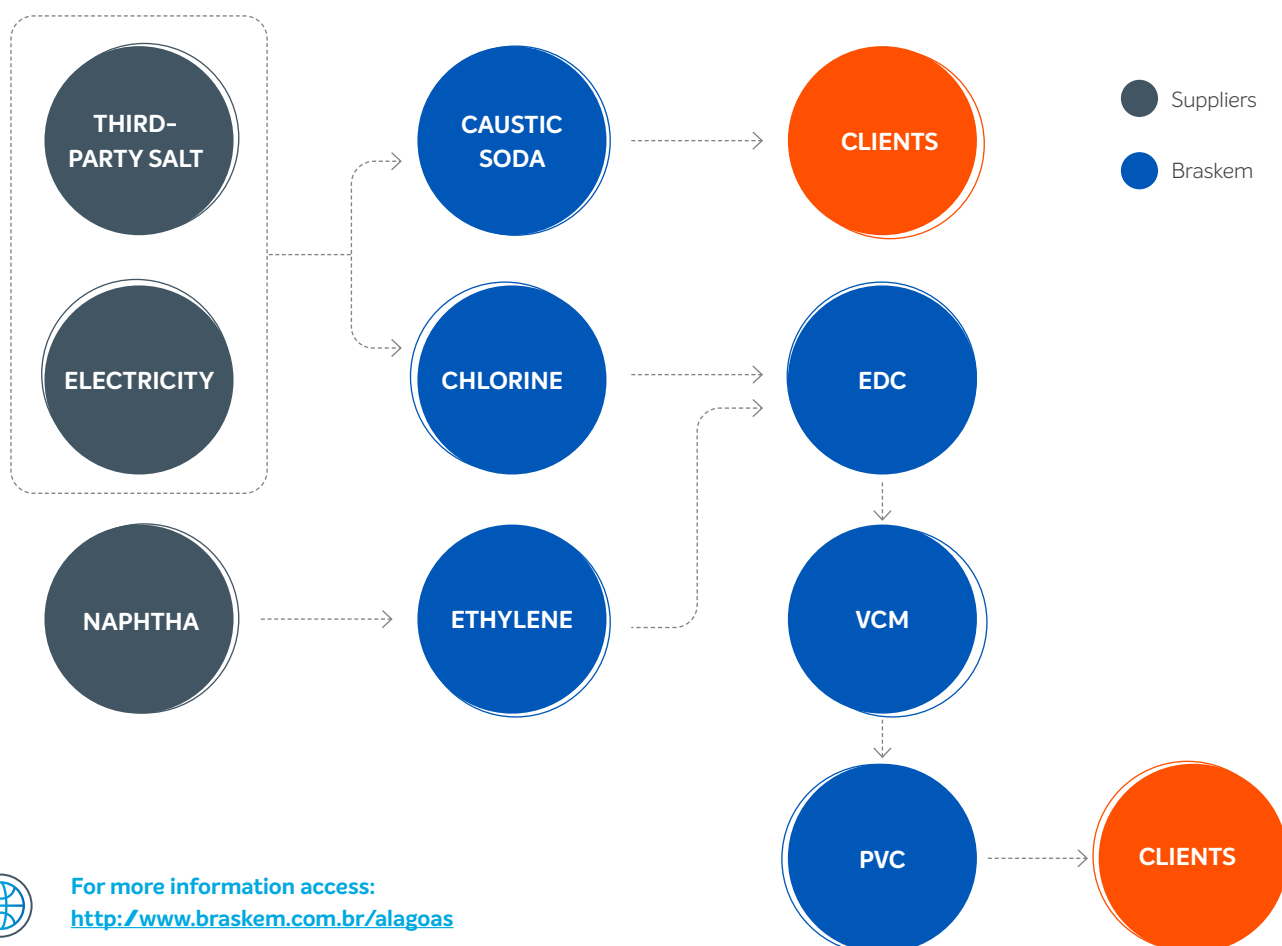
### Operations

In relation to our operations, they account for 3% of Alagoas' GDP and involve more than 60 companies in the plastic and chemical chain in the state. For this reason, even with the interruption of important activities, we have assumed a commitment with the stakeholders and have not dismissed any members.

In addition, to honor the service to our Customers, we import raw material from other states and abroad, with a focus on resuming operations at the Pontal da Barra plant in the future. We asked the Brazilian Mining Agency (ANM) for authorization to research salt reserves in rural areas of Alagoas to continue generating jobs and income in the region.

On May 9, 2019, according to a material fact disclosed to the market, Braskem started the process of closing the salt extraction activity and the consequent stoppage of the chlor-alkali and dichloroethane factories in Maceió/AL. In view of this scenario, and aiming to resume the chlor-alkali operation, the Company started a project that aims to change the raw material base for the chlor-alkali factories through the acquisition of domestic and/or imported sea salt from third parties. The product will be stored, dissolved in water for brine production and then treated and sent for processing. The estimated cost for the project is R\$ 60 million. The forecast for starting the chlor-alkali plant is in 4Q20.

### OPERATIONAL FRONT 2020



For more information access:  
<http://www.braskem.com.br/alagoas>

## Customers

It is through partnership and development together with our Customers that our products are transformed to make the lives of millions of people better. By establishing long-lasting and deep relationships with our Clients, we are able to grow together and boost our entire value chain.

In addition to our dedicated commercial, product engineering and market development teams present in the 4 countries where we operate, in addition to our commercial offices, we have a specific channel for our Customers available at <https://www.braskem.com.br/Clients> on which we made available our product catalogs, quotation for these products, progress of purchase orders, invoices, bank-issued invoices, consultations and requests for credit limit, and consultation to the quality certificate. In line with this commitment, we have undertaken a series of initiatives to strengthen the relationship with our Customers.



**Circular Economy:** we have entered into partnerships with several customers to develop more sustainable products, such as the renewable ones, which expand and facilitate the recycling and reuse of plastic packaging. In addition, we developed actions and solutions to enhance post-consumer plastic waste and the recycling chain as a way to mitigate environmental and social risks. For this, we entered into partnerships with Customers, recyclers, cooperatives and companies that own consumer brands.



Through our partnership with the Brazilian Association of the Plastic Industry (ABIPLAST), we promote initiatives that encourage the export of processed products.



This family of products offers eco-efficient resins that help reduce energy consumption during the production process and the weight of the final product, in addition to increasing productivity, which contributes to reducing production costs and environmental impacts.

## Plastic transformation movement

With the purpose of contributing to the growth of plastic transformation, we have worked since 2013 in partnership with Brazilian Association of the Plastic Industry (ABIPLAST) in the development of the Incentive Plan for the Plastic Chain (PICPlast). The initiative has two main fronts: (i) Competitiveness and Innovation, responsible for the training offered to transformation companies so that they can improve their products, processes and solutions, and (ii) Plastic Transformation Movement, which seeks to show the importance of plastic in people's daily lives in various projects.

## Novos modelos de negócio

Our Digital Center also explores new business opportunities and services for our Clients. Thus, in 2019, we started two internal startups that, together, operated more than 1,000 transactions.

- **Edge Portal:** is a platform for customers in the chemical industry. Edge allows customers to conduct research and comparisons among available products, place orders and access their purchase history. They are also able to track shipments and access sales documents.
- **LoadShark:** aims to improve the way the Company schedules deliveries by truck from factories to warehouses and to customers. In Brazil, about 1500 deliveries leave Braskem's factories every day. Scheduling deliveries is a largely manual process that involves different people, papers and spreadsheets. LoadShark uses algorithms to assess the impact of orders, truck locations, receipts, customers, destinations and delivery times. Thus, the platform uses this data to create the most efficient delivery schedule for freight costs and fleet productivity.



See more details in 2019 Sustainability Report on:  
<https://www.braskem.com/RI/annual-reports>



## Suppliers

Our suppliers and service providers are an essential part of our production chain and they are fundamental to maintaining our ability to generate value for all our stakeholders. Aware of this importance and in line with our sustainable development strategy, we are committed to developing and using suppliers and service providers in the locations where we operate.

% OF NATIONAL SUPPLIERS	2019 (A)	2018 (B)	A-B
Brazil	56%	59%	3.0 p.p.
USA	97%	96%	-1.0 p.p.
Germany	97%	98%	1.0 p.p.
Mexico	49%	71%	22.0 p.p.

Our supplier management is decentralized, with areas responsible for analyzing expenses, evaluating the quality of products and services and adhering to the Code of Conduct for Third Parties. The Code is based on widely accepted documents such as the United Nations Universal Declaration of Human Rights, the procedures recommended by the International Labor Organization (ILO) and the laws and regulations of the countries where we operate. In addition, 100% of contract suppliers for our industrial areas must also respond to and meet our minimum HSE requirements.

In 2019, we completed the validation process for the Sustainable Procurement Tool, which improves the process of assessing socio-environmental risks during the technical analysis of bids, helping different procurement teams to insert sustainability issues in the selection of Suppliers.

**In 2019, the Supply area was once again recognized by the CDP Supply Chain program, which highlights the companies that most encourage their Suppliers to join their business in terms of sustainability, such as reporting greenhouse gas emissions and water management.**

In addition to teams dedicated to relationship with suppliers in all countries where we operate, we also have a Supplier Portal available at <https://www.braskem.com.br/fornecedores>, where Suppliers have access to news about our company, results of their evaluations, sales information, among other features.

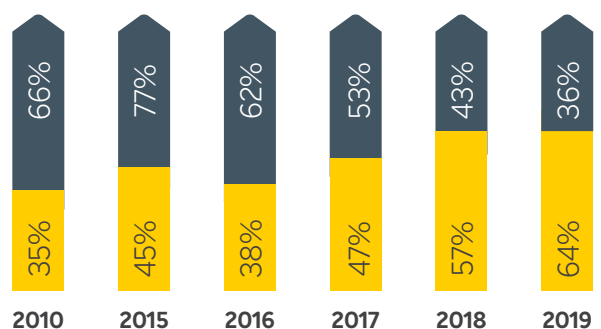
## Diversification

The diversification of suppliers is also part of our strategy so that the Company has the ability to guarantee the supply of feedstock in different circumstances.



### Reduction of the reliance on brazilian naphtha

In Brazil, the supplier of our plants is mainly Petrobras. However, since 2010, we have sought to increase the reliability of naphtha supply by diversifying suppliers and expanding imports. Accordingly, we increased the share of imported naphtha by 29 percentage points of the total purchased naphtha, which mitigates the risk of dependence on a single supplier for our Brazilian operations.



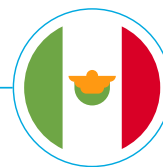
 Petrobras

 Imported Naphtha



### Diversification

In the United States, we have propylene suppliers of various types, such as refineries, first generation petrochemicals (crackers) and propane dehydrogenators. There are more than 15 suppliers in that region. In Europe, we have more than 5 propylene suppliers in Germany.



### Fast-track for ethane import

In Mexico, our main supplier is Pemex, contractually responsible for at least 70% of the supply of ethane – the raw material of our petrochemical plant. Thus, in line with the supplier diversification strategy, we invested approximately US\$ 2.4 million in a short-term solution for importing ethane from the United States, with logistics through trucks. This solution has been in operation since December 2019 and aims to supply 12,800 barrels per day to 25,400 barrels per day, which represents a supply between 19% and 38% of this plant's ethane requirement.

## Government

In order to exercise their activities, our Members and third parties acting on our behalf need to interact with Public Agents. We believe that any interaction with Public Agents must be based on ethics, transparency and a legitimate dialogue: (i) originated by a lawful and ethical reason that is in accordance with our policies; (ii) carried out with Public Agents who have functional competence to conduct the dialogue; and (iii) conducted in an appropriate manner, with standard language, appropriate style and vocabulary and professional treatment.

To conduct this legitimate dialogue with the Government, in addition to the institutional relations team, we also have a government relations team and the Public Agent Interaction Tool, so that our Members can record all information about any type of interaction.

In our relationship with the Government, we have tax and fiscal obligations, tax incentives, special tax regimes, contingent liabilities, the Global Agreement and financing with government agencies and public banks.

## Contingencies

As a result of the normal course of our activities, we may be a defendant in legal and administrative proceedings of a civil, corporate, fiscal-tax, labor and regulatory nature. Based on the opinion of our external legal advisors, we classify these proceedings as probable loss, in which the likelihood of loss is greater than 50%, and possible loss, in which the likelihood of loss is between 25% and 50%. For lawsuits with a probable loss, we maintain an accounting provision in the amount corresponding to: (i) amount in controversy, plus due charges, for tax and social security processes; and (ii) estimated disbursement amount, plus due charges, for labor and other claims. We do not maintain a provision for processes with possible loss, except for those arising from business combinations, since the elements available are not sufficient

or clear in such a way to allow us to conclude that the trend will be of loss or gain.

## Alagoas

In view of the situation in Alagoas, we have registered civil contingencies within the scope of the Public Civil Action against Braskem and other defendants in which an award of approximately US\$ 7 billion is being sought, relating to socio-environmental and property damage, in addition to several other remedial measures, including environmental compliance, safety plans and suspension of the Company's government benefits.

The Company's Management, supported by the opinion of external legal advisors, classifies the chances of loss as possible.

CONTINGENCIES US\$ MILLION	2019 (A)	2018 (B)	A/B
<b>Tax</b>	<b>1,705</b>	<b>1,995</b>	<b>-15%</b>
Probable loss and business combination	167	157	-6%
Possible loss	1,538	1,839	-16%
<b>Labor</b>	<b>238</b>	<b>268</b>	<b>-11%</b>
Probable loss and business combination	78	46	70%
Possible loss	159	222	-28%
<b>Cíveis, societários e outros</b>	<b>8,797</b>	<b>391</b>	<b>2.148%</b>
Probable loss and business combination	41	47	-13%
Possible loss	8,757	345	2440%
<b>Total</b>	<b>10,740</b>	<b>2,655</b>	<b>305%</b>
Probable loss and business combination	286	249	15%
Possible loss	10,454	2,405	335%



## Global Agreement

In the context of the unlawful acts performed by former Members and agents within the scope of Operation Car Wash (*Operação Lava Jato*) in Brazil, in December 2016 we entered into a Global Agreement with the US Department of Justice (DOJ) and the US Securities and Exchange Commission (SEC), in the United States, with the Attorney General's Office, in Switzerland, and with the Federal Public Prosecutor's Office (MPF), in Brazil. Under the terms of the Global Agreement, the Company agreed to pay the authorities of such jurisdictions the total amount of US\$ 957 million (equivalent to R\$ 3.1 billion). In May 2019, we entered into an Agreement with the Office of the Federal Controller General (CGU) and the Office of the General Counsel for the Federal Government

(AGU), in Brazil (AGU/CGU Agreement), on the same facts as the subject matter of the Global Agreement, resulting in an approximate additional disbursement of R\$ 410 million.

Under this agreement, Braskem was also subject to monitoring required by the Brazilian Federal Public Prosecutor's Office, the US Department of Justice (DOJ) and the US Securities and Exchange Commission (SEC), in order to assess the company's compliance practices and implement improvements. In the first quarter of 2020, monitoring was completed and our compliance system was certified by the three agents involved. Learn more in the Compliance Chapter.

AUTHORITY	TOTAL AMOUNT	AMOUNT PAID US\$ MILLION	AMOUNT PAYABLE
Brazilian Federal Public Prosecutor's Office (MPF) <sup>1</sup>	703	443	260
US Department of Justice (DOJ)	95	95	0
US Securities and Exchange Commission (SEC)	65	65	0
Switzerland's Office of Attorney General <sup>2</sup>	95	79	15
Office of the Federal Controller General (CGU) and Office of the General Counsel for the Federal Government (AGU) <sup>3,4</sup>	102	0	102
<b>TOTAL</b>	<b>1,059</b>	<b>682</b>	<b>377</b>

<sup>1</sup> Balance will be paid in 4 annual installments on January 30 of each year as from 2020

<sup>2</sup> Balance will be paid in 3 annual installments on June 30 of each year as from 2020

<sup>3</sup> Total AGU/CGU Agreement was R\$ 2.91 billion. Of this amount, approximately R\$ 2.5 billion will be deducted from amounts that we had already committed to pay with MPF, resulting in an additional disbursement of R\$ 410 million

<sup>4</sup> Balance will be paid in two annual installments in 2024 and 2025



## Financing with public agencies

To finance our growth and strategic projects, we have contracted loans from public banks and government agencies in Brazil such as the Brazilian Bank for Economic and Social Development (BNDES) and Banco do Nordeste do Brasil. Abroad, we have operations with Credit and Export Agencies (ECAs), such as Nippon Export and Investment Insurance (NEXI), from Japan, Euler Hermes, from Germany, and SACE, from Italy. The relationship with these banks and government agencies is conducted by the Project and Investment Financing area.

## Risk Rating Agency

Our commitment to generating value today and in the future depends on maintaining our financial strength. We have a credit risk rating by the three largest agencies: Fitch Ratings (Fitch), Standard & Poor's (S&P) and Moody's. In 2020, due to the uncertainties caused by the pandemic scenario of COVID-19, Braskem had its credit risk reassessed, which led to a downgrade in both Fitch (BB+) and S&P (BB+), matching our credit risk with the credit risk of the Brazilian government by the two agencies. The relationship with the rating agencies is conducted by the Investor Relations area and we make available to the market most of the reports issued by the agencies about our credit profile at <https://www.braskem.com/RI/Ratings>.

## Rating

### CORPORATE CREDIT RISK – GLOBAL SCALE

AGENCY	RATING	PERSPECTIVE	DATE
Fitch	BB+	Stable	07/03/2020
S&P	BB+	Stable	07/08/2020
Moody's	Ba1	Stable	04/26/2020

## Shareholders

We conduct our business with ethics, transparency and integrity to ensure the best return for shareholders, adding value to their equity and remunerating their invested capital.

With 6 Members, our Investor Relations area works daily to keep the communication channel open between our managers and shareholders in order to reduce the perceived value of our company by the market and its effectively fair value. To this end, we provide information that goes beyond the minimum required by regulatory agencies of the capital market and, therefore, we promote spontaneous, frank, accurate and rapid communication.

## Stock performance

Braskem's class "A" preferred shares (BRKM5) depreciated 35.2% compared to the end of 2018, quoted at R\$ 29.85 per share. The devaluation of Braskem's shares in the year was mainly influenced by the downturn in the petrochemical cycle and by the end of negotiations between Odebrecht and LyondellBasell for the sale of the stake in Braskem according to the Material Fact released on June 4.

In 2019, ADRs representing class "A" preferred shares depreciated 39.17% in relation to year 2019.

## Dividend distribution

Our dividend distribution occurs after the assessment and approval by our governance bodies as established in the policy, which mainly take into account our ability to generate cash flow and long-term projections, including investment plans and other relevant factors, such as obtaining and/or maintaining the investment grade defined by the rating agencies. In all cases, our dividend distribution takes place with total transparency and respect for the law, the regulation of the securities market and our Financial and Dividend Policies, which determine that the proposal for dividends in addition to the minimum required by the applicable rules cannot raise Braskem's leverage (Net Debt/EBITDA ratio), in the current year and in the subsequent 2 years, more than 2.5 times.



Access the dividend distribution policy:  
<http://www.braskem-ri.com.br/estatutos-e-politicas>

US\$ MILLION	2019 (A)	2018 (B)	A/B
Dividends Distributed	169	411	-59%



## MANUFACTURED CAPITAL

In 2019, we had 41 industrial units, 7 pilot plants, 2 innovation and technology centers, 4 laboratories, and logistical warehouses whose fixed assets total approximately US\$ 8 billion.

### FIXED ASSETS

US\$ MILLION

	2019 (A)	2018(B)	A/B
Brazil	3,891	4,201	-7%
USA	1,128	913	24%
Germany	64	71	-10%
Mexico	2,892	3,008	-4%
Others	1	3	-79%
<b>Total</b>	<b>7,975</b>	<b>8,196</b>	<b>-3%</b>

### CAPACITY (KTON)

2019

Brazil Chemicals and Specialties	9,468
Brazil (Green Ethylene)	200
Brazil (PE)	3,055
Brazil (PP)	1,850
Brazil (PVC)	710
Brazil (Caustic Soda)	539
Brazil (Chlorine)	400
Brazil (EDC)	520
U.S. (PP)	1,570
U.S. (UTEC)	n.a.
Germany Production Capacity (PP)	625
Mexico Production Capacity (Ethylene)	1,050
Mexico Production Capacity (PE)	1,050

In 2019, we announced the definitive closure of the salt extraction activities in Maceió/AL and, as a result, our chlorine soda and dichloroethane operations were halted. In addition to that, we had a scheduled shutdown in one of the production sites in our petrochemical complex in Camaçari/BA and we reduced the utilization of our crackers' capacities in general given the lower profitability of exports. Thus, the utilization rate of our crackers stood at 89% in 2019, a reduction of 2 percentage points compared to 2018. In 2020, (i) we deactivate one of our chlor-alkali sites at Bahia, presenting a reduction in our production capacity of 79 thousand tons of caustic soda and 64 thousand tons of chlor when compared to 2019 figures and (ii) we reached 100% of completion of our new PP plant at United States, adding 450 thousand tons to 2019 figures.

## Investments

Total of US\$ 700 million, US\$ 187 million, or 21% less than the amount estimated at the beginning of the year, and exceeding the US\$ 100 million reduction target set at the end of the first half of 2019, as a result of our commitment to financial strength in a petrochemical scenario more challenging than what was anticipated.

**US\$ 470 million in operational projects:** the largest investments were made at the scheduled shutdowns at the Bahia petrochemical complex, in Brazil, and at the La Porte plant, in the United States.

**US\$ 229 in strategic projects:** the resources were directed to the following projects: (i) construction of the new PP plant in the United States, which totaled R\$ 678 million (US\$ 173 million), representing 75.1% of the total invested in strategic projects; (ii) upgrade of electrical infrastructure at the Neal plant, in the United States; (iii) modernization of the electrical system at the ABC petrochemical complex; and (iv) resumption of chlor-alkali production in Maceió, through the acquisition of sea salt.

In 2020, 100% of the construction of the new PP plant was completed, which added another 450 thousand tons to Braskem's production capacity. The con-

struction of Delta was based on Braskem's sustainable development assumptions, observing relevant eco-indicators, such as carbon emissions, water and energy efficiency, recycling and reduction of the waste volume. Delta's commercial operation should start in 2020 and its production will strengthen the supply of domestic US demand, which currently imports polypropylene to fill the deficit in its domestic market. The unit will also directly assist Braskem's global export capacity for its customers in North America, South America, Europe and Asia.

## Value Chain

The products we manufacture are transformed by our Clients into manufactured capital in various industries such as: automotive, civil construction, durable and non-durable consumer goods, agribusiness, hygiene, and pharmaceutical, among others.

In 2019, we launched 21 new products that are increasingly sustainable and make people's lives better:



**Packaging**



**Housing and Infrastructure**



**Agriculture and Food**



**Health**



See more details in 2019 Sustainability Report on: <https://www.braskem.com/RI/annual-reports>



## FINANCIAL CAPITAL

The main source of our financial capital is the **cash generated by our operations** – our equity – and **third-party resources** from financial institutions and the capital market.

The main applications of financial capital are in fixed assets – such as investments in subsidiaries, plants, equipment, warehouses, patents, use rights and intangible rights; stocks of raw material and finished products and, finally, the Company's cash.

Thus, in each fiscal year, we finance business through debt and equity, which together with the existing cash resources, added to the new funding and the cash generated by our operations, are applied in our business, and result in value added or distributed to all stakeholders.

### Third-party resources

In 2019, the Company's total indebtedness<sup>1</sup> increased, due to the raising of:

- US\$ 2,250 million via bond issuance in the international capital market;
- R\$ 500 million of commercial promissory notes issued in the Brazilian capital market;
- US\$ 150 million in a credit facility with SACE, the Italian export credit agency;
- Approximately R\$ 270 million in a financing line with the BNDES, through transfers;

<sup>1</sup> Does not consider Braskem Idesa

NEW FUNDINGS US\$ MILLION	2019 (A)	2018 (B)	A/B
Capital Markets	2,250	0	n.a.
Bank Loans	172	0	n.a.
Governamen- tal Agencies	222	314	-29%
Delta Project	0	170	-100%

The proceeds of new issuances were used in part to prepay short-term debts, in order to extend the Company's debt amortization schedule.

Thus, at the end of 2019, we prepaid debts that would mature in the short term. Among the debts prepaid, the following stand out:

BOND PRE-PAYMENTS US\$ MILLION	MATURITY	AMOUNT ON 12/31/2018
<b>Bond 2020</b>	<b>May, 2020</b>	<b>21</b>
Bond 2020	May, 2020	354
Bond 2021	April, 2021	691
Bond 2021	April, 2021	253
Bond 2022	May, 2022	54
Bond 2023	January, 2023	76
<b>Total</b>		<b>1,448</b>



The result of the liability management contributed to the extension of the average term of our debts from 14 years to 17 years, as well as the months of coverage of debt maturities by our cash from 40 months to 71 months at the end of 2019 – this work reinforces our commitment with the Company's financial strength, which brings comfort to our cash in the coming periods.

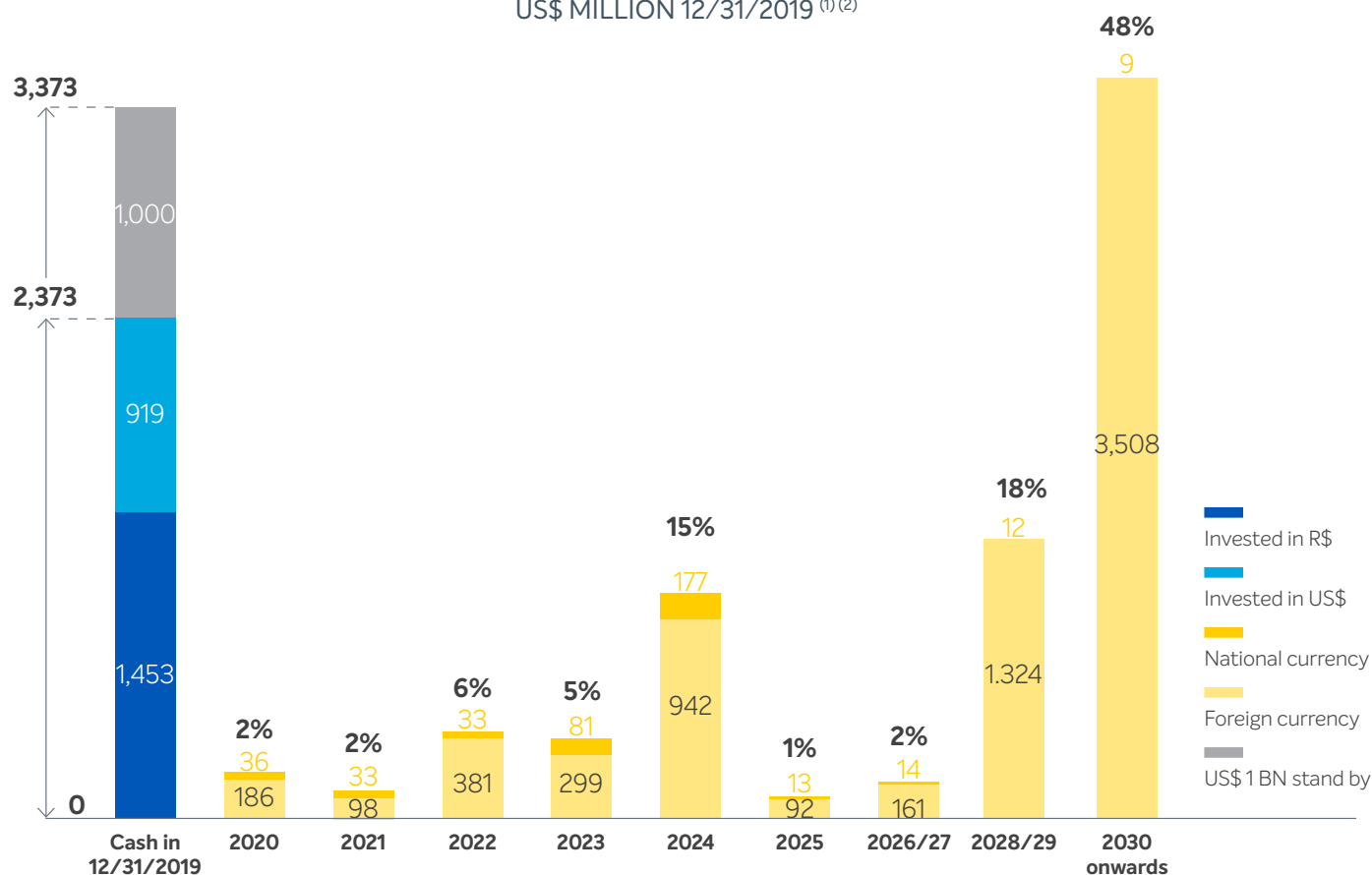
We also had an improvement in the cost conditions of these new fundings, which resulted in a reduction in the average cost of our debt from 5.52% + exchange rate variation in 2018 to 5.17% + exchange rate variation in 2019.

#### PROFILE OF FINANCIAL RESOURCES US\$ MILLION

	2019 (A)	2018 (B)	A/B
<b>Total</b>	<b>7,200</b>	<b>6,426</b>	<b>12%</b>
Capital market	6,238	5,660	10%
Bank loans	383	314	22%
Government agencies	518	381	36%
Delta Project	186	160	16%
Costs	(124)	(90)	39%
<b>Net debt</b>	<b>5,370</b>	<b>5,129</b>	<b>5%</b>

#### CORPORATE DEBT PROFILE

US\$ MILLION 12/31/2019 <sup>(1)</sup> <sup>(2)</sup>



<sup>(1)</sup> Does not consider discounts from transaction costs and Leniency Agreement.

<sup>(2)</sup> Considers the amortization of R\$26 million in 2021 related to the NCE Swap, according to note 20 (20.3.1) of the 2019 Financial Statements

## Free Cash Generation

Free cash generation in 2019 was US\$ 771 million, due to the lower EBITDA and the payment of interest related to the full/partial prepayment of certain bonds (break-fund costs), with these factors partially offset by:

- Decrease in accounts receivable, due to the lower sales volume and lower sales prices of products;
- Lower inventories of feedstock and finished goods;
- higher volume of naphtha imports with longer payment terms;

- Monetization of R\$281 million of the balance in PIS/COFINS taxes (exclusion from ICMS tax base);
- Receipt of advances from clients related to future sale of chemicals in the Brazilian market and to future exports of PE and PP; and
- Lower payment of income tax and social contribution (IR/CSLL) in Brazil and of income tax in the United States.

It is important to know that, in view of the low cycle in the petrochemical industry and the committed to our financial strength, we exceeded the goal of reducing CAPEX of US\$ 100 million by 21%, totaling a reduction of US\$ 187 million in the year.

### CASH GENERATION US\$ MILLION

	2019 (A)	2018 (B)	A/B
Recurring EBITDA	1,473	2,859	-48%
Change in working capital*	618	354	74%
Operating CAPEX	(441)	(485)	-9%
Interest paid	(555)	(495)	12%
IR/CSLL payment	(102)	(242)	-58%
Strategic investments	(224)	(213)	5%
Others**	4	45	-91%
<b>Free cash generation</b>	<b>771</b>	<b>1,824</b>	<b>-58%</b>

\* Adjusted to: (i) exclude the leniency agreement payment; (ii) exclude the effects of the reclassification between Financial Applications (includes LFT's and LF's) and Cash and Cash Equivalent; (iii) exclude the impact of judicial deposit related to Alagoas Public Civil Action; and (iv) includes the amount of other financial liabilities.

\*\*Includes, mainly funds received in the sale of assets and investments.

## Distributed value

We aim to distribute our financial capital in order to add value to all our stakeholders. Thus, any resource provided, whether by third parties or by the company's cash, is applied and returns with added value for the entire society.

US\$ MILLION	2019 (A)	2018 (B)	A/B
Personnel	464	428	8%
Taxes, fees and contributions	535	1,348	-60%
Financial expenses	1,621	1,778	-9%
Rentals	81	73	10%
Remuneration of own capital	(793)	796	-200%
<b>Total Value Added</b>	<b>1,908</b>	<b>4,423</b>	<b>-57%</b>

%	2019 (A)	2018 (B)	A-B
Personnel	24%	10%	14 p.p.
Taxes, fees and contributions	28%	30%	-2.4 p.p.
Financial expenses	85%	40%	44.8 p.p.
Rentals	4%	2%	2.6 p.p.
Remuneration of own capital	-42%	18%	-59.5 p.p.
<b>Total Value Added</b>	<b>100%</b>	<b>100%</b>	<b>0.0 p.p.</b>

# OUTLOOK FOR THE FUTURE AND STRATEGY

## Being the world leader in sustainable chemistry

At Braskem, we carry out in-depth assessments of the external and internal context in which we operate before defining our strategic actions. In the external context, megatrends have the potential to create significant implications and changes for the petrochemical industry. In this sense, Braskem is committed to participating in the debate and understanding how megatrends are transforming the economic and commercial scenario, in addition to the implications for our customers, for us and for society.

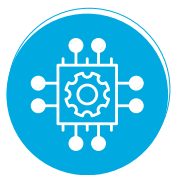
Still in the external context, it is essential to understand the current and future panorama of the global petrochemical scenario. The fundamentals of the industry pose important challenges for petrochemical companies and must be constantly evaluated. Finally, in the internal context, we analyze aspects such as: internal competences and tangible or intangible assets that the company controls.

## MEGATRENDS

Currently, humanity is experiencing a unique and special moment in its history, in which factors of great impact on the environment, people, society and the economy are interacting in an accelerated way to create a future that is totally different from the past.

At Braskem, we work together with several stakeholders to understand the major changes that are challenging organizations. These major changes are classified as megatrends and can represent great opportunities or risks for the way companies interact with their customers.

Among all the global megatrends, we are committed to accompanying those that have the greatest disruptive potential in our industry in order to transform them into new opportunities for differentiation.



## Industry 4.0

The trend is related to the evolution of the connectivity among machines and digital technologies, which are integrated to human activities, by using data collection, type storage and analyzing it quickly.

**Our response to that trend, we have been working expand initiatives from the Digital Center, which the role is to promote digital transformation in our industrial and corporate process.**



## Circular Economy

This trend is a response to the linear economy, the economic model based on the linear production method: extract, produce and dispose of as waste, which is reaching its limit, considering its negative impacts to the environment. The circular economy, aims to keep resources in use for as long as possible, extracting the maximum value throughout their use, to then recover and regenerate products and materials at the end of each life cycle.

**In response to that trend, we have positioned in 2018 in favor of the Circular Economy, announcing several initiatives, such as the development of chemical and mechanical recycling.**



## Renewable Energy

Since the world is under constantly development, we have observing an increase of the energy necessity and, considering the negative impact of energy consumption from fossil fuels, the trend is that renewable energy will be even more produced and consumed, so the environmental impacts can be lower than that generated by the fossil fuel consumption.

**In response to that trend, we seek for diversify our energy matrix and energy efficiency of our operation, thru power purchase agreements and partnerships for renewable energy consumption.**



## 3D printing

The trend to increase adoption of products made from 3D printing, which reproduces physically an idea developed digitally.

**In response to that trend, we search for the development of products that can be used as raw material for 3D printing production.**



## Mobility Revolution

The trend for replace traditional vehicles to electric ones, that has been expanded in different countries, such as China, European Union and United States, mainly by the formulation of new regulations.

**In response to that, we have been monitoring this trend and searching for the market development, which can use plastics to make vehicles lighter and more efficient.**



See more details of megatrends on 2018 Integrated Report on: <https://www.braskem.com/RI/annual-reports>

## GLOBAL PETROCHEMICAL LANDSCAPE

Despite the disruptive potential of megatrends in the petrochemical industry, investment decisions in the sector continue to be driven by expectations about the competitiveness and accessibility of raw materials and global economic growth, since the demand for chemicals is highly correlated to the world Gross Domestic Product (GDP). In this sense, the most consolidated and important risks for producers in the sector are still the imbalances between supply and demand for chemical products and volatility in the prices of raw materials, which follow different dynamics and are commonly defined by other uses, such as for fuel and energy.

From the end of 2019 to the present, the world economy has been impacted by the drop in demand caused by the COVID-19 pandemic. For 2020, the IMF's initial expectation was that the world economy would show a modest improvement. However, the spread of the coronavirus (COVID-19) changed this scenario for a significant drop in world GDP. In the short term, the recovery is expected to be gradual, with global growth projected for 2021 below what was expected in the pre-pandemic projections, but influenced mainly by China's growth.

Despite the gradual recovery of economies, this scenario has led major players in the global petrochemical industry to postpone investment decisions in new capacities, as well as the start of new ethylene plants, mainly in the United States. Thus, in the short term, China and North America are expected to lead the addition of new ethylene production capacity. In the medium and long term, the new additions will still be concentrated in China, but also in other countries in Asia and the Middle East.

According to data from an external consultancy specialized in the petrochemical sector, approximately 46.1 million tons of annual ethylene capacity are scheduled to be commissioned between 2020 and 2024 worldwide. In China alone, it is expected that approximately 22.3 million tons will be commissioned.

In North America, mainly in the United States, the forecast is that 9.9 million tons of ethylene capacity will start operating, with ethane as the main raw material due to the great competitiveness of this product in the cost curve. It is important to note that due to the intensity of capital required for construction of the plants and the complexity of the projects, these are often subject to delays and/or cancellations.

In relation to the price dynamics of the main raw materials, the beginning of 2020 was marked by the fall in the price of oil, due to the price reduction and production increase announced by Saudi Arabia, after Russia's opposition to limit world production in negotiations with the Organization of the Petroleum Exporting Countries (OPEC) – the negotiations took into account the drop in global demand due to COVID. After intermediation by the United States, Russia, Saudi Arabia and OPEC agreed on a historic 10% cut in production. Thus, the current scenario is a recovery in oil prices, but still below the prices practiced in 2019, which reflects in the price of naphtha, one of our main raw materials.

## OUR VALUE GENERATION STRATEGY

Once the external context (megatrends and the petrochemical scenario) has been analyzed, we will begin to analyze our internal context. In the internal analysis, relevant aspects for a petrochemical company are evaluated, such as production scale, global presence, raw material matrix, economic and financial metrics, and competency gaps, among others.

Based on the process of analyzing the external and internal context, we define our strategy with the intention of ensuring the construction of an increasingly competitive company, with a focus on operational excellence and resilience with respect to volatility.



Our strategy is focused on 5 pillars and their respective ambitions. Additionally, safe action is and will always be a focus on Braskem's operations, being a perpetual and non-negotiable value in our strategy.



## PRODUCTIVITY AND COMPETITIVENESS

Our focus is on implementing initiatives to improve and optimize our operations, and on ensuring the discipline of our processes, combined with the highest standards of Health, Safety and Environment (HSE).

### Our main actions in 2019:

1. Adoption of digital tools aiming at optimizing processes, reducing inefficiencies and increasing productivity with cost reduction.
2. Evolution in the implementation of the Intelius System and in the Knowledge Management platform.

### FEEDSTOCK DIVERSIFICATION

In relation to the feedstock Diversification pillar, we worked to create structural flexibility in our petrochemical plants, seeking to increase the versatility of our contracts through the diversification of our supplier base, and expanding our flexibility through investments in assets industrial and logistical systems.

#### Our main actions in 2019:

1. Implementation of the Fast-Track solution in our business in Mexico.
2. Increase in the share of imported naphtha in the total supply, compared to the historical average.

### GEOGRAPHIC DIVERSIFICATION

Through initiatives focused on Geographic Diversification, we aim to expand the global footprint outside Brazil, with gains in scale in PE and PP, and strengthen our leadership in the Americas Ambition.

#### Our main actions in 2019:

1. Progress in the construction of the new polypropylene production unit, located in La Porte, in the US state of Texas.
2. New branch in Asia, focused on business development in the region.
3. Expansion of offices in Rotterdam and Singapore, and warehouse in Colombia.

### PEOPLE, INNOVATION, GOVERNANCE AND REPUTATION

As for the People, Innovation, Governance and Reputation pillar, we are committed to further strengthening the focus on people, with an ethical, upright and transparent performance in all of our actions, on promoting sustainable development by considering the needs of all our stakeholders today and in the future, including with regard to the Circular Economy.

#### Our main actions in 2019:

1. Advance in external monitoring initiatives and intensification of compliance efforts.
2. Evolution in Circular Economy, with the sale of recycled resins and chemicals, and progress in the implementation of BeUx.

## STRATEGIC ACTIONS OF 2020

Considering the rapid advance of disruptive trends and the current challenges of the petrochemical industry and the world economy, our strategic actions in 2020 are focused on:

- **Productivity and Competitiveness:** (i) Ensure the supply to PVC and soda customers, mitigating the impacts caused by the temporary non-integrated operation of the business, and (ii) negotiate the feedstock supply contracts with Petrobras;
- **Raw Material Diversification:** (i) Approval of the complementary solution for importing ethane in Mexico;

- **Geographic Diversification:** (i) Start up the operation of the new PP plant in the USA, and (ii) strengthen the relationship with global customers;
- **People, Innovation, Governance and Reputation:** (i) End the external monitoring program, (ii) address the issues of Alagoas together with the authorities, in order to ensure the safety of people and the safe return of operations, and (iii) expand the offer of recycled resin;
- **Capital Allocation / Financial Strength:** (i) Discipline of expenses, CAPEX and comfortable liquidity position, allowing the Company to go through the low cycle without any financial restrictions;

To convert R\$ to US\$ it was considered the annual average exchange rate or the final quote of each year.

# HISTORICAL DATA

## HUMAN CAPITAL

MEMBERS PER COUNTRY	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A/B	B/C	C/D
Brazil	6,050	6,173	5,996	5,976	-2%	3%	0%
United States	759	754	699	711	1%	8%	-2%
Mexico	830	812	785	752	2%	3%	4%
Germany	202	188	173	174	7%	9%	-1%
International Offices	99	81	60	43	22%	35%	40%
<b>TOTAL</b>	<b>7,940</b>	<b>8,008</b>	<b>7,713</b>	<b>7,656</b>	<b>-1%</b>	<b>4%</b>	<b>1%</b>

MEMBERS BY GENDER	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A-B	B-C	C-D
Women	23%	23%	22%	22%	0.0 p.p.	-0.8 p.p.	-0.5 p.p.
Men	77%	77%	78%	78%	0.0 p.p.	0.8 p.p.	0.5 p.p.

CONTRACTORS	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A/B	B/C	C/D
Contractors*	16,231	14,759	11,670	12,489	10%	26%	-7%

\* Information includes only industrial units and offices in Brazil

DIVERSITY	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A-B	B-C	C-D
Women	23%	23%	22%	22%	0 p.p.	-0.8 p.p.	-0.5 p.p.
Women in Leadership	25%	27%	25%	23%	2 p.p.	-2 p.p.	-2 p.p.
Blacks in the Total Members in Brazil	29%	30%	29%	29%	1 p.p.	-1 p.p.	0.5 p.p.
Blacks in Leadership	12%	13%	12%	13%	1 p.p.	-1 p.p.	0.6 p.p.

## INTELLECTUAL CAPITAL

	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A/B	B/C	C/D
I&T Team Members	301	307	302	296	-2%	2%	2%
Number of projects to develop new process and products	258	308	355	334	-16%	-13%	6%
Number of new grades launched	21	27	15	21	-22%	80%	-29%

US\$ MILLION	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A-B	B-C	C-D
Number of clients supported by our I&T centers	513	495	505	530	4%	-2%	-5%
R&D OPEX	63	55	52	46	14%	6%	13%
R&D CAPEX	17	12	7	4	43%	71%	75%

US\$ THOUSAND	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A-B	B-C	C-D
Investment in Braskem Labs	459.5	546.0	558.0	411.0	-16%	-16%	36%

## NATURAL CAPITAL

ECO-INDICATORS PERFORMANCE	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A/B	B/C	C/D
Water consumption (m <sup>3</sup> /t)	4.31	4.28	3.98	3.93	1%	8%	1%
Generation of liquid effluents (m <sup>3</sup> /t)	1.31	1.19	1.06	1.11	10%	12%	-5%
Energy consumption (Gj/t)	11.09	10.94	10.61	10.25	1%	3%	4%
Waste generation (Kg/t)	2.20	2.13	2.13	2.16	3%	0%	-1%
Intensity of GHG emissions (scope 1+2, tCO <sub>2</sub> e/t)	0.62	0.61	0.57	0.64	2%	6%	-11%

INVESTMENTS IN ENVIRONMENTAL PROTECTION US\$ MILLION	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A/B	B/C	C/D
Environment	1.86	2.79	4.10	6.82	-33%	-32%	-40%
Treatment of Liquid Effluents	14.45	16.45	16.48	14.64	-12%	0%	13%
Waste Management	12.15	22.44	17.87	15.84	-46%	26%	13%
Emissions Management	1.98	1.83	2.76	2.26	8%	-33%	22%
Environmental Licenses	0.36	0.30	0.31	0.29	19%	-4%	9%



## SOCIAL AND RELATIONSHIP CAPITAL

AMOUNT INVESTED US\$ THOUSAND	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A/B	B/C	C/D
Edukatu	0	129	72	120	-100%	79%	-40%
Ser +	228	465	616	347	-51%	-25%	78%
Plastinaguis	104	62	32	0	68%	94%	n.a.
Braskem Volunteering Program	243	261	91	0	-7%	187%	n.a.

% OF NATIONAL SUPPLIERS	2019 (A)	2018 (B)	2017 (C)	2016 (D)	A-B	B-C	C-D
Brazil	56%	59%	71%	76%	3.0 p.p.	12.0 p.p.	5.0 p.p.
USA	97%	96%	93%	99%	-1.0 p.p.	-3.0 p.p.	6.0 p.p.
Germany	97%	98%	93%	94%	1.0 p.p.	-5.0 p.p.	1.0 p.p.
Mexico	49%	71%	75%	84%	22.0 p.p.	4.0 p.p.	9.0 p.p.

## MANUFACTURED CAPITAL

<b>FIXED ASSETS US\$ MILLION</b>	<b>2019 (A)</b>	<b>2018 (B)</b>	<b>2017 (C)</b>	<b>2016 (D)</b>	<b>A/B</b>	<b>B/C</b>	<b>C/D</b>
Brazil	3,891	4,201	5,038	5,198	-7%	-17%	-3%
USA	1,128	913	688	512	24%	33%	34%
Germany	64	71	69	63	-10%	3%	10%
Mexico	2,892	3,008	3,199	3,229	-4%	-6%	-1%
Others	0,6	3,0	3,0	0,0	-79%	0%	n.a.
<b>TOTAL</b>	<b>7,975</b>	<b>8,196</b>	<b>8,997</b>	<b>9,002</b>	<b>-3%</b>	<b>-9%</b>	<b>0%</b>

## FINANCIAL CAPITAL

<b>VALUE ADDED US\$ MILLION</b>	<b>2019 (A)</b>	<b>2018 (B)</b>	<b>2017 (C)</b>	<b>2016 (D)</b>	<b>A/B</b>	<b>B/C</b>	<b>C/D</b>
Personnel	464	428	445	363	-48%	-4%	23%
Taxes, fees and contributions	535	1,348	1,326	865	74%	2%	53%
Financial expenses	1,621	1,778	1,424	1,936	-9%	25%	-26%
Rentals	81	73	77	70	12%	-4%	9%
Remuneration on own capital	(793)	796	1,295	-209	-58%	-39%	-720%
<b>Total Value Added</b>	<b>1,908</b>	<b>4,423</b>	<b>4,567</b>	<b>3,025</b>	<b>5%</b>	<b>-3%</b>	<b>51%</b>

