



INTEGRATED REPORT

It is Braskem transforming the future of people and the planet in real time.

Summary

Message from the Chairman of
the Board of Directors

Message from the Business Leader

Highlights of the Year

Braskem

Who we are

Business Model

Governance, Ethics and Compliance

Company Strategy

Risk Management

Social Action

Covid-19

Maceió Case

Sustainable Development

Our sustainable performance

Sustainable Development and
Business Plan: only one direction

2020–2030 Commitments

Governance in Sustainability

Capital Performance

Human Capital

Financial Capital

Manufactured Capital

Natural Capital

Social and Relationship Capital

Intellectual Capital

Appendix

Presentation

For the second consecutive year, Braskem is publishing its report unifying key information relating to the topic of ESG along with results.

In this document, in a concise and objective manner, we present the GRI and SASB indicators most relevant to our stakeholders, reaffirming our commitment to transparency. In order to construct this report, we also follow the standards of the International Integrated Reporting Council (IIRC).

Additionally, we have released the first results of our new **Sustainability Strategy**, collected throughout 2021. [GRI 102-50, 102-52]

Happy reading!

Message from the Chairman of the Board of Directors

Dear reader,

To remain relevant and meet the demands of society, and the market itself, companies need to create value over time, change, and adapt to what is happening on the planet.

In recent years, Braskem has been undergoing important advances in its trajectory, especially in relation to Environmental, Social and Governance (ESG) aspects. These aspects are being discussed by the financial sector from a risk management perspective, attributing to socio-environmental and governance factors a significant impact on business value.

In this context, the Board of Directors has closely monitored Braskem's Global Sustainable Development Strategy and the definition of projects and business plans to achieve the commitments to which it has committed, creating value for all of its shareholders and others in the value chain. These matters are part of the regular agenda of the Board, with the advice of the Strategy and Communication Committee, which already monitored ESG issues, but in 2021 incorporated new competencies and changed its name to the Strategy, Communication and ESG Committee (CECESG).

Our work aims to monitor, question, and provoke Braskem initiatives with regard to corporate sustainability and ESG criteria, within the scope of the strategic vision. We understand that, by ensuring the interests of shareholders, we are also aiming for the company to be an agent of transformation in society and its relationship with all stakeholders.

We made important commitments aligned with the Paris Accords regarding climate change, such as carbon neutrality by 2050, and the circular economy. In this sense, the Board has raised questions and monitored the initiatives and the preparation of a business plan to achieve such commitments, mainly in the context of challenges that the petrochemical sector will face.

Investment in the development of the circular economy of plastic is one of Braskem's priority focuses in relation to long-term development. We have been working to evolve communication with society and change how plastic is seen through campaigns and educational projects, mainly related to conscious consumption and the correct disposal of waste.



José Mauro Mettrau Carneiro da Cunha
Chairman of the Board of Directors

Another important matter that has the attention of the entire company is the fight against climate change. The petrochemical industry plays a central role in the search for renewable raw materials, as well as in the development of technologies for capturing carbon for storage and utilization as a source to produce chemicals.

On this front, Braskem is the main producer of biopolymers made from renewable resources globally, and in 2021, we approved the growth strategy of this business, an important pillar to achieve the commitments made about climate change.



We see **Braskem's** long-term performance with **focus** on coping of **climate change** and in the **reduction of plastic waste**

In governance, Braskem continues to improve its practices and has reached a high level of compliance with the Brazilian Code of Corporate Governance (Código Brasileiro de Governança Corporativa – CBGC): the company complies fully with 65% of the CBGC and complies partially with the remaining 13%.

It is also worth mentioning that in 2022 the Board currently has five members, for a total of 11, in line with market best practices in terms of governance.

In 2021, we also transformed the former Compliance Committee into the Statutory Compliance and Audit Committee (Comitê de Conformidade e Auditoria Estatutário – CCAE). Previously named the Compliance Committee, it was modified to adhere to CVM Resolution No. 23/2021 and the rules of the Sarbanes-Oxley Law (SoX). Among its main responsibilities is that of ensuring the monitoring of Braskem's internal controls and exposure to risks, in addition to monitoring the quality and integrity of the financial statements of the Company, and to supervise and monitor the performance of the external auditors. It is composed of 5 independent members, 3 of which are members of the Board of Directors and 2 are external members, with recognized experience in corporate accounting matters.

From our point of view, Braskem has not only been making important commitments, but also addressing the difficulties associated with them. All this goes hand in hand with the company's business strategy, approved by the Board of Directors.

Regarding the challenges and responsibilities, we cannot fail to talk about the Alagoas geological event, present in all the agendas of the Board. Our assessment is that the company has dealt with the case head on, using a large and qualified team of at least 1,200 people directly involved to resolve the issues related to the event.

Braskem has dedicated substantial resources to quickly carry out the family relocation process, in many cases before the deadlines established by the authorities, in addition to providing support, including psychological support, to the people involved. On the financial side, provisions were made in the amount of R\$12 billion.

Finally, it is important to highlight the company's commitment to financial health, delivering excellent results: record cash generation, which enabled the advance payment of dividends to its shareholders.

The company reached the end of 2021 having fulfilled its goals and achieved excellent results, demonstrating commitment to the generation of value for society and its investors. In the future, there will always be challenges, but Braskem knows where to and how to go. With a long-term, sustainable value creation strategy and vision, this is a favorable backdrop for current and future investors.

Happy reading!

José Mauro Mettrau Carneiro da Cunha
Chairman of the Board of Directors

Message from the **Business Leader**

[GRI 102-14]

Dear reader,

2021 was excellent. We had a historic year at Braskem. We celebrated a number of achievements with record results, mainly related to people and process health and safety, economic and financial results, and in sustainability, thanks to the exceptional work of our team members.

We renewed our strategy in Sustainable Development, aligned with the 2030 Agenda of the United Nations (UN), which with the Sustainable Development Goals covers the ESG aspects, with special attention to climate change, circular economy, social responsibility, and human rights. Additionally, we have created a Sustainability Advisory Board to support us, consisting of four external and independent members specialized in ESG. With that, over the course of 2021, we have already gotten results from these initiatives, recording 17% achievement of our goals for 2030.

Speaking specifically about the environmental aspect, we led the CDP Climate ranking once again, we were on the A List of CDP Water, and we were recognized by the Bloomberg News Economy Forum as the best thermoplastic resin producer in the circular economy.

Much of our sustainability strategy is based on forming partnerships. In terms of circular economy, for example, we understand that beyond just supporting the recycling sector, we need to be part of it. To that end, we opened our first recycling plant in partnership with the company Valoren. The total investment in the project was R\$67 million, and it will supply 14,000 tons of resins with recycled content annually.

We have been signing partnerships for the purchase of clean energy since 2018 and we have had significant evolution on this front over the course of 2021, moving forward with the company's strategy of becoming self-producers of renewable energy. This achievement was a result of the agreement established in 2020 with Casa dos Ventos which, in addition to enabling the creation of jobs in the region where the wind farm was built, allowed us, in 2021, to purchase shares in the assets destined to support the agreement.



Roberto Simões
Braskem's Business Leader



We joined Veolia and signed an investment agreement of R\$400 million for the production of renewable energy using steam from eucalyptus biomass in the state of Alagoas. In total, we celebrated six such partnerships, two of which were signed recently in 2022. Not only do these contracts help us emit fewer Greenhouse Gases (GHGs), they also stimulate the growth of the renewable but energy sector as a whole.

We have also invested in operations to leverage opportunities to combat climate change. We announced and initiated the US\$61 million investment to expand our green ethylene production capacity, made from sugarcane ethanol, which will go from 200,000 to 260,000 tons annually.

The path we have to take requires investment in technology and innovation. Therefore, in 2021 we joined other companies in the search for sustainable solutions. We signed a memorandum of understanding with the US company Lummus Technology for the potential joint licensing of Braskem green ethylene technology in two projects, one under development in North America, and another under analysis in Thailand. Finally, we also returned to the B3 Sustainability Index (ISE B3), we received the ISO 37001 certificate for Anti-Bribery Systems Management and achieved the record score for reputation in the RepTrak index which we were better evaluated by our most strategic stakeholders, including customers, team members, society and influencers.

Financial Record

Looking at the economic aspect, we have reached the highest level of financial health since our inception in 2002. This was possible due to our diversification strategy in terms of geography and feedstock, that we have implemented in the last decade. This strategy allowed us to capture value from the favorable scenario of spreads in the petrochemical sector over the year. In addition to that, the good outcomes are also results of the good work of our team members, both to maintain discipline in capital allocation and to work around the logistical challenges caused by the pandemic.

Among the various records we celebrated, we had the highest operating result and free cash generation result in our history. Free cash generation reached R\$10.7 billion, which allowed Braskem to pay R\$7.35 billion of dividends to its shareholders, based on the 2021 fiscal year, representing 77.5% of the company's adjusted net profit for the year. Yet, our operating result ended the year at R\$5.6 billion, and the corporate leverage at 0.94x, well below from 2020 level of 2.94x at the end of 2021.

This set of good results caused our rating to be changed to BBB-, a stable outlook, by Fitch and by S&P, which allowed us to resume the investment grade. And we ended the year being the second highest-valued share in the Bovespa index, with an increase of 144.5% in reais.

Operational Performance

Just like in the financial aspect, our operating results were also positive. We have maintained production of our industrial units at good utilization levels, even while dealing with the global pandemic impacts on the global supply chain, which generated a lack of raw materials and logistical challenges, such as a lack of containers.

In Brazil, our utilization rate of petrochemical plants was 81%, mainly due to the general scheduled maintenance stoppage at the ABC industrial units (SP).

In the United States and Europe, Braskem continued to operate above the industry average, ending the year at 87%, considering the average of the two regions, despite the winter storm that impacted part of the USA.

Mexico operation

In Mexico, we managed to maintain good use of the industrial unit and, at the same time, overcome an old obstacle related to feedstock supply, through a well-conducted negotiation by Braskem Idesa with the Mexican government.

As a result, we signed an agreement with Pemex and other governmental entities, for the construction of an ethane import terminal, which will meet the total need for feedstock the operation, and may even exceed its current capacity, scheduled for completion in the second semester of 2024.

In addition to this agreement, we signed an amendment with Pemex to the ethane supply contract, under discussion since the beginning of 2021, to regularize and amend commercial and operational conditions of the partnership. As a result, Braskem Idesa started to receive 30 thousand barrels of ethane per day until the import terminal is completed or by February 2025, whichever comes first, in addition to having preference over the additional ethane that the Mexican state-owned company produces.

As these discussions evolved, we also sought to increase imports of ethane through the fast track solution, which started in 2020 and in the fourth quarter of 2021 reached 84% of its current capacity.

In financial terms, Braskem Idesa concluded its debt refinancing plan and issued bonds linked to ESG targets, which were our first sustainable emission. Furthermore, the good results on several fronts have also allowed our joint venture to carry out the first and unprecedented cash distribution to Braskem, in the amount of US\$37.6 million.

(1) Source: Economatica.

Focus on people

While we address the strategies needed to achieve our goals linked to economic and environmental aspects, we keep people as a priority, both within our operation and as we look at society.

In relation to the geological event in Maceió (AL), we continue with the implementation of the Compensation and Support for the Relocation Program (PCF), exceeding 97.5% of the vacated properties in the neighborhoods affected by the geological phenomenon. We also presented around 14,500 compensation proposals until April 2022, with 99.5% acceptance. On this front, the agreement with authorities established December 2022 as the deadline for actions under PCF completion. The expectation with the authorities is that the actions of the Relocation and Financial Compensation Program will be completed by December 2022.

In addition to the vacancy arrangements, we continue to offer psychological support to residents and remain attentive to their demands, that were heard and addressed remotely, given the scenario of social distance imposed by the pandemic. By April 2022, we had provided 24,000 psychological consultations and more than 200,000 telephone consultations, and we had implemented more than 1,000 actions demanded by residents as a result of these interactions.

In 2022, we will continue to implement the necessary measures for the safety of residents in the region, in addition to proceeding with the safe closure of wells in the region, which should be completed in 2025. We will also move forward with the urban repair of the affected area, that will count with the participation of interested public authorities and popular consultation in the implementation.

In our industrial plants, health and safety continued as non-negotiable values, focusing on the goal of zero accidents. We had the best performance in people safety since 2017, and the best historical result in process safety in 2021.

In terms of social investment, Braskem allocated around R\$38 million in initiatives throughout 2021, including actions to combat the pandemic and hunger, which benefited more than 758,000 people globally, reinforcing our service to the surrounding communities.

At the same time, there were significant advances in diversity and inclusion, making Braskem an increasingly human, diverse and inclusive company. In 2021, the global rate of women in leadership positions rose 1.5 percentage points to 31%. In Brazil, the second year of the Internship Program with flexible rules and actions aimed at attracting Black people increased those selected by 11%.

Advances have also been made in relation to Human Rights. We conducted the first global risk audit on this topic, which will allow us to design management and mitigation plans appropriate to the specifics of each region where we are operating.

All of these movements around ESG, closely accompanied by a well-established governance system and putting people as a priority, reinforce our commitment to sustainable development and renew our support for the United Nations (UN) Global Compact and its Sustainable Development Goals (SDGs).

Looking to the future

Looking ahead, one of our short-term strategic priorities will continue to be the positive evolution of the situation in Maceió, as well as the operationalization of the new contract with Pemex and the construction of the ethane terminal in Mexico. And globally, we will intensify our actions in sustainability and in circular economy, focusing in renewables and recycled sources and products, creating value to shareholders, with innovation and technology as a key enablers.

In 2022, we will complete 20 years of history, aware that there is a lot of work to be done, but with the certainty that we are on track to achieve the goals we commit to with shareholders and generate the positive and transformative impact we seek to have on society.

To all Braskem team members, Board of Directors, and other stakeholders I express my gratitude for the commitment to building an increasingly better company for all.

Happy reading!

Roberto Simões
Braskem's Business Leader

“We are going to intensify our sustainability initiatives and value creation globally.”

2021 Highlights

RECORD SCORE IN REPUTATION

*According to
RepTrak methodology*

RETURN TO ISE B3

*among the top performers of
the total selected companies*

BLOOMBERG NEF RANKING

*As leading company in
circular economy*

RETURN TO SHAREHOLDER

*Third largest TSR¹ in dollar (157%),
considering all companies listed on
the IBOV and S&P 500*

LEAD IN GLOBAL PACT

*Since 2014, for engagement in
sustainable development*

CDP CLIMATE AND WATER

*once again ahead of the
global ranking leadership*

RETURN TO INVESTMENT GRADE

*Increased investment rating
by Fitch and S&P, now
regarded as investment grade*

(1) TSR: Total Shareholder Return.



ETHICS AND GOVERNANCE

- **Strategy, Communication and ESG Committee (CEESG)** – formerly the Strategy and Communication Committee, from 2021 onwards it began monitoring ESG aspects of Company strategy
- **ISO 37001 Certificate** for the Anti-Bribery Management System. This certification was for Brazilian territory only
- **Statutory Audit and Compliance Committee** (Comitê de Conformidade e Auditoria Estatutário - CCAE) – incorporation of Statutory Audit and Compliance Committee (CCA) advising Board of Directors
- **Sustainable Development Advisory Board** – comprised of external members and experts who guide executives towards the 2030 and 2050 strategy
- **Braskem Idesa in the ranking of companies with best practices in IC-500 Corporate Integrity** by Mexican Transparency, Mexican Anti-Corruption and Impunity (Mexicanos Contra a Corrupção e a Impunidade – MCCI) and *Expansión* Magazine

(1) TIER 1: Incident with loss of containment of products above the limits established by the American Petroleum Institute(API) 754 for TIER 1 according to the product released, or any release that causes: fatality or accident and leave of an team member or third party, hospital damage or fatality to the external population, financial loss greater than US\$100 thousand, or evacuation of the local community.

(2) TIER 2: Incident with loss of containment of products above the limits established by the API (American Petroleum Institute) 754 for TIER 2 according to the product released, or any release that causes: accident without leave of an team member or third party, and financial loss greater than US\$2.5 thousand.

(3) As of April 30th, 2022.

ESG AND FINANCIAL PERFORMANCE

- R\$7.35 billion of dividends paid, based on the fiscal year of 2021, representing 77.5% of net profit
- R\$10.7 billion of free cash flow generation, a annual record
- Corporate leverage, in dollars, of 0.94x by the end of 2021
- Selected for the 8th consecutive time to integrate the S&P's Sustainability Yearbook
- Presence in the Efficient Carbon Index (ICO2) and corporate governance indexes (IGCX and IGCT) of the B3
- Staying in the FTSE4 Good Index
- Partnership with Ecovadis to bolster vendor management program with ESG criteria analysis

INNOVATION

- Partnership with Lummus for green ethylene technology licensing
- R\$302.8 million invested in research and development, including fixed expenses and capex, an increase of 25%
- 81% of the portfolio of innovation projects contributing to the sustainable development

HEALTH AND SAFETY

- **Personal Safety:** 0.86 events with and without leave per million man hours worked, lowest level since 2017
- **Process Safety:** 0.32 Tier 1⁽¹⁾ and Tier 2⁽²⁾ events per million man hours worked, lowest level on record
- **Braskem was awarded several Responsible Care® Awards** Responsible Action award by ACC (American Chemistry Council) for recognizing the efforts on the Covid-19 responsiveness and excellent safety performance in industrial units)

DIVERSITY, EQUITY, AND INCLUSION

- **Bloomberg Gender Equality Index 2022** Braskem was selected for the second consecutive time to participate in the Bloomberg Gender-Equality Index (GEI) portfolio
- **Women's Empowerment Principles (WEPs) Award** in the bronze category. The initiative belongs to UN Women and the Global Pact
- **Braskem was awarded the Seal of the Pro-Equity in Gender and Race Program** Recognition seal for gender equality in the work on the 6th Edition of the Brazilian Program Pró-Gender and Race Equity, granted by the Ministry of Women, Family and Rights Human Rights (MMFDH), UN Women and International Labor Organization (ILO)
- **Forbes Ranking** – elected one of the best companies to work for in the world

ENVIRONMENT

- **Start-up of first mechanical recycling plant** in partnership with Valoren, and 14,000 tons of capacity
- **Green ethylene production** – record in 2021 and approval of capacity expansion project to 260,000 tons
- **Partnership with Casa dos Ventos** – acquisition of shareholding in wind farms making us self-producers of renewable energy
- **Partnership with Veolia** – signed a 20 year agreement for the development and purchase of renewable energy from eucalyptus biomass, in PVC plant, Alagoas
- **Vesta Project** – implemented the first phase of the project during the ABC cracker maintenance shutdown, with the implementation of part of the electric motors, with gains of more than 30 kt/year of CO₂e

SOCIAL RESPONSIBILITY AND HUMAN RIGHTS

- **Maceió Case** – more than 14,000 properties have already been vacated, surpassing 97% of the area defined by Civil Defense. More than 13,919 compensation proposals have been submitted, and 99.5% acceptance⁽³⁾
- **Recognition by the UN Global Pact and High Commissioner for Human Rights** for good Human Rights Practices
- **Private Social Investment** – 145 social projects, which benefited more than 758,000 people globally and R\$38 million invested in combating the pandemic
- **Socially Responsible Company in Mexico** – recognition from the Mexican Center for Philanthropy (CEMEF) for best practices in combating the pandemic



Braskem

Leading the Americas
in Biopolymer Production

Clients in over

71 countries

+ 8,000 team members
in **11 countries**

- › Who we are
- › Business Model
- › Governance, Ethics and Compliance
- › Company Strategy
- › Risk Management

Who we are |GRI 102-1, 102-2|

Braskem S.A. is a global petrochemical company, committed to the circular economy and carbon neutrality, that believes and invests in innovation as an enabler pillar of business plan, whose purpose is to improve people's lives by creating sustainable solutions in chemicals and plastics.

Founded in 2002 in Brazil, it is currently the sixth-largest petrochemical company of the world in the production of thermoplastic resins, and leader in Americas, with clients in more than 71 countries, and a market leader and pioneer in the industrial-scale production of bio-polymers (plastic made from renewable raw materials).

We are the largest producer of polypropylene in the Americas, based on the annual production capacity of our plants in Brazil, and United States of America. We are the only integrated petrochemical company that produces basic chemicals and polymers in Brazil and the largest producer of PE in Mexico and PP in the United States. We produce a diverse portfolio of petrochemicals and thermoplastics, including polyethylene, green polyethylene (biopolymer), polypropylene and PVC. Our products are typically used in high volume applications and we benefit from our world-scale plants to increase our competitiveness.

Our clients use our plastics and chemical products to produce a wide variety of products that people use in their daily lives to meet their essential needs in food packaging, home furnishings, industrial and automotive components, paints and coatings.

We believe that the transformation of plastics and chemical production from fossil raw materials to sustainable renewable sources represents one of the key growth and sustainability opportunities in the global chemical industry. We are a global leader in the production of green polyethylene (green PE) and benefit from our proximity to one of the world's largest renewable energy producers, Brazil.

Performance map |GRI 102-41, 102-6, 102-7|

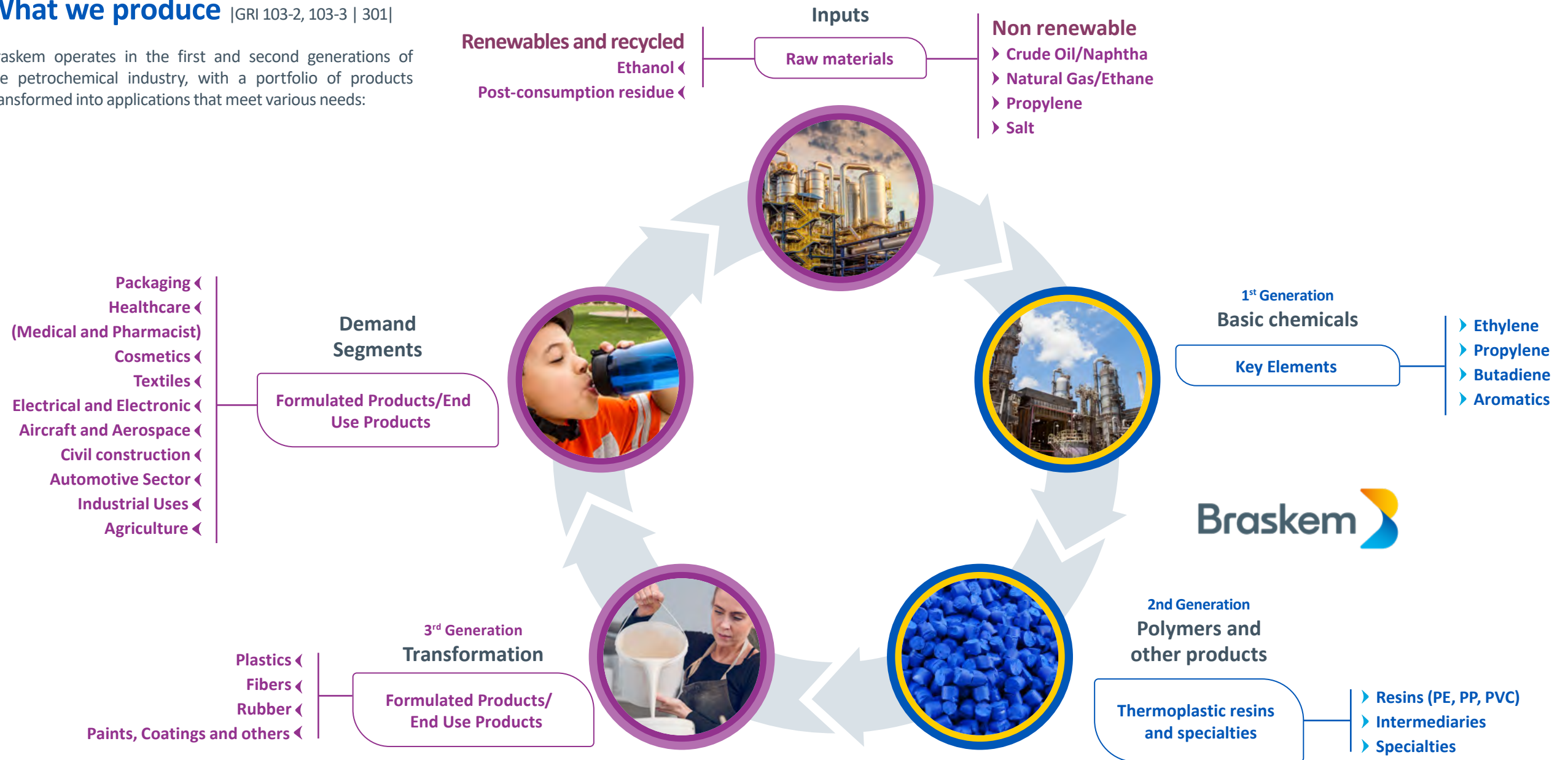
- > + **8,000** team members in 11 countries
- > **14** offices
- > Clients in over **71** countries
- > **200,000** tons of biopolymers and another **60,000** tons in expansion
- > Annual production capacity of **10.7 million** tons of chemicals⁽¹⁾ and **9.3 million** tons of thermoplastic resins
- > Net revenue: **US\$19.6** billion in 2021
- > Market Value: **US\$8.2 billion** (12/31/2021)

(1) Include other chemicals, besides ethylene.

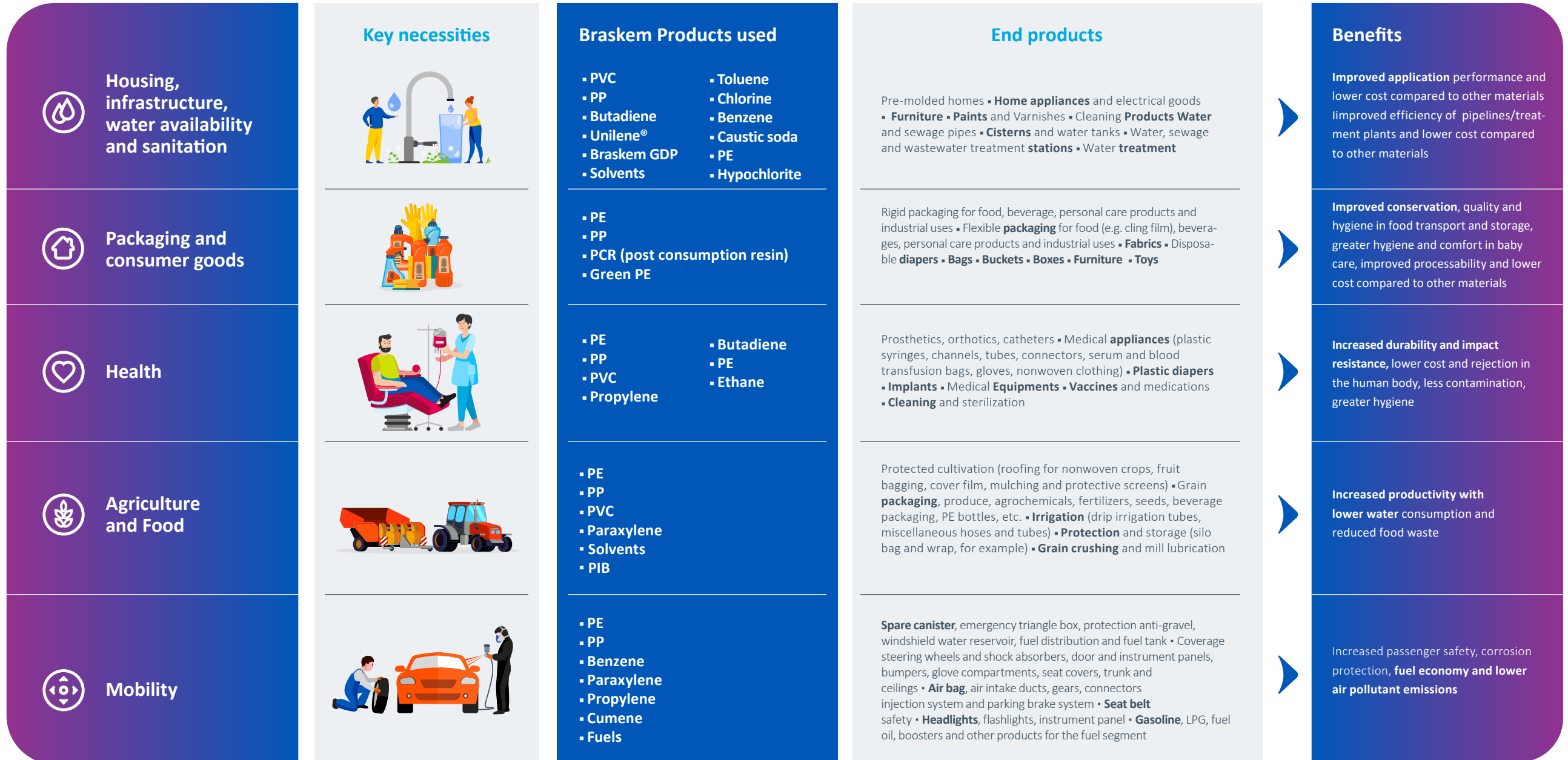


What we produce | GRI 103-2, 103-3 | 301

Braskem operates in the first and second generations of the petrochemical industry, with a portfolio of products transformed into applications that meet various needs:



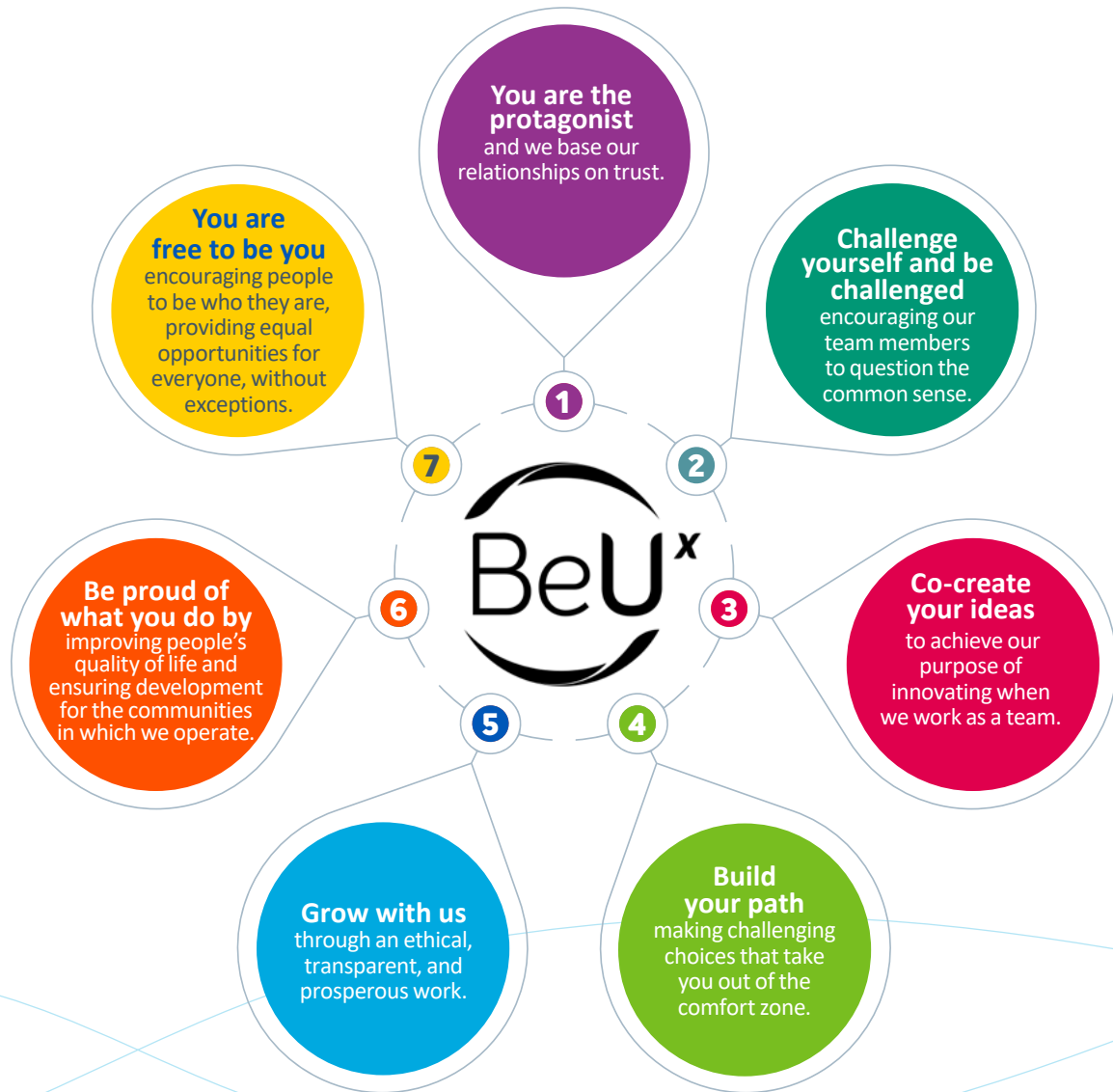
Our solutions



Organizational Culture

[GRI 102-16]

We cultivate a culture based on diversity, inclusion, equity, respect, trust, and empathy. Since 2019, our values have been translated into seven pillars



BeUx represents our proposal of value to team members, that aims to create a link between people and the organization, providing a workplace where everyone feels good; and can build their path, have significant experiences, and have access to new developmental tools.

New assessment competencies

In 2021, new organizational skills were reinforced with Leaders and Team Members through the Skills Trail, which included lectures and live workshops on feedback, self-development, self-awareness, culture and taking a leading role.

In Brazil, more than 800 team members participated and mean satisfaction of 95%. In the United States, focus remained on engaging team members in Career Dialogs to reinforce leading from the front, and support for leaders during their development to attain professional and personal goals.

While in Mexico, meetings were conducted by leaders in order to promote the closest most personal ties. In Europe & Asia, the 11 meetings held supported reflections on individual development plans and cross-cultural communication challenges.

Additionally, in support of and backing for these initiatives, we have created an online global track for continuous training in Braskem competences.

Four working models

Even before the pandemic, Braskem already implemented flexible working models in their offices. In 2021, given the changes experienced since 2020, we expanded the options and started to offer four options, depending on the type of activity performed by the team member, legal requirements and the availability of tools: face-to-face, flex office (mostly on-site), hybrid (physical presence on premises less frequent than than flex model) and external (specific cases). In anyway, we continue to have the perception that it is important to keep working in person at some frequency. This is because face-to-face interaction helps team integration and immersion in the Braskem organizational culture, among other aspects.



INPUTS

Human Capital

- Diversity;
- Multiculturalism;
- Competences;
- Ethics and compliance.

Financial Capital

- Cash generated by our operations;
- Bank loans and financing;
- Funds raised in the capital market.

Natural Capital

- Naphtha;
- Ethane;
- Propane
- Propylene;
- Etanol;
- Plastic waste;
- Water;
- Electricity.

Social and Relationship Capital

- Bonds of trust with our stakeholders.

Manufacture Capital

- Industrial Units;
- Pilot plants;
- Innovation and technology centers;
- Technical laboratories;
- Logistic warehouses;
- Train cars;
- Cargo terminals.

Intellectual Capital

- Patents;
- Technologies;
- Systems;
- Platforms;
- Brands;
- Copyrights;
- Processes.

BUSINESS MODEL



OUTPUTS

Portfolio of innovative and sustainable chemical and plastic products transformed by our customers into applications that meet daily human needs and improve people's lives.

OUTCOMES

- Professional and personal achievement; Training and development; Socio-environmental safety; Chemical safety of the products.
- Discipline in capital allocation; Distribution of added value.
- Water consumption; Water reuse; Energy consumption; Clean energy; Energy efficiency; CO₂ emission; Emission of pollutants; Waste generation; Effluent generation; CO₂ capture; Recycling.
- Community well-being; Transparent relations with Government; Free competition; Class agreements; Dialogue with Society; Customer loyalty; Reputation; Relationships with Suppliers.
- Efficiency of installed capacities; Extended useful life.
- Digital transformation; Clean technologies; Eco-efficient products; Operational efficiency.

International Business Council (IBC)

ISEB3

SASB

SUSTAINABLE DEVELOPMENT GOALS

WORLD ECONOMIC FORUM

GRI

CDP
DRIVING SUSTAINABLE ECONOMIES



SDGs in which Braskem contributes the most.

More details in the Capital Performance Chapter. [Click here](#)

Governance, Ethics and Compliance

Governance Structure

|GRI 102-18, 102-19, 102-20, 102-22,
102-23, 102-24, 102-25, 102-26, 102-27|

The Board of Directors (BD), one of the main bodies of the governance system, is composed of **11 members – and their respective alternates –**, five of which are **independent members**. The Board of Directors has, among its members, one Chairman and one Vice President, and the Braskem Business Leader (CEO), who cannot accumulate the position of Leader with the Chairman of the Board of Directors.

ESG themes fundamental to the Braskem strategy have already been widely discussed at meetings of the board of directors, such as the Maceió Case, monitoring of social and environmental risk and sustainable development commitments, and included in the Braskem Action Program, in the format of variable compensation goals. With the prioritization of discussions regarding ESG in the business strategy, the BoD has begun receiving training on trends on this front. In 2021, the key topics addressed were climate change, circular economy, social accountability and human rights. |GRI 102-29|

The directors are elected by a slate indicated by the majority shareholders of the Shareholders' Agreement, filed at the company's headquarters, and have a term of two years, and re-election is permitted. The new members must participate in the Integration Program for Directors organized by the company's Corporate Governance area, which aims to assist in familiarizing with the culture, people, the business environment, and compliance and governance systems. The remuneration of the Board of Directors members is defined annually by the General Meeting of the company, together with the remuneration of the other managers, and the Fiscal Council.

Our governance structure is also composed of a Statutory Executive Board, a Fiscal Council, Statutory Audit and Compliance Committee, in addition to **advisory committees** to the Board of Directors:

Compliance and Statutory Audit Committee (Comitê de Conformidade e Auditoria Estatutário, CCAE): until 2021 called Compliance Committee, it was amended to adhere to CVM Resolution No. 23/2021 and the rules of the Sarbanes-Oxley Law (SoX), in alignment with its strategy and best corporate governance practices. It has, among its main responsibilities, to ensure the monitoring of Braskem's internal controls and exposure to risks, in addition to supervising the quality and integrity of the financial statements and financial reports, the activities of the independent auditors, without harm to the duties assigned to the Fiscal Council. It is composed of five independent members, three of whom are directors of the Board of Directors and two external members.

Strategy, Communication, and ESG Committee (Comitê de Estratégia, Comunicação e ESG, CECESG): formerly called Strategy and Communication Committee, from 2021 onward, it began to incorporate socio-environmental and governance issues. It evaluates Braskem's strategic direction, ensuring compliance with the sustainable development guidelines adopted by the company. In addition, it follows the corporate policies in place regarding the disclosure of information, sustainable development, health, safety, environment, quality and productivity, and recently ESG issues. It is composed of four members of the Board of Directors, one of whom is independent.

Finance and Investment Committee (Comitê de Finanças Investimentos – CFI): monitors and analyzes policies in force related to guarantees, financial management, investments, dividends, and interest on equity and securities trading. It is also responsible, among other topics, for recommending investment decisions and for monitoring the company's financial strategy and the performance of Braskem's shares in the capital market. It is composed of four members of the Board of Directors, one of whom is independent.

People and Organization Committee (Comitê de Pessoas e Organização – CPO): monitors and reviews strategic policies and projects related to the topics of People and Organization, as well as the parameters and criteria presented by the board for the remuneration of administrators. It is composed of three members of the Board of Directors, one of whom is independent.



Assessment of the Board of Directors

[GRI 102-28]

The company performs the evaluation process of the Board, its advisory committees and the Board Secretariat annually. This assessment is based on the regulations of this governance body, and the criteria evaluated are proposed by the People and Organization Committee (POC) and defined by the chairman of the board. The POC can also count on the support of a specialized external consultancy to define the scope, methodology to be implemented and carry out the evaluation process.

In 2018, the Board of Directors approved the hiring of a specialized external consulting firm to conduct the first evaluation process of the Board and its committees, in a collegiate manner, and the members, individually. The consulting assistance has been adopted by the company since then.

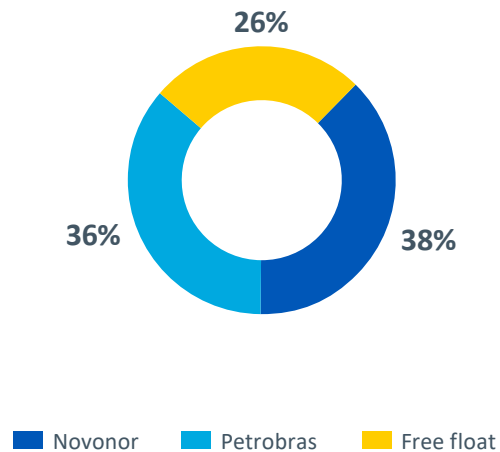
In December 2021, the Board approved the start of a new assessment cycle (2020–2021) of its own and its advisory committees, including the evaluation of individual directors. This cycle included the conduction of individual interviews, individual evaluation, and 360° evaluation of all directors. At the end of the work, recommendations were delivered on the alignment and role of the Board in the development of strategies, their composition, processes, and culture; the individual performance of the directors and the performance of the advisory committees, and the governance secretariat.

[GRI 102-19, 102-25, 102-26, 102-27, 102-28]

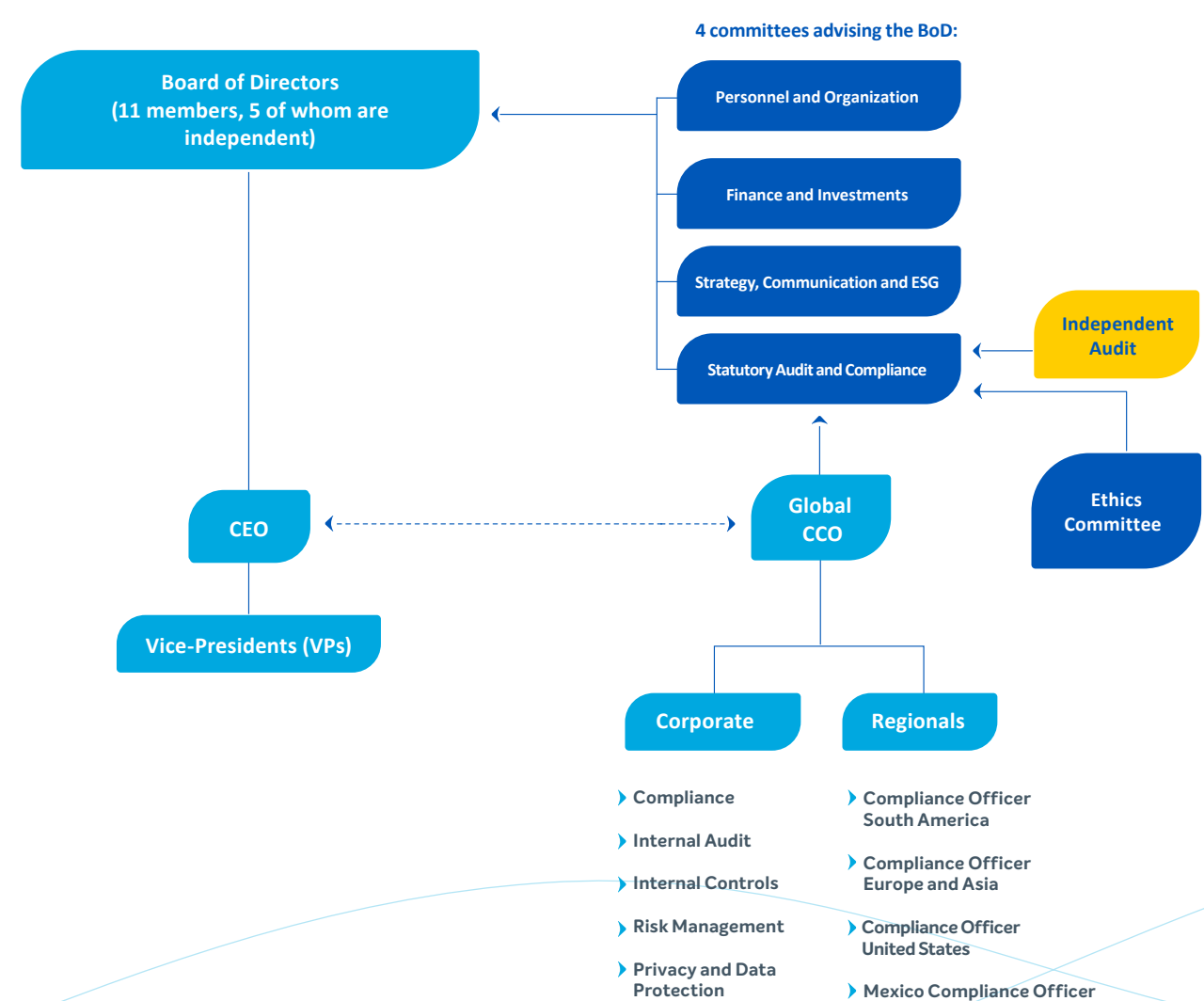
Shareholding composition

Our main shareholders are Novonor (formerly Odebrecht), a majority shareholder with 38.3% of the voting capital shares, and Petrobras, which owns 36.1% of the voting capital shares. The remaining 25.6% shares are mainly distributed at B3 market, New York Stock Exchange (NYSE) and Latibex - Latin American section the Madrid Stock Exchange, which brings liquidity for shareholders.

Total Capital



Governance Org Chart



Compliance System

We have a Chief Compliance Officer (CCO), who reports directly to the Board of Directors, via the Compliance and Statutory Audit Committee (CCAEC), indirectly to the CEO. The purpose of double reporting is to have autonomy, without exclusive connection with the administration, while maintaining the connection with the business leader. CCAEC itself is above CCO, which defines, for example, the budget of the Compliance area. The team, which in 2016 had eight people, today more than 70 professionals distributed globally.

Below the CCO, there are five structures, which act for the continuous improvement of our processes and risks management:

1 Internal controls: advises the company in the design of controls and the evaluation of processes. In 2021, we support several business areas to improve their processes and controls to offer greater security to the company's financial reports. To this end, new processes and controls were designed and implemented as part of the annual assessment cycle.

2 Risk Management and Business Continuity: supports the leaders of the business areas in the assessment, prioritization, treatment, and reporting of corporate risks. Based on the rules established in the Global Risk Management Policy, conduct a cyclical and continuous structured process used to identify, understand and respond to risks that may impact the achievement of the company's objectives. The risk maps are segregated by vice presidencies, regions, and also new businesses, and the consolidated version is approved by the Board of Directors.

Thus, the company prioritizes risk treatment actions, allocates managers and responsibilities. For unplanned business interruptions or incidents, business continuity plans are outlined with detailed strategies to provide an adequate level of operation within the company until the situation is normalized.

3 Data privacy and protection: responsible for the guidance and organization in data protection, adopting ethical solutions, in compliance with global legislation, including the General Data Protection Law, through the implementation of digital technologies. The privacy program aims to protect the fundamental rights of team members, partners, and clients through awareness, training, and the adoption of technical and organizational measures.

4 Compliance: responsible for helping disseminate the company's values, and codes of conduct, promoting ethical, integrity, and transparent conduct through training on ethics, integrity, anti-corruption, and related topics. It is also responsible for establishing and conducting processes related to due diligence, conflicts of interest, and business courtesies and their monitoring and compliance risk mitigation, ensuring the accomplishment of compliance procedures.

5 Internal Audit: responsible for objectively and independently assessing compliance with policies and procedures and the effectiveness of controls. The work involves preparation of a report and definition of an action plan for improvement, erected in conjunction with business leaders and submitted for approval by the Board of Directors. In 2021, 16 projects were completed, resulting in 87 improvements and approximately 110 action plans. Among projects completed, of a global scope, we highlight the in-depth assessment of the effectiveness of SOx controls, as well as the risks and controls relating to Purchasing, Contract Management, Socio-environmental, Export, Insurance, Collection, Sales and Feedstock processes, among others.

These structures are part of our Compliance System that acts to prevent, detect and remedy deviations. It is provided in our [Global Compliance System Policy](#), which addresses the guidelines and responsibilities of our team members and operations, in addition to establishing governance bodies for their compliance.

The System must be implemented by Braskem team members, under the periodic supervision of the Board of Directors.





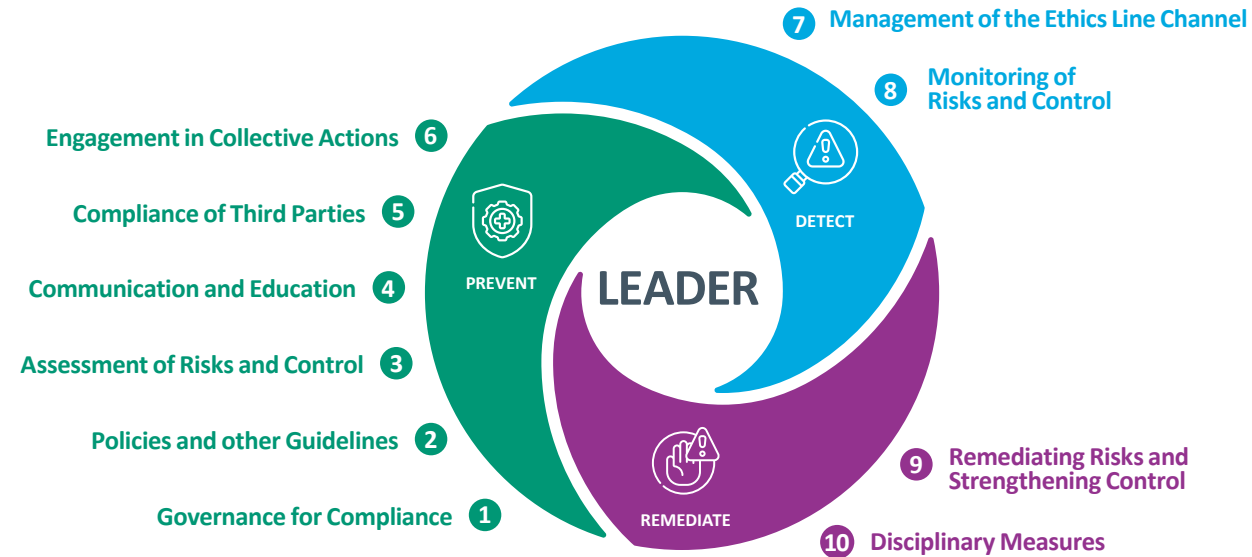
Ethics Line

The Compliance area also conducts the investigations of complaints that reach the Ethics Line. Deployed in 2017, the channel is outsourced and independent, and it is made available by Braskem so that its team members, suppliers, contractors, clients, and other audiences can contribute information to maintain an ethical corporate environment. The information is recorded and handled with absolute confidentiality. Reports to the channel may be made anonymously and no retaliation is tolerated to the complainant in good faith.

Year by year the channel receives an increasing number of reports. We attribute this increase to the maturity of the channel within the company, its trust, as well as its effectiveness, verified with the Team Members in biannual surveys. All investigations are independently and impartially conducted. The Ethics Committee and the Statutory Audit and Compliance Committee are informed of the results and action plans resulting from investigations.

[Learn more](#)

Compliance System | GRI 102-17, 103-2, 103-3 | 205, 206, 406, 415, 419|



Some tools that help us ensure ethical practice are also part of the Compliance System:

▶ **Related Party Policy**

[Learn more](#)

▶ **Global Risk Management Policy**

[Learn more](#)

▶ **Third-Party Code of Conduct**

[Learn more](#)

▶ **Code of Conduct**

[Learn more](#)

▶ **Compliance and Statutory Committee**

[Learn more](#)

▶ **Global Anti-Corruption Policy**

[Learn more](#)

[Click here](#) to access Braskem's Bylaws and Corporate Policies

Intranet: direct contact with Compliance leaders

Braskem provides the macrostructure of the company on its intranet, in which guidance materials for team members can be found, such as the company's Code of Conduct, the Anti-Corruption Policy, the Compliance System Policy, among other normative documents of the Compliance area. In addition, there is a specific section for the Compliance area, where guidance materials can be found such as the team member and third-party codes of conduct, policies, and other guidance documentation of the area, pocket guides, training, link to access the Ethics Line channel and all other pieces of information regarding the Braskem Compliance System. In addition, it is possible to view on the company's macrostructure in its intranet, which includes the names and contacts of the compliance leaders, allowing all team members to access them directly to obtain guidance and clarify any doubts.



Ethics and Compliance: the continuous improvement

In recent years, we have improved our internal structure, processes, and culture in terms of governance and compliance. This work led us to an important maturity and helped us attain, in 2021, achievements that confirm our commitment to integrity and transparency: **ISO 37001 certificate and the best grade in the Ethos Institute's history.**

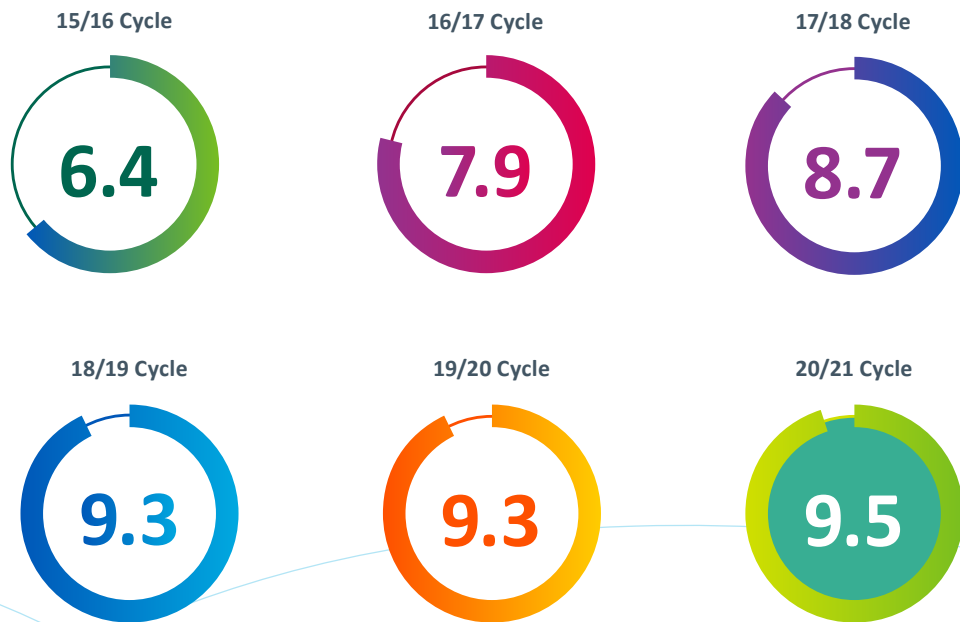
The indicators of the Ethos Institute evaluate 13 aspects of sustainable and responsible businesses, and in 2021 Braskem achieved the highest score in ten of them, and the best assessment since implementing the Compliance System. With this result, Braskem is above the general average of companies in all criteria evaluated.

The global agreement: completion of the independent monitoring by granting certificates from authorities

Throughout the years of monitoring (2016-2020), several actions were taken:

- ▶ **11,000+** documents evaluated
- ▶ **1,100+** transactions tested
- ▶ **80+** corporate policies revised
- ▶ **400+ interviews** with team members

Braskem's evolution in Ethos Institute indicators of integrity



Timeline



The Company's Strategy

Braskem has been committed to the principles of sustainable development in all our operations since its creation in 2002. Through its strategy, it seeks to prevent and mitigate risks, in addition to capturing business opportunities associated with environmental, social, and governance issues, to improve people's lives and the planet by creating sustainable and innovative solutions from chemicals and plastics, engaging its entire value chain.

In 2009, aware of its role in society, the company made a public commitment entitled "You have to mature to be green", referring to its contribution to combating climate change. Braskem understands that this is a global agenda and part of the solution and transition to a low-carbon economy. In addition, Braskem actively participates in international forums and discussions in order to motivate and highlight industry participation in sustainable development and social responsibility.

Also in 2009, in order to guide its strategy, Braskem defined its first cycle of long-term sustainability commitments, Macro Objectives, envisaging 2020. Braskem has made significant progress over the years and achieved 85% of the established goals.

In 2010, it became a world leader in the production capacity of biopolymers produced from sugarcane ethanol, an innovative product that demonstrates the company's commitment to adopting practices relating to sustainability and the use of raw materials from renewable sources.

In 2020, the Macro Objectives driving its strategy were reassessed and renewed, including ambitious challenges for 2025, 2030 and 2050, in line with the 2030 Agenda. The development of these new challenges was a comprehensive and demanding process that took months to be completed. It involved 30 workshops, interviews with more than 500 leaders and team members, and it was based on analysis of global challenges and trends. It also included corporate risk analysis in relation to our business and value chain, mapped out by the corporate risk management area.

We understand that plastics will continue to be an essential product for society, with growth in demand expected, and over time, the creation of solutions and new technologies that allow an increase in the supply of more sustainable products. Hence, innovation is an important for capacitating our business transversely and we understand that in order to overcome these challenges and achieve our goals, at the same time as ensuring company growth, we need to develop disruptive technology and a market leadership position in relation to sustainable development.

Currently, the petrochemical sector is undergoing a transition and has at least two major challenges: the neutralization of greenhouse gas emissions and recycling of post-consumer plastic, which in addition to relying on innovation, also has challenges in obtaining raw materials, as well as a better structured supply chain. Accordingly, we see ourselves as responsible for developing new solutions, many in partnership with other companies, universities, and startups.

In relation to our company growth portfolio, we analyzed what the impact is in terms of GHG emissions. The strategy is to take environmental aspects into account during investment management, which we began in 2021, with an in-company CO₂ pricing, boosting projects that reduce CO₂ emissions, and carrying out more judicious analysis on projects that increase CO₂ as a premise for assessment. This will contribute to the decarbonization of our current assets and encourage the creation of new projects and business models with a lower carbon footprint.

Our strategy aims to expand positive impacts and mitigate risks in company operations, creating business value from innovation and sustainability. Hence, the Braskem business strategy is centered around five key aspects:

► **I – Grow in Renewables and Recycled:** New commitments undertaken seek to strengthen this strategy, positioning the company as part of the solution, in addition to fostering an ecosystem in favor of conscious plastic consumption. In this respect, we continue to move forward with the commitment to reach 1.0 million tons of green PE production capacity by 2030, which represents a 5-fold increase in our capacity by the end of 2021.

We also aim to increase the sale of recycled products, working on the prevention of plastic waste disposal and making our products increasingly circular. By 2025, we intend to expand our portfolio to include 300,000 tons of thermoplastic resins and chemicals with recycled content and increasing to 1 million tons of such products by 2030. To meet our goals, we intend to work through partnerships with other companies in our value chain in order to strengthen mechanical and chemical recycling globally.

In addition to this, the company aims to be among the best companies in the chemical industry in terms of greenhouse gas emissions (GHG) and a key player in capturing carbon dioxide emissions (CO₂) using renewable raw materials. We announced our ambition to be net-zero by 2050 in GHG and CO₂ emissions and achieve a 15% reduction in current emissions by 2030.



► **II – Grow Existing Businesses with Productivity and Competitiveness:** Continue investing in our current business in order to maintain productivity and competitiveness, focusing on operational efficiency and excellence, commercial and logistics effectiveness, cost leadership, and differentiation through our customer relationships. In this respect, the company has a number of initiatives underway or under study: I – In Mexico, expand the capacity of the fast track solution, involving the incorporation of additional unloading stations, to allow Braskem Idesa to achieve the maximum ethane import volume up to 35,000 barrels a day, with completion of the project planned for the second quarter of 2022. In addition, we intend to invest in a new ethane terminal to attain independent raw material sourcing and expand operations.

In Brazil, we continue to assess opportunities arising from the global chemical industry reorganization, new raw material availability in Brazil (from the pre-salt) and elsewhere, downstream expansion utilizing our sizable volumes in base chemicals, and upstream integration in propylene in the United States and Europe.

In addition to this, transversely, we are implementing processing and operating optimization initiatives through our global efficiency program entitled “Transform for Value”, responsible for coordinating and accelerating improvement initiatives within a range of areas, including our digital hub, capital expenditure, competitiveness and

productivity, energy, and other continuous improvement efforts. Such program initiatives added up to US\$390 million/year to be incorporated to the program’s consolidated pipeline until 2023.

► **III – Continue to innovate:** Innovation is a key factor for enabling strategy and generating value for our clients and stakeholders. We aim to continue investing in innovation, in particular renewables and recycled, but also throughout our traditional business areas. We continue assessing opportunities arising from the global chemical industry reorganization, new raw material availability in Brazil (from the pre-salt) and elsewhere, downstream expansion utilizing our sizable volumes in base chemicals, and upstream integration in propylene in the United States and Europe.

As of December 2021, our portfolio has included approximately 223 projects, on the following strategic fronts: (i) New technologies, (ii) Defensive measures – to prevent loss of markets already served by us, (iii) Gains in market share, (iv) New markets, and (v) Cost savings and competitiveness.

► **IV – Strengthening the Governance:** Braskem holds shares listed in the B3’s Tier 1 listing segment and the New York Stock Exchange under the BAK ticker. We also voluntarily follow other high standards of corporate governance, such as the implementation of a statutory audit committee in 2021 and maintenance of at least 20% independent members on the Board of Directors.

We are committed to strengthening our governance, compliance, and personnel management systems, as well as our reputation with all stakeholders, positioning us as a global company focusing on human beings, with a vision of the future, which cultivates strong relationships and generates value for all our stakeholders.

We have adopted a Code of Conduct, a Compliance System Policy and an Anti-Corruption Policy, as well as a series of in-company guidelines designed to guide our management, members and counterparties and reinforce our principles and rules on ethical behavior and professional conduct. We maintain an Ethics Line overseen by a third party available to team members and non-team members. All whistleblower complaints are investigated by the Compliance team and submitted for assessment by our Ethics Committee and/or our Statutory Audit and Compliance Committee.

► **V – Allocation of Responsible Capital and Shareholder Compensation:** To continue striving for a balance in our capital allocation, returning capital to shareholders, while investing in our capital-intensive businesses and the growth opportunities these present. We are a company that consistently delivers positive operating cash flow, even during downturns in the petrochemical cycle, and our decision-making process seeks to maximize the net present value of our future cash generation.

We also have a strong liquidity position, with most debt maturing in the long-term (beyond 2030), as well as solid credit metrics. We are considered an investment grade company by S&P Global Ratings and Fitch Ratings, with a BBB- corporate credit rating on a global scale and a stable outlook from both credit rating agencies.

We attract opportunities through disciplined and profitable growth investments, whether in construction, procurement or partnering assets. We also have a rigorous process for managing our asset footprint, which has led us to selectively close down plants in the past.

Our biopolymer strategy derives from investments that we expect to be value-added due to expected strong growth in demand and competitive pricing.

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

Risk Management

[GRI 102-15, 102-30, 103-2, 103-3 | 205-1 | 307]

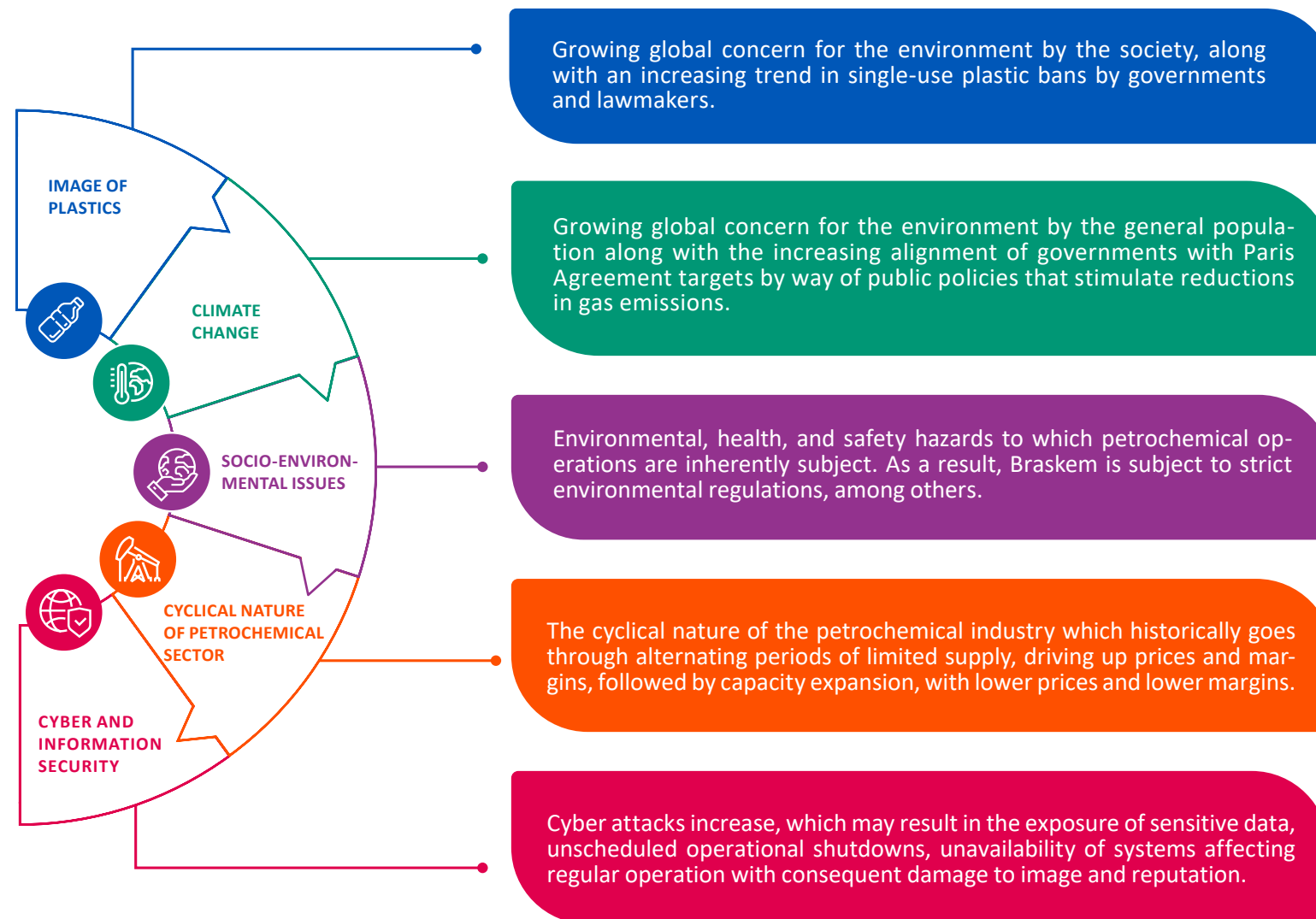
The risk assessment process directs efforts to maximize opportunities and reduce negative impacts on the search for achieving strategic objectives. The role of the Board of Directors and the Business Leader in risk management analyses consists of defining treatment priorities, responsible, and allocation of resources, as well as the monitoring of the implementation of priority risk mitigation negotiations. [GRI 102-30]

Braskem’s risk management methodology is based on international references and divides risks into four categories: strategic, operational, financial, and regulatory.

In accordance with our Global Risk Policy, risks are periodically assessed by company executives and submitted to regional and then global consolidation processing and are classed according to potential impact and probability of materialization. The result of this analysis is presented graphically on a heat map to the advisory committees of the Board of Directors (CCAIE, CECESG, CFI, or CPO) when applicable, during which action priorities are directed as assessed and approved by the Board of Directors.

With the approved result, priority risks are now treated and monitored to mitigate and prepare the company to face adverse matters.

Following the assessment of the corporate risks of all Braskem operations in 2021, we now highlight some risks that are being treated and monitored:



Subsequent to the controls implemented, no significant corruption-related risks have been identified. The topic remains a priority and is addressed by the Vice President of Compliance.



Social Action

Fighting hunger and Covid-19

Over R\$16 million in hospital supplies and donations of basic food hampers

- Covid-19
- The Maceió Case

The Maceió Case

97% + vacant properties up to March

R\$12 billion⁽¹⁾ in provisions for compensation and safety actions

(1) Refers to the total gross amount of provisions related to the Alagoas geological event. The balance net of provisions, as of March 31, 2022, was R\$7.2 billion, of which R\$4.0 billion presented in liabilities current and R\$3.1 billion in non-current liabilities.

Covid-19

As the Covid-19 pandemic wears on, we continue to promote actions inside and outside Braskem in 2021. Internally, we conducted awareness campaigns with team members regarding the importance of vaccination. We also constantly monitored the Covid-19 cases in our teams. Sanitation and control measures, such as layout changes in offices, remote work, and the smallest bus occupancy in the company remained effective in 2021.

Fighting hunger

In the second year of the pandemic, Braskem's actions aimed at communities surrounding our industrial units prioritized the fight against hunger, in face of the scenario of increasing poverty and food insecurity in Brazil. At the same time, we continue to donate to hospitals that treat Covid-19 patients.

In total, the company allocated around R\$16 million in individual initiatives and partnerships globally, with more than 90% of this amount destined for Brazil, with major actions in the states of Alagoas, Bahia, Rio de Janeiro, São Paulo, and the Rio Grande do Sul.

Braskem team members also engaged in the cause of fighting hunger, through the Volunteers X Covid volunteer task force, and donated about R\$315,000. Braskem joined this effort and gave a five-fold contribution to the amount collected turning into 27,300 food baskets for the communities.

Our main actions in 2021

Over **R\$16 million** donated in total, divided into initiatives such as:

► In Brazil, more than **106,000 food baskets**, 35,000 hygiene kits, and 3 tons of vegetables and fruits were donated to families in the five states where the company operates, benefiting about **292,000 people**. In Mexico, donations to fight Covid benefited about **30,000 people**.

Of the total number of food baskets, around R\$9,200 were donated to the Mothers of the Favelas Project, of the Central Union of the Slums (Central Única das Favelas – Cufa).

► **R\$3.1 million** for match funding BNDES [Brazilian Development Bank] Salvando Vidas (Matchfunding Saving Lives) for the purchase of equipment and supplies for **hospitals** that treat patients with **COVID-19** by the Unified Health System (Sistema Único de Saúde – SUS).

► **R\$2 million** for the Hospital de Síndrome Gripais HGE (HGE Flu Syndrome Hospital) in Alagoas.

► **R\$100,000** for SOS Manaus, a joint initiative of several companies to purchase mini oxygen plants during the peak of COVID-19 in Amazonas.



► These are two of Braskem's various **operational fronts with local communities**. For a complete overview of our **social activities**, check out **Social and Relationship Capital**.

For further details on
Social and Relationship Capital.

Click here



The Maceió Case

People safety and relocation

Braskem has the safety of people as a non-negotiable value, and since the occurrence of the geological event in Maceió (AL), in 2018, this has been the main concern. In 2021, we had important advances in this regard, reaching over 97% of unoccupied properties, with the relocation of families in the affected region. The estimated deadline in the agreement with the authorities is that the actions of the Relocation and Financial Compensation Program will be completed by December 2022.

Service to residents

The PCF, created in December 2019, has more than 1,200 professionals working directly in the search for the best solutions for residents, including social technicians, facilitators, legal support and psychologists. Currently, on average, more than 650 compensation proposals are submitted monthly, and in just over two years of PCF, the company presented more than 14 thousand proposals (*up to 04/30/2022), from a total of approximately 17.5 thousand proposals, with an acceptance rate of 99.5%. PCF offers financial aid and several free services, such as moving, which is made and paid by the program, lockers, partnership with real estate agencies to search for properties; program for the temporary care and reception of animals that cannot be relocated with their tutors; support in opening bank accounts; partnership with notaries to issue documents and certificates, among others.

Communication with the community

We provided priority to the process by establishing several channels of direct communication with the affected families – from face-to-face assistance at the Resident’s Center, to support via messaging apps, among other means. By April 2022, more than 200,000 phone assistance had been made via 0800.

The evolution of communication with society resulted, throughout 2021, in more than 1,000 actions to account for Braskem’s initiatives in Maceió. To inform with even more agility and transparency, the Braskem’s communication website was reformulated and became a broader platform with information of interest to the resident and the community about the case. Social media channels and “Braskem Explica”, published by the main local press vehicles, are also used to ensure that up-to-date information is available and accessible.

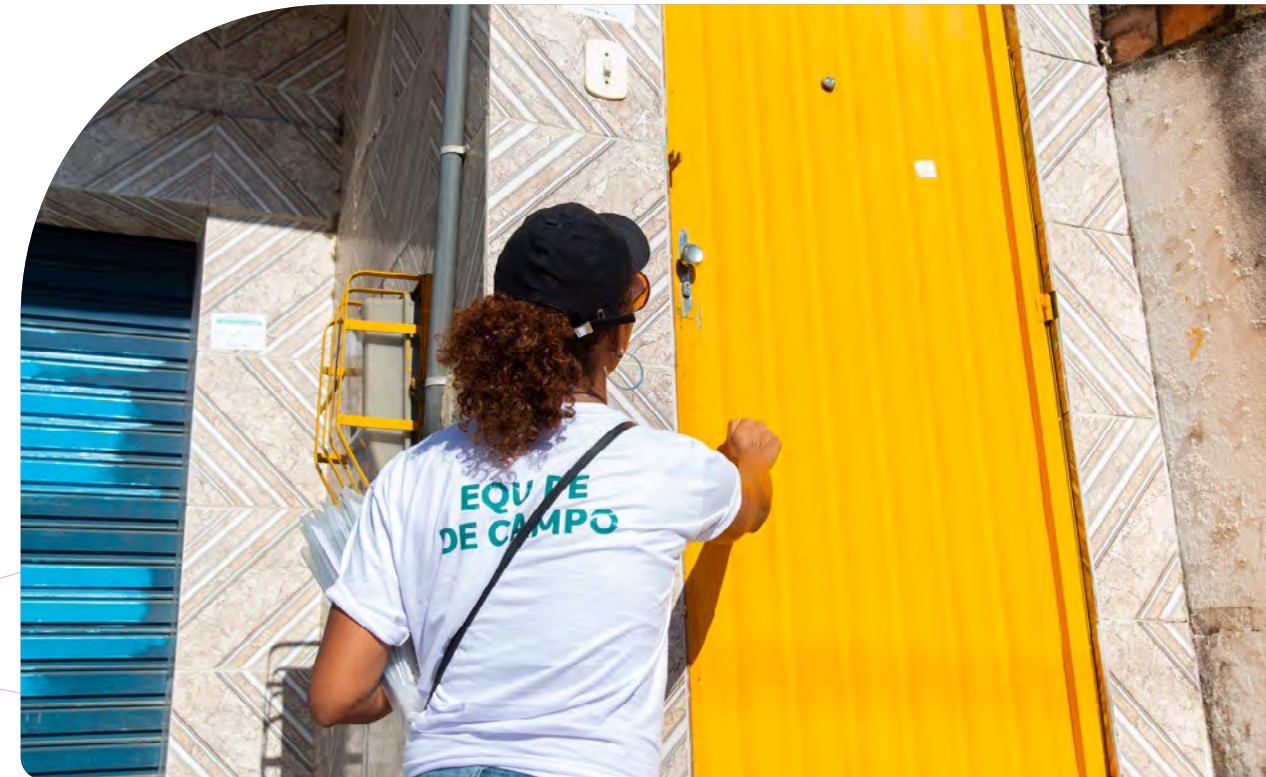
Relationship with the community

Since 2019, through social dialogue with community leaders, leading residents and merchants, we have provided information and clarified doubts about the Financial Compensation and Relocation Support Program and about works and interventions in the territories, among other topics. Also, as a result of these interactions, we receive demands from communities and seek to support their resolutions, keeping active listening and identifying opportunities for cooperation in order to mitigate the impacts perceived by residents.

Psychological support for residents

Braskem also offers a free psychological support service to all people who are part of families residing in vacant areas and are included in the Financial Compensation and Relocation Support Program. Assistances were not suspended even with the pandemic - the consultations were made online. By April 2022, 24,000 psychological services had been provided to residents of the affected neighborhoods.

The assistance aims to support the process of understanding emotional, behavioral and relationship issues. The service is defined between the resident and the psychologist, and the number of consultations and the period of treatment vary according to the health professional’s assessment of the needs of each patient. People with limited mobility can be cared for at home.





Closing Plan and monitoring of salt wells

Throughout 2021, the company maintained its best efforts to adopt the necessary and appropriate measures to solve the issues arising from the geological phenomenon verified, fully complying with the commitments assumed. The actions for closing and monitoring the salt wells follow the mine closure plan approved by the National Mining Agency (ANM), aiming at stabilizing the phenomenon of subsidence resulting from the extraction of rock salt.

Also in 2021, we completed the installation of the monitoring network in the affected area, where the salt wells are located, which have been deactivated since May 2019, and we made progress in installing these networks in other regions of the affected neighborhoods.

Urban repair in the region

For urban repair, interventions will be carried out in unoccupied areas, with preservation of the existing historical and cultural heritage, urban mobility actions, social compensation and indemnification for collective damages. The participation of interested public bodies is foreseen, in addition to popular consultation mechanisms. In 2021, there was a significant advance in the social diagnosis of the region.

Environment

By the end of 2021, the environmental diagnosis of the region had already been completed, indicating a preliminary proposal for actions to address the identified environmental impacts, which must still follow the steps provided in the Agreement for Social and Environmental Reparation.

Next steps

In 2022, the priority will be to complete real estate relocation and financial compensation. In addition, we will proceed with the process of safely closing the 35 wells in the region, which began in 2020 and is expected to last until 2025. As a way of providing transparency to the actions related to Maceió, the information regarding the case is gathered on a website, where we periodically report on the initiatives put in practice.

Learn more

97.5% of the properties unoccupied by March 2021, out of a total of 14,420 properties, around 35,000 people.

Almost 11,000 indemnities paid that, added to the financial aid and lawyers' fees, amount to R\$2.4 billion.

99.5% acceptance of the compensation proposals (*by 04/30/2022).

More than R\$2.4 billion was disbursed to the PCF (*by 03/31/2022).

R\$12 billion⁽¹⁾ in provisions for compensation and safety actions (*4Q21).

1,200 professionals were directly involved on behalf of the company to resolve the issues related to the case.

(1) Refers to the total gross amount of provisions relating to the Alagoas Geological Event.

Production resumption in Maceió

In February 2021, Braskem communicated the resumption the chlorine-soda and dichloroethane production in its Maceió unit, which halted in May 2019. Thus, the company went back to producing PVC and caustic soda in an integrated manner, i.e., from the raw material (chlorine, MVC, and EDC) to the final product (PVC), in the state. The new operational process is made from dry salt imported from Chile, since Braskem permanently ended salt extraction activities in the municipality.

Resuming the activities will enable the company to keep contributing to the local economy, including retaining more than 2,500 skilled jobs. The operation helps to move the chemicals and plastics chain, which covers about 40 other industries in sectors such as hospital and civil construction and generates around 12,000 jobs in the region.

Braskem invested R\$68 million in technological and infrastructure adaptations in the industrial plant and in road and port logistics to integrate the salt transportation process, following practised designed to promote goals in health, safety and environment.

Timeline

2018

- ▶ A 2.4 magnitude earthquake on the Richter scale is recorded Pinheiro neighborhood in Maceió (AL), where we maintained 35 rock-salt extraction mines since 1976, as part of Salgema's operations, which would then become part of Braskem. |GRI 203-2|

2019

- ▶ Hiring of independent geological studies.
- ▶ Permanent closure of the rock-salt extraction activities.
- ▶ Creation of the protection area, based on a study by the Leipzig Geomechanical Institute (Germany).
- ▶ Signing of cooperation agreements with the Maceió City Hall for joint actions.
- ▶ Execution of a term of agreement between Braskem and the Federal Public Prosecutor's Office (MPF), the Public Prosecutor's Office of the State of Alagoas (Ministério Público do Estado de Alagoas, MPE-AL), the Federal Public Defender's Office (Defensoria Pública da União, DPU), and the Public Defender of the State of Alagoas (Defensoria Pública do Estado de Alagoas, DPE-AL), for support in vacating risk areas (signed on 12/30/2019, with subsequent amendments). On 12/18/2019 the Financial Compensation and Relocation Support Program (Programa de Compensação Financeira – PCF) was launched to serve residents of the protection area around the salt mines. |GRI 203-2|

2020

- ▶ Start of mine closure.
- ▶ Start of demolitions.
- ▶ Signing of addenda to the agreement based on updates to the Maceió Civil Defense Map, which led, at the end of 2020, to the extinction of the Public Civil Action for the indemnity of residents.
- ▶ Signing of Socio-environmental agreement with MPF and intervention of MPE. The agreement provides for the implementation of measures related to stabilization and monitoring, of the geological phenomenon, and actions directed at the mitigation, repair, or compensation of environmental, urban, and social impacts. Because of the agreement, the Public Civil Action against Braskem was extinguished.
- ▶ Signature by the Ministry of Labor (MPT) for the extinction of the Public Civil Labor Action.

2021

- ▶ Resumption of the chlorine-soda and dichloroethane production in the Maceió unit.
- ▶ Completion of the installation of the monitoring network of the salt mine area, deactivated since May 2019.
- ▶ Delivery of another installation stage of the ground-monitoring network. As a result, the network counts with seismographs, with equipment donated by Braskem.
- ▶ Start the demolition process of the Mutange slope.



- ▶ Creation of the physical Resident Center. With the pandemic, the service has migrated to an online format.



Sustainable Development

CDP Water A List
for the fifth consecutive year

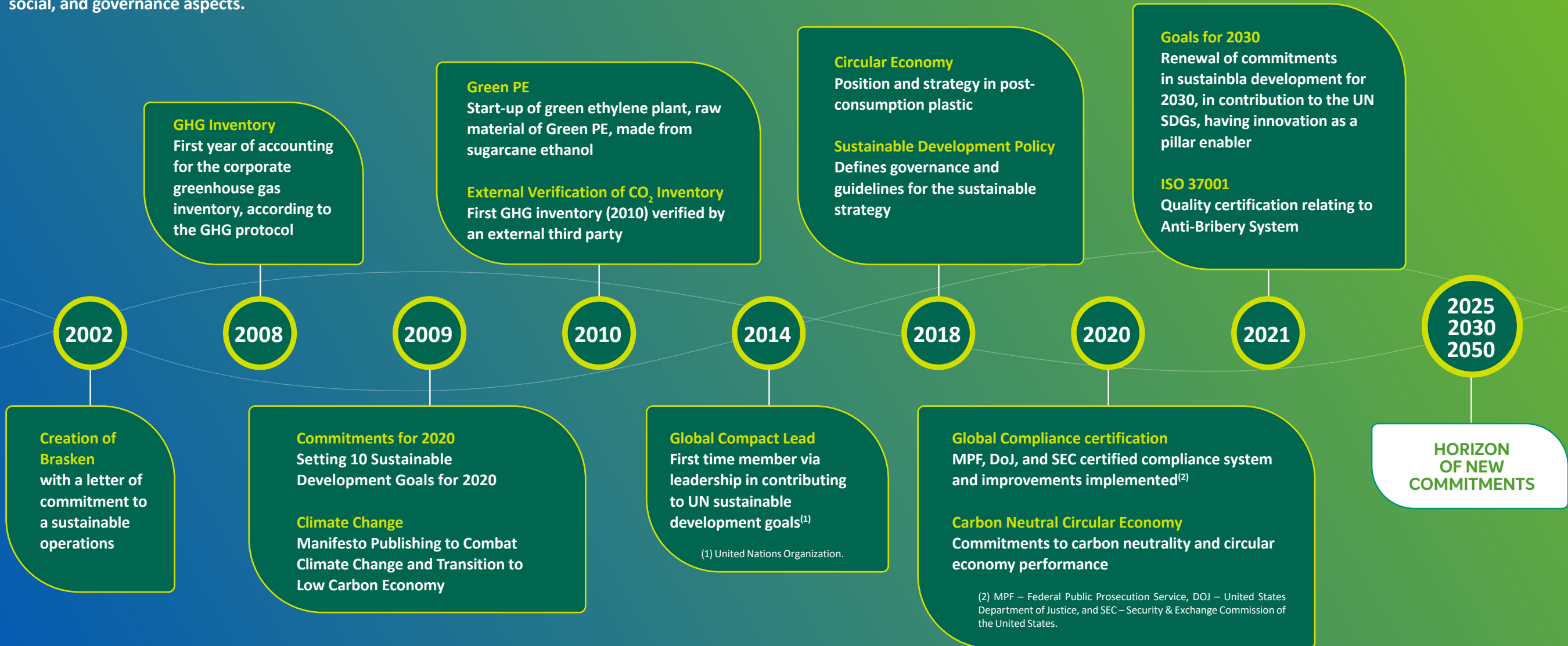
Inclusion in the **UN Global
Pact LEAD group of
companies since 2014**

ISCC certification
for production from
circular raw material

- › Our sustainable performance
- › New Sustainable Development Strategy
- › 2020–2030 Commitments
- › Governance in Sustainability

Our Sustainable Performance

Since its creation, Braskem has been committed to acting based on the principles of sustainable development, and over the years has promoted transformations incorporating environmental, social, and governance aspects.



Sustainable Development and Business Plan: only one direction

In 2021, we made a public commitment regarding several goals aligned with our Global Sustainable Development Policy, which incorporated a circular economy and neutral carbon commitments, launched in the previous year. We started to outline the paths to be followed and, over the last year, we have already started several projects, detailed in chapter 7 of this report.

The development of new commitments occurred in 2020 and involved more than 500 global team members and leaders. This strategy was built based on the analysis of global challenges and trends, the Materiality Matrix and the results of the Risk Management analysis of our business and our supply chain and considering recognized external sustainability references. This process was materialized by the approval of our Global Sustainable Development Strategy by the Board of Directors.

The new goals consider all the dimensions of sustainable development: economic, social, and environmental. They seek to expand the positive impacts and mitigate risks in Braskem's journey. All are aligned with the Paris Agreement for Climate Change and the Sustainable Development Objectives (SDG) of the United Nations (UN), with priority for those in which Braskem contributes most to the solution.

Our new sustainable development strategy guides the strategic pillars of our business plan, mentioned in the Company Strategy chapter.

Learn more

Our priority SDG:

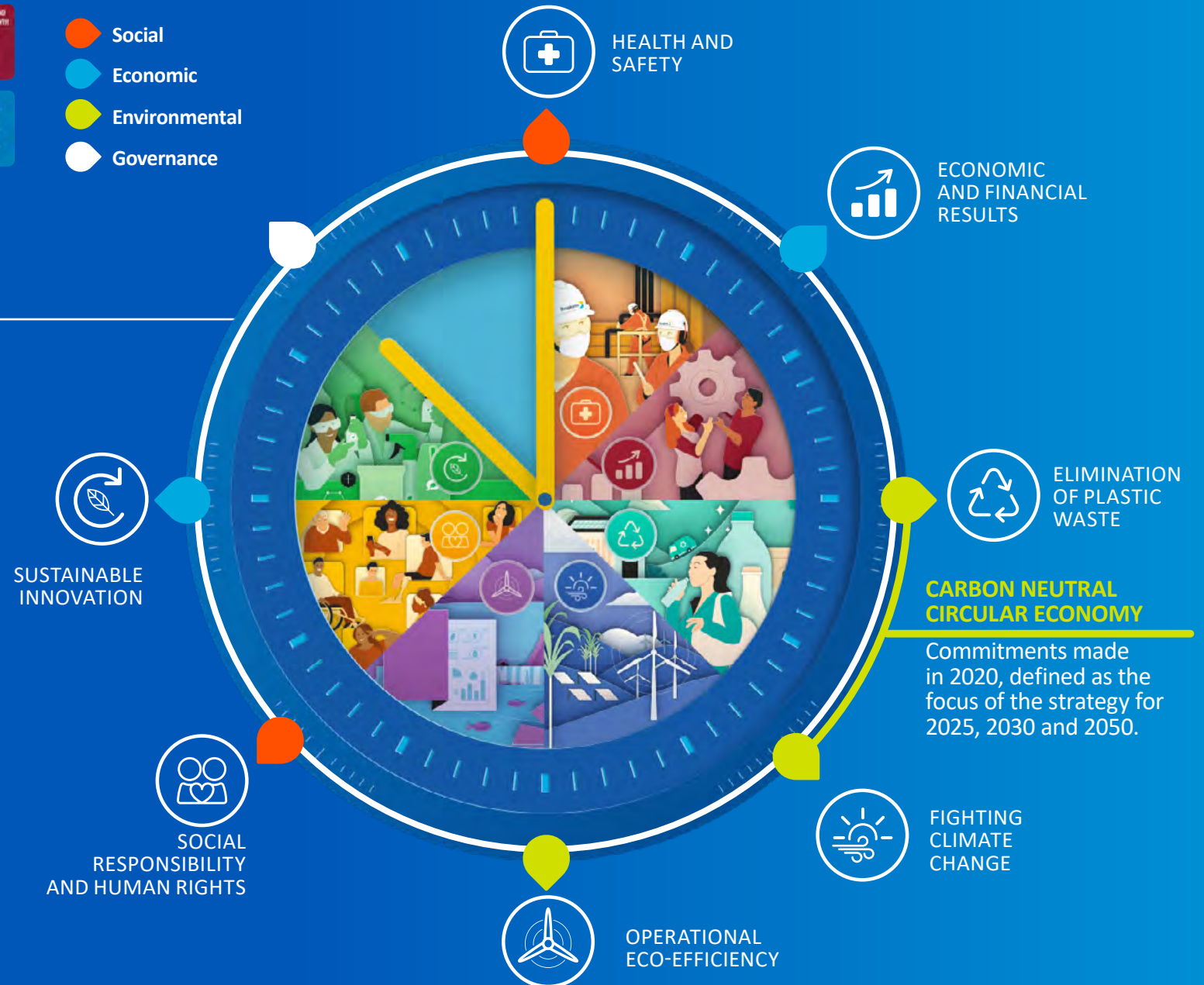


Theme

- Social
- Economic
- Environmental
- Governance

Commitments 2020–2030

Based on the work carried out, we reached seven dimensions, with objectives established for the period 2020-2030, but with goals for 2025, 2030, and 2050. Next are our dimensions and some of our key commitments:



SUSTAINABLE INNOVATION

2020–2030 Commitments

17% advance in 2021

Throughout 2021, we established responsibilities and organized workflows for every dimension of the **new sustainability strategy**. Accordingly, we have already collected some initial results and ended the year having advanced by **17% on our commitments for 2030**.

Below are details of our advance in the seven dimensions. Each of these has a package of indicators, for which goals for 2030 were defined and which have 2020 as the calculation base-year. Hence, evolution is rendered by the arithmetic mean of the advance, as a percentage, of each indicator in relation to the goals set for 2030.

Baseline calculation:

We adopt the following baseline calculation assumptions:

- 1 Calculation basis as a result of the observed year (for Health and Safety, Elimination of Plastic Waste, Social Responsibility and Human Rights – Risks in Human Rights in the Value Chain, and Sustainable Innovation).
- 2 Calculation basis observing the period between 2011 and 2020 for Economic and Financial Results – Total Shareholder Return.
- 3 Calculation basis as a result of the average of the last three years (for the rest of the dimensions that were not mentioned above).

Achievement of indicators

The achievement of indicators is calculated by how much Braskem has advanced in relation to the proposed challenges to 2030.^{(3), (4)}

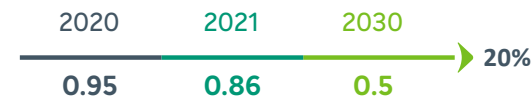
(3) $\frac{([2030 \text{ commitment} - \text{baseline year}] - [2030 \text{ commitment} - \text{current year}])}{[2030 \text{ commitment} - \text{baseline year}]}$.

(4) Exception is the Total Shareholder Return, which is calculated by the simple variation: final value/initial value.

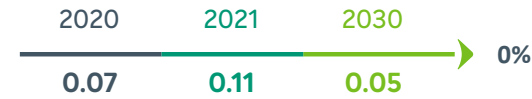
HEALTH AND SAFETY



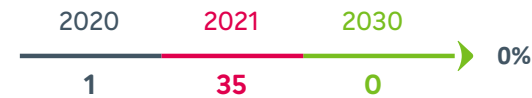
Accident Rate CAF⁽⁵⁾ + SAF⁽⁶⁾
(accidents per million man hours worked)



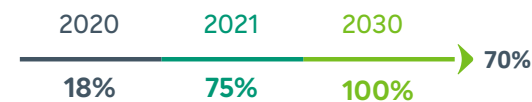
Tier 1 Accident Rate⁽⁷⁾
(accidents per million man hours worked)



Occupational Diseases
(number of events)



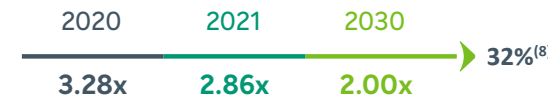
Socio-environmental risk mitigation plan
(% of actions implemented)



ECONOMIC AND FINANCIAL RESULTS



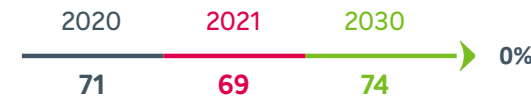
Net Debt to EBITDA Ratio
(points)



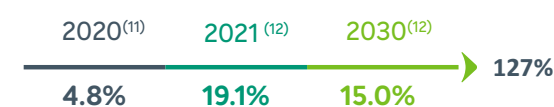
RepTrak Pulse – Clients
(range)



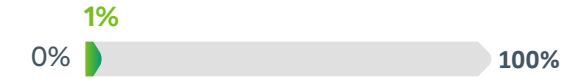
Dow Jones Sustainability Index
(points)⁽⁹⁾



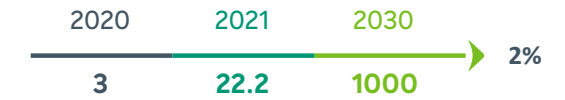
Total Shareholder Return⁽¹⁰⁾
(%)



ELIMINATION OF PLASTIC WASTE



Sales of products with recycled content⁽¹³⁾
(thousand tons)



Recovered Plastic Waste
(thousand tons)



(5) CAF (accident with days away from work).

(6) SAF (accident without days away from work).

(7) TIER 1: incident with containment loss of products above the limits stated by American Petroleum Institute (API), 754 for TIER 1, as per product released, or any other release that causes: fatality or accident with absence of a team member or third-party, injuries or fatal actions to the external population, financial loss above US\$100 thousand, or community evacuation.

(8) Leverage indicator approximated for two decimals may interfere in the final achievement value.

(9) Braskem's goal is to be among the 10% best positioned in terms of score, one of the inclusion criteria of the index. Thus, the score established as a goal may vary depending on the grade cut resulting from this criterion.

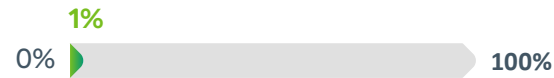
(10) The Total Shareholder Return is calculated using the following formula: $\frac{(\text{Final Price} - \text{Initial Price}) + \text{Dividends}}{\text{Initial Price}}$

(11) The baseline-year is calculated looking at the 10-year period between 2011-2020.

(12) The current-year, as well as the 2030 target, use the period of the last 10 years in the calculation methodology, including the reported year.

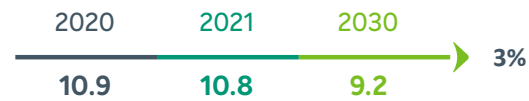
(13) Considers the sale of all circular solutions, with 20.2kt of resins and 2kt of chemicals in 2021. Of the volume of resins sold, 65% is recycled material, the rest is virgin resin that was blended to guarantee quality.

FIGHTING CLIMATE CHANGE



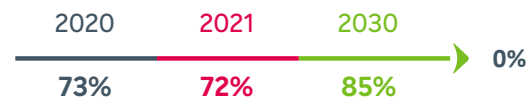
Volume of Emissions

(million tons of CO₂e, scopes 1 and 2)



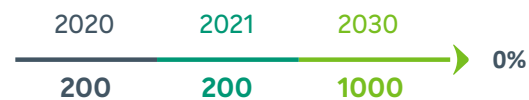
Renewable Electric Energy

(% of electric energy purchased)



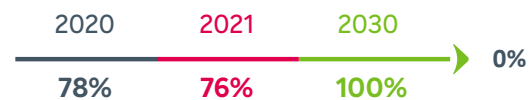
Green PE Production Capacity

(thousand tons)



Water Safety Index

(% of safe water collected)



SOCIAL ACCOUNTABILITY AND HUMAN RIGHTS



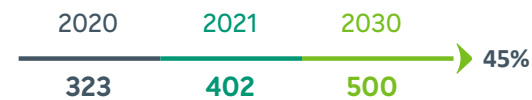
RepTrak Pulse – Communities

(range)



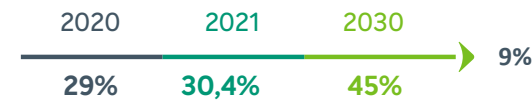
Benefited people in Communities⁽¹⁵⁾

(thousand people)

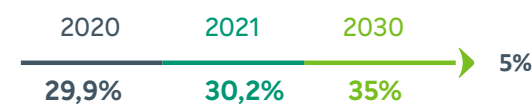


Diversity

Women in leadership⁽¹⁶⁾ (%)



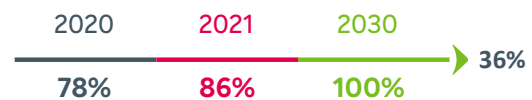
Black team members⁽¹⁶⁾ (%)



Medium and High Risks⁽¹⁷⁾ in

DH in Value Chain

(% fully managed)

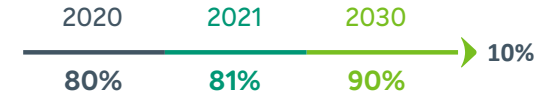


SUSTAINABLE INNOVATION



Sustainability Index of I&T

(% of portfolio of projects with positive impact)



Sale of Eco-Products



(14) Braskem's quantitative score in relation to this stakeholder has improved, however the reputational range remains "Weak".

(15) It does not include people benefited by pandemic combat actions
(16) The goals of women in leadership and black people at Braskem consider only the members of Brazil. The global indicators and its targets of both themes are under discussion and may change the targets, considering the specific needs of each region where Braskem operates.

(17) Includes only high and medium risks.

OPERATIONAL ECO-EFFICIENCY



Under definition

Braskem is discussing the definition os indicadores and goals for this dimension.

Governance in Sustainability

Braskem has a Sustainable Development Policy approved by the Board of Directors and monitored by the Communication, Strategy, and ESG Committee. The Policy assigns roles and responsibilities to all Braskem team members, including executives.

The company has created governance to monitor the progress of the strategy, as a way to support and ensure compliance with the commitments made by Braskem.

Also in 2020, a Global Sustainability Committee was formed, which aims to monitor, question, direct, and decide on the implementation of the initiatives necessary to achieve our goals. The Committee is composed of the Business Leader and all the executive vice presidents, who meet monthly.

Below the Global Sustainability Committee, there is a working group for each dimension (seven altogether) and three structuring groups: Governance, Concepts & Tools, and Communication. Each of the working groups is led by a vice president and supported by a company director.

In 2021, we implemented new advisory bodies of the **Global Sustainability Committee**:

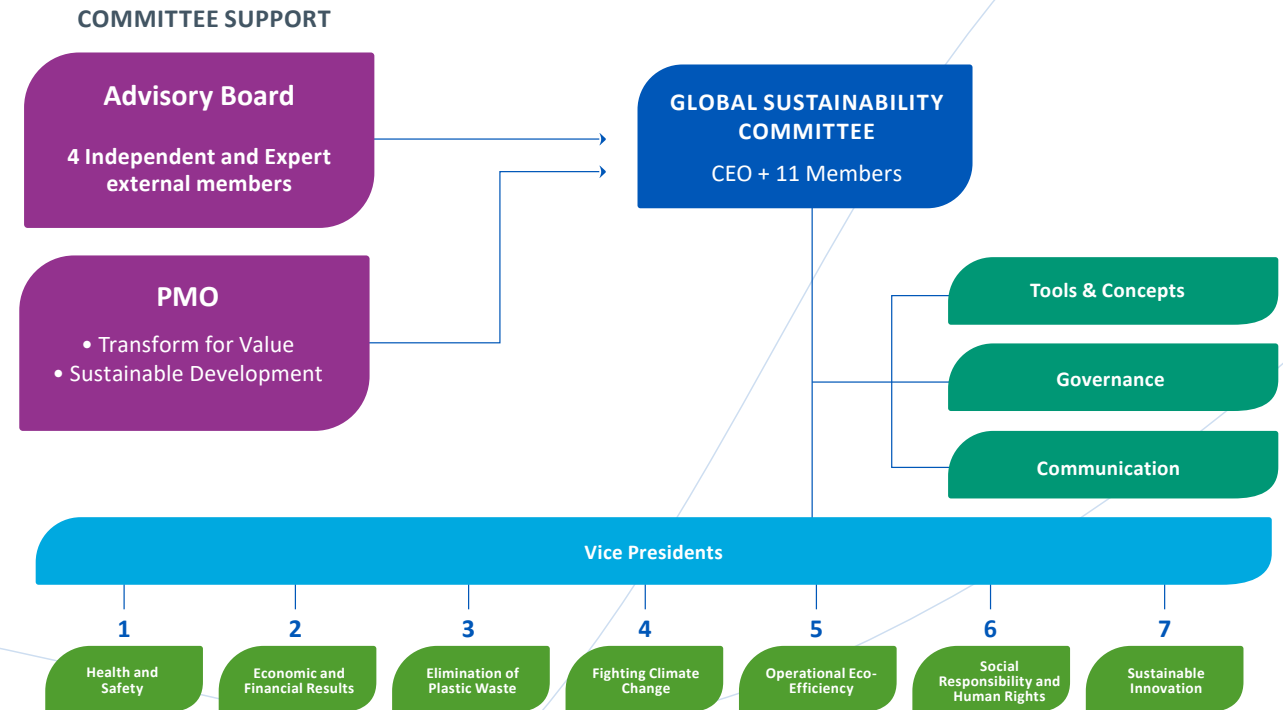
- ▶ **Sustainable Development Team**, a group of 15 specialists spread over all regions that we have operation, including the corporate team at Brazil, whose purpose is to define Braskem’s strategic directions about sustainable development in operations, products, and the entire value chain, supporting the areas assigned for executing the initiatives.
- ▶ **Project Management Office (PMO)**: opportunity identification and the development of initiatives for risk mitigation, focusing on the implementation of governance and processes for strategy execution.
- ▶ **Advisory Council**: composed of four external members, with diversity profiles. Its purpose is to bring an outside, diversified and exempt view on topics of sustainability of critical importance to Braskem. The board considers four pillars: (i) strategy and long-term vision; (ii) Project and Innovation portfolio focusing on the nature of project portfolios, developing technologies, and investments; and (iii) trends, risks, and external factors.

Targets tied to ESG

In our performance assessment cycle – called the Action Program (AP) – we connect strategic goals with what each team member does to achieve these goals. The cycle is composed of corporate, shared, and individual goals, in addition to assessment subject to competences, aligned with Company culture. The definition of variable compensation (PLR) results from this combination of factors.

Corporate goals are those that the organization uses as a guideline, a strategic direction. Since 2020, business leader goals focused on ESG have significantly increased: In 2020, the percentage of ESG targets in the LN PA was 10%. Already in 2021, this percentage rose to 33% and these aspects were included as part of corporate goals, that is, they became part of the performance assessment of approximately 8,000 Braskem team members, from Business Leaders to the base of the hierarchy.

Sustainability Governance Framework:





Capital Performance

- Human Capital
- Financial Capital
- Manufactured Capital
- Natural Capital
- Social and Relationship Capital
- Intellectual Capital

Human Capital

- Gender Equality Index 2022 for the second consecutive year
- 9% drop in the total injury accident rate

Financial Capital

- Return to Corporate Sustainability Index – BR (ISE) in 2022
- Investment Grade company in 2022

Natural Capital

- Gold category at GHG Protocol for the 11th time
- Leadership position at CDP Clima for the 6th time
- Acquisition of shareholder participation in Casa dos Ventos wind farm

Manufactured Capital

- Start up of the first recycling plant
- Sale of I'm green™ Recycled resins: increase of 175%

Social and Relationship Capital

- +R\$38 million in ISP, donations and volunteering, distributed in 145 projects
- + 758 thousand benefited people worldwide destined to sustainability

Intellectual Capital

- R\$302.8 million invested in I&T
- 81% of I&T fixed expenses designated to sustainability



Human Capital

[GRI 103-2, 103-3 | 302, 303, 305, 306]

Our team members are the protagonists of the company's results. Therefore, we strive to promote a safe, healthy, diverse, and inclusive work environment that provides development opportunities for all, establishing a lasting professional relationships. Thus, we relate human capital to the objectives of the **health and safety** and **social responsibility and human rights** dimensions of our strategy for 2030.



Dimension 1 HEALTH AND SAFETY

For us, health and safety are a fundamental value. Therefore, our long-term strategy incorporates this theme from two perspectives: the health and safety of people – members, third parties, and surrounding communities – and process safety. By 2030, our challenge is to halve frequency of personal and process accidents and zero occupational diseases.

For more details on
advances in this dimension

[Click here](#)



Dimension 6 SOCIAL RESPONSIBILITY AND HUMAN RIGHTS

This dimension covers a wide range of topics. Its connection with human capital, however, is built on responsible activities taken in collaboration with our members to promote a diverse, inclusive, and equitable workplace in which everyone feels respected, has equal chances, and is free to be themselves. Our goal is to promote, through the Diversity, Equity, and Inclusion Program, an increase in the participation of under-represented groups in Braskem's membership and leadership. This dimension also includes human rights and social responsibility, themes presented in Social and Relationship Capital.

For more details on
advances in this dimension

[Click here](#)



Health and Safety

[GRI 103-2, 103-3 | 403, 403-9,
SASB RT-CH-320a.1, RT-CH-320a.2]



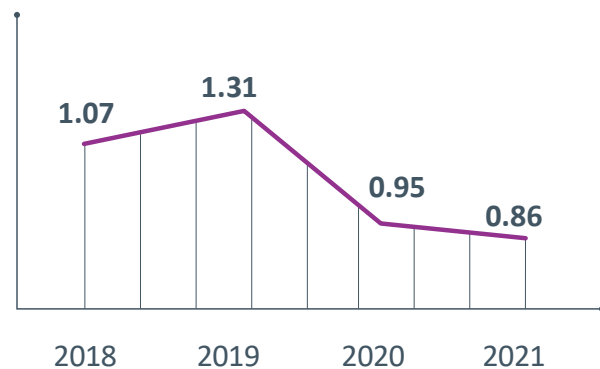
Health and safety performance

Lost-time and non-lost-time

Accident Rate: 9% reduction in 2021

The rate of accidents with and without lost time (CAF + SAF) was 0.86 per thousand hours worked in 2021, a reduction of 9% compared to the rate in 2020. This is the lowest rate in the last three years.

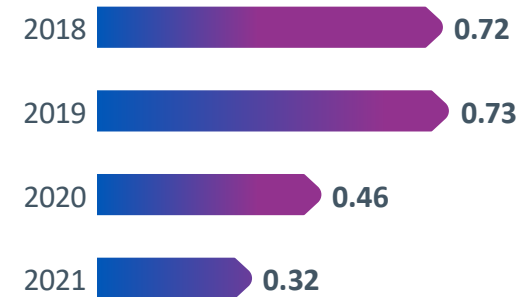
Accident rate CAF + SAF (1MM/HHT)



Process accident rate

Regarding the rate of process accidents, our main focus has been on the mechanical integrity of our industrial assets. This front performs the management of assets so that they are always suitable for the intended application throughout their useful life. This work is done in a complementary way to the Human Reliability Journey, which also contributes to the reduction of process incidents. With this, we achieve the following results:

Accidents rate TIER 1 and 2 (1MM/HHT)



The TIER 1 accident rate (number of TIER 1 events per thousand hours worked) was 0.11 in 2021, which corresponds to an increase of 57% compared to 2020.

Human Capital Performance |GRI 401-1, 405-1|

	2020	2021	Variation 2021 vs. 2020
Number of team members (thousand)	7,993	8,312	4%
Training investments (R\$ million)	8.6	10.8	26%
Engagement in the well-being thermometer (%)	83.8	81.6	11 p.p.
Promotions	482	761	58%
Voluntary severance rate (%)	2.5	3.7	1.2 p.p.
Women in leadership (%) GRI 405-1	30	31	31.11
Black people in leadership (%) GRI 405-1	13	13	13.47
Accident rate CAF + SAF*	0.95	0.86	-9.5

The TIER 2 accident rate (number of TIER 2 events per 1 million hours worked) in 2021 was 0.21, compared to a rate of 0.39 in 2020, which represents a 46% reduction, the best result in the last five years (2017-2021). The total rate of process accidents (TIER 1 + TIER 2) was 0.32, the best historical result of Braskem in this theme.





Intelius management system

Intelius is Braskem’s global management system and brings corporate guidelines and minimum global standards to be met by all work processes in the company. Our team members and contractors are trained to use the tools of Braskem’s global management system, Intelius, which integrates and standardizes industrial and non-industrial processes. It was developed based on ISO 45001, ISO 14000, and ISO 9000⁽¹⁾ standards, in addition to regulations of other standards applicable to the petrochemical industry (such as ABNT, API standards, and ABIQUIM’s Responsible Care program).

Applied to all the company’s activities, the practices allow the identification and prevention of impacts on the safety and health of the worker, on the environment, on process safety, the reliability of the assets, and the quality of our products, besides providing for corporate audits and monthly monitoring of indicators.

The system undergoes an annual internal audit to identify and repair potential non-conformities about its guiding principles.

Intelius has five pillars: Health, Safety and Environment (HSE), Quality and Industrial Effectiveness, Performance Management and Continuous Improvement and Sharing of Good Practices.

Occupational risk management

In addition to the legal requirements, Braskem implements its internal requirements for occupational risk management. These requirements are unfolded into management programs, in which monitoring plans are included. Currently, all the prioritized and monitored risks are below the established tolerance limit, except for noise. This is the result of control measures that have been implemented over the years. For the noise agent, Braskem is advancing a project to improve the identification of the sources of greater impact to act more effectively. Furthermore, Braskem has engineering standards that establish requirements so that in new projects and processes this risk is not increased.

Human Reliability Day

Reliability can be seen as an evolutionary stage in terms of occupational safety: once the risks in terms of processes and equipment have been mitigated and controlled, it is time to take a closer look at human failure from a behavioral perspective. If human beings can fail, we need to understand what factors can minimize the chances of these failures occurring.

We began our human reliability journey in 2018, with the awareness of members and third parties about the concept, its importance, and how to act about this within the company.

Human reliability training

To ensure the effectiveness of the initiatives in this area, we initiated actions to raise awareness about human reliability starting at the highest levels of Braskem’s hierarchy. In 2021, it was the turn of the members and contractors who work directly at the plants to receive training. About a thousand people were trained throughout the year, in three countries using tools such as workshops and videos, to practice human reliability culture in the day-to-day running of the plants.

Life Saving Rules

With the concept of reliability in mind, we reformulated the golden rules for safety at work, excluding some and including new ones, in alignment with the culture of safety and accident reduction. To the existing rules were added:

Line of fire: we position others and ourselves outside and away from the “line of fire” when performing activities involving dangerous potential energy (mechanical or chemical contact). (new)

Critical operational activities: we ensure that written procedures/instructions are followed when performing critical or high-risk activities, such as shutdowns and turnarounds. (new)



(1) ISO 45001: Occupational Health and Safety Management System.
ISO 14000: Environmental Management System.
ISO 9000: Quality Management System.

Integral Health Program

In 2021, we understood that it was essential to take a step further regarding the health of our team members, and we started to design the Integral Health Program to promote an increasingly humanized and welcoming work environment, raising the levels of people’s health, with the protagonism of individuals, establishing a culture of well-being and support in ensuring a healthier future for our members.

Throughout the year, we dedicated ourselves to building this program, with the help of a consultancy firm, which is expected to be launched in 2022. The idea is to cover various factors that influence the quality of life, such as obesity, smoking, and drug use.

There will be four pillars of action in health: physical, emotional/mental, occupational, and social and family related.

► **The Program Taking Care of People** has special focus on the impacts of changes in the pandemic. On the other hand, **Integral Health** aims at the health of its members in a broad way.

Taking Care of People Program

The program seeks to minimize the impact of the changes that came in the wake of the Covid-19 pandemic, promoting a more humanized and collaborative environment and supporting the continuity of operations through five pillars: mental well-being, physical well-being, and social well-being, support for remote work and professional enhancement.

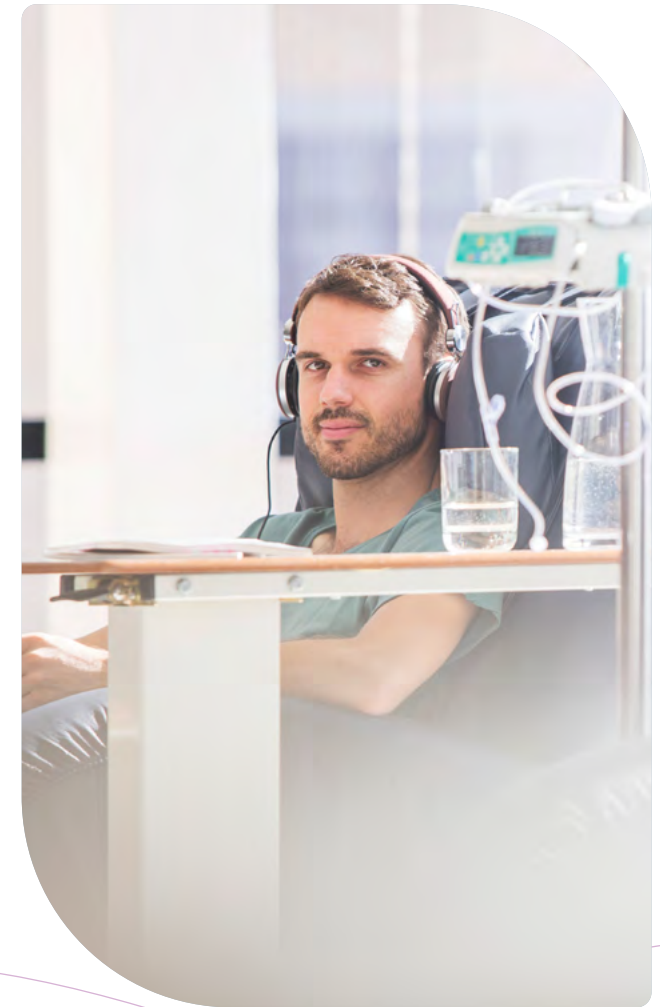
In 2021, we expanded our Wellness Support Program in Brazil, which, in addition to offering psychological and social support, now includes legal and financial assistance. We focused on emotional wellness, with the realization of ten webinars, two campaigns of activation an reflection, with 3,834 participants and 96% satisfaction.

In the United States, we gave lectures on mental health and created an application to support members in promoting their mental, physical, and emotional balance. In Europe and Asia, we launched the series “Healthy Minds”, focused on reflection and training in mental health.

In addition, we held 11 meetings for leaders and members on this subject. In Mexico, communication with members about physical and emotional health issues was strengthened through the “Sentirte Bien” program, with 11 wellness webinars and activities such as psychological, emotional, and financial counseling.

Health and Safety evaluation of suppliers

In 2020, we began to look at the process of hiring third parties also from a health and safety point of view. Previously, these factors were considered, but not in an explicit and standardized manner, as we have now done. In 2021, we conducted the pilot of this evaluation, which has four main criteria:



Diversity, Equity, and Inclusion

[GRI 103-2, 103-3 | 405]



Bloomberg Gender Equity Index



In 2022, for the second consecutive time, Braskem was included in the Bloomberg Gender Equity Index, which recognizes publicly traded companies committed to promoting an inclusive work environment, while supporting the work-life balance. The index measures gender equality across five pillars: female leadership and talent career track, gender equality and gender pay parity, inclusive culture, sexual harassment policies, and pro-woman branding.

WEPs Brazil (UN) Award, bronze category



An initiative of the UN Women's Empowerment Principles (WEPs), this prize recognizes the efforts of companies that promote actions focused on gender equality and the empowerment of women.

Best Employers by Forbes



Forbes recognized Braskem as one of the best employers in the world, among 750 companies in more than 28 countries. More than 150,000 people were interviewed, and among the assessment criteria is the company's concern with the impact on the environment, the pursuit of developing new talents, social responsibility, and its actions in favor of diversity.

Diversity, Equity, and Inclusion Program

We have invested in training and raising awareness of the leaders on the theme of Diversity, Equity and Inclusion, which already shows positive results. In parallel, we are working on structuring programs and data monitoring. In 2021, for example, we noted that 93% of women returning from maternity leave remain at Braskem for at least one year. [GRI 401-3]

Below, we highlight some of the key initiatives and outcomes for 2021:

More than 3,000 people trained in concepts related to Diversity, Equity, and Inclusion - among leaders, team members, and contractors - in all regions, in addition to the development of the first global training on these topics.

II Global Week of Diversity, Equity, and Inclusion, which mobilized 2,500 team members in all regions, and included initiatives to promote diversity-related content and dialogue.

38% of black and brown interns hired in relation to the total selected.

Increase of 1 percentage point of women in leadership for 2020

To ensure the increase of racial diversity among applicants, attracting mainly the interest of black students, the program has relaxed some selection criteria since 2020.

English is no longer mandatory in 40% of the vacancies and applicants who enter will be eligible to scholarships. In the curriculum evaluation stage, as a way to minimize biases related to factors that may be excluding, leaders do not have access to information such as age, institution of education and previous experience. Another highlight is that the logical reasoning test was replaced by a decision-making journey, allowing to know candidates more inclusively.

We also intensified training in diversity and inclusion for all members responsible for the selection, so that they have an even more careful look.

The company has partnerships with Cia de Talentos, the Mais Diversidade consultancy, Talento Incluir, and black university groups to promote initiatives aimed at attracting, developing, and including groups historically marginalized by society.

Totalling 31% of women as leaders at Braskem, globally



In 2021, Braskem’s Internship Program hired 250 students. Of this total, 38% were black, 54% were women, 45% were low-income and 5% were over 28 years old.

► **II Semana Preta (Black Week)**

We held the II Semana Preta (Black Week) in Brazil, an event aimed at the black university public, which deals with content about the labor market, professional tips, and exchange of experiences to bring this public closer to Braskem and the internship program. In 2021, 1,432 students participated, a 286% increase compared to the previous year.

► **Pilot project to hiring a People with Disabilities in the Brazilian Internship Program**

In Brazil, the 2021 internship selection process had a pilot project to hiring 10 interns with disabilities. At the same time, the leadership was brought into the discussions on this topic, through webinars and dialogues regarding the inclusion of the disabled professional, and we acted in raising awareness and training of all stakeholders involved in conducting these interviews and onboarding this group inclusively. In 2021, accessibility studies were also conducted by the São Paulo and Salvador offices to adapt the facilities to receive these professionals. This is the beginning of a very important journey for Braskem, since the inclusion of people with disabilities will be one of our commitments for the the next coming years.

► **Creation of affinity networks in the United States**

In 2021, Braskem in the United States created three affinity networks: blacks and allies, women and allies,

and LGBTQIA+. The groups enable team members to connect and engage on a specific topic, generally related to their identity and personal experiences.

► **At Braskem Idesa, 90% of the leadership opportunities in internal positions were held by women, including in the industrial area.**

► **In Europe and Asia, 8 leadership training and awareness classes were formed on diversity and inclusion, which supported the strategy and individual dialogues with the teams. Besides that, the LGBTQIA+ Affinity Network was implemented.**

Diversity at Braskem

[GRI 405-1]

	Men	Women	Women in Leadership ⁽²⁾
2018	77%	23%	27%
2019	77%	23%	30%
2020	76%	24%	30%
2021	75%	25%	31%

	Black people ⁽³⁾	Black people in leadership ⁽³⁾
2018	29%	13%
2019	30%	13%
2020	30%	13%
2021	30%	13%

(2) Leadership positions include coordinators, managers, directors, vice presidents and business leader. To find out the % of women for each hierarchical level, access: www.braskem.com/esgdashboard
 (3) Only consider Brazilian team members.

Dignity and diversity

We consider discrimination to be any practice of distinct treatment, exclusion, restriction, or preference based on sex, gender, sexual orientation, religious belief, philosophical or political conviction, color, race, social origin, disability, or other criteria, which the legal framework intends to cancel or reduce to treatment equality. In the workplace, we understand that this translates into annulment or reduction of opportunities.

To curb these attitudes, we maintain a Code of Conduct, which must be followed by all our members. When we receive any reports of violations of standards in the “Canal Linha de Ética”, they are investigated. After internal analysis by Compliance and other relevant departments, such cases receive a mitigation plan, which can count on actions and disciplinary measures.

Discrimination reports [GRI 406-1]



Resolution of cases in 2021:
nine cases received, eight closed.

Did you know?

Equality is a universal right

According to the Universal Declaration of Human Rights, every human being has the capacity to enjoy the rights and freedoms established therein, without distinction of any kind, whether of race, color, sex, language, religion or political opinion, whether of any other nature, national or social origin, wealth, birth, or any other status.

Source: <https://www.unicef.org/razil/declaracaouniversal-dos-direitos-humanos>.



Financial Capital

[GRI 103-2, 103-3, 201]

Financial health and discipline in capital allocation, with a focus on generating value by mitigating risks and capturing opportunities, especially about ESG standards, are key elements for the good performance of financial capital in the long term. Our sustainability strategy includes the **Financial and Economic Results** dimension as we understand the enabling role that financial health plays in achieving sustainable development goals.



Dimension 2

FINANCIAL AND ECONOMIC RESULTS

This is one of the seven dimensions of our 2020–2030 sustainability strategy and aims to maintain Braskem’s financial health and generate long-term value, by mitigating risks and capturing opportunities linked to ESG aspects. To this end, we focus on strengthening the relationship with the financial market based on ESG value, on the continuous improvement of our governance and compliance practices, on long-term relationships with clients, and, as a consequence, on increasing the value generated for shareholders through the total shareholder return indicator.

For more details on
advances in this dimension

[click here](#)



Performance in Financial Capital

- ▶ Annual record of free cash flow generation: **R\$10.7 billion.**
- ▶ Recurring Operating Result of **US\$5.6 billion, 171%** higher than in 2020.
- ▶ Corporate leverage at: **0.94x** at the end of 2021, compared to **2.94x** in 2020⁽¹⁾.
- ▶ Stock with the highest rise in the Bovespa index: **144.5%.**
- ▶ Added value demonstration: **R\$35.2 billion.**

Financial Result

In 2021, petrochemical spreads reached high levels and above the industry's high cycle. The strong increase is mainly explained by continued healthy demand for petrochemical products, in addition to the global supply chain constraints related to the impacts of natural events, port closures as a containment measure for COVID-19 in Asia, worldwide container shortage, and the resulting rise in freight prices.

In this scenario, the company's recurring Operating Result was US\$5.6 billion, 171% higher than 2020, mainly explained by the bigger international spreads of the main chemicals and resins in Brazil, polypropylene in the United States and, Europe, and polyethylene in Mexico; and higher sales volume of the main chemicals in Brazil and polypropylene in the United States and Europe. In reals, the recurring Operating Result was R\$30.3 billion, 176% higher than 2020, given the 4.6% depreciation of the real against the dollar.

Free cash flow generation

Braskem maintained discipline in capital allocation, reinforcing its commitment to financial health, and presented an annual record for free cash flow generation of R\$10.7 billion million in 2021, mainly due to the strong recurring Operating Result.

During the year, capital allocation was mainly in: (i) gross debt reduction; (ii) dividend distribution; and (iii) investments.

Liquidity and capital resources

At the end of 2021, the liquidity position was US\$2.5 billion, considering the renewal of the international revolving credit facility of US\$1 billion, due in 2026, obtained from a syndicate of 11 global banks.

We reduced our gross debt by US\$1.9 billion, thus, by the end of 2021, the average debt term was around 15 years, with 54% of maturities concentrated after 2030. The weighted average cost of the company's debt was exchange variation plus 5.24%.

As a result, corporate leverage measured by the ratio of net debt to recurring Operating Result in U.S. dollar ended 2021 at 0.94x, compared to 2.94x in 2020.

Braskem Idesa completes debt refinancing

In October, Braskem Idesa (BI) concluded its debt refinancing plan, with the replacement of the remaining balance of US\$1.35 billion from Project Finance with new debt: (i) bond issue of US\$1.2 billion; and (ii) term loan in the amount of US\$150 million. These new debts have a longer profile and increase the average debt term to 9 years with the weighted average cost of exchange variation plus 7.1%. With the settlement of the Project Finance debt, the guarantees provided by Braskem to Braskem Idesa, in the total amount of US\$358 million, will be terminated.

The new capital structure includes the issuance of debt bonds with commitment and interest linked to targets for reducing carbon emissions, in line with the company's long-term sustainable development strategy.

With this issue in the capital markets, Braskem Idesa has committed to **reducing its greenhouse gas (GHG) emissions by 15% by 2028.**

(1) measured by the net debt/recurring operating income in dollars.

Recovery of Investment grade

In 2021, Braskem had its global rating go up to BBB-, with a stable outlook, both by the risk-rating agency S&P Global Ratings as well as Fitch Ratings, which makes it a company considered investment grade.

Raising to investment grade reflects the improvement in profitability and cash generation indicators, the company's commitment to leveraging, and the expectation that Braskem will continue to benefit from the high spreads in petrochemicals in the short term.

Investments reached US\$663 million in 2021

At the end of 2021, the company registered investments in the approximate amount of US\$663 million, down 13% from the projection of US\$764 million. Expenditures were mainly affected by the postponement of projects and the Brazilian real depreciation against the U.S. dollar in the period. Among the main projects are: (i) the project to modernize the electrical system of the petrochemical complex in ABC; (ii) the project to expand biopolymer capacity at the Triunfo Petrochemical Complex; and (iii) the construction of a recycling line for high-quality post-consumer resin in Brazil.

In 2022, we plan to invest US\$236 million in projects related to the seven dimensions of the sustainability strategy, distributed as follows:

Projection of investments in 2022, by the dimension of the sustainability strategy⁽²⁾

Dimension	US\$ MM
1 - Health & Safety	28
2 - Financial and Economic Results	2
3 - Disposal of plastic waste	5
4 - Climate Change	127
5 - Operacional Eco-efficiency	49
6 - Social Responsibility & Human Rights	12
7 - Sustainable innovation	14
Total	236

⁽²⁾ The above mentioned investments only consider capital projects of the company, without considering investment for scheduled shutdowns, spare parts, among others not related to the Macro-Objectives.

Click here



Find out more details of the financial results in the 2021 Management Report

Return to shareholders

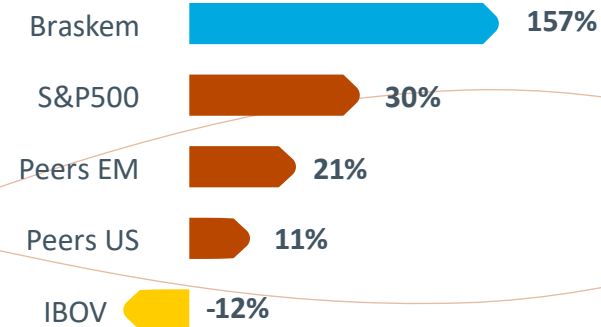
Dividend distribution

Reinforcing its commitment to efficient capital allocation and shareholder returns, the company paid dividends in the total amount of BRL 7.35 billion, based on the result for the year 2021, representing 77.5% of adjusted net income of the year. In December, the company's Board of Directors approved the distribution of anticipated dividends, based on the result for the year 2021, in the total amount of R\$6.0 billion. In May 2022, an additional payment in the amount of R\$1.35 billion was made, based on the result for the year 2021.

Total Shareholder Return⁽³⁾

In 2021, Braskem presented a TSR substantially higher than its international peers, being the 3rd largest TSR, considering all companies listed on the IBOV and S&P 500.

Return to shareholders



ESG Value

Return to ISE B3

In 2022, Braskem returned to the B3 Sustainability Index (ISE B3), being Braskem's 16th participation in the portfolio, out of 17 editions. The return represents the recognition of the company's efforts and commitments with environmental, social and governance aspects.

Staying in the FTSE4Good Index

Braskem will remain listed in the FTSE4Good in 2022, after being independently evaluated, according to the index criteria. FTSE4Good is one of the most important international sustainability indexes and is measured by the Financial Times Stock Exchange (FTSE) Russell, a subsidiary of the company that manages the London Stock Exchange. It is composed of publicly traded companies committed to ESG aspects, based on a strict selection, which takes into account more than 300 indicators.

⁽³⁾ TSR = [(Final price – Initial Price) + Dividends] / Initial Price.

⁽⁴⁾ Peers EM: Orbia and Alpek.

⁽⁵⁾ Peers US: LyondellBasell, Dow and Westlake.



UN CFOs Task Force

In 2020, Braskem joined the CFO Task Force, an initiative of the UN Global Compact. Thus, we are committed to implementing the CFOs Principles for the integration of Sustainable Development Goals (SDG) in our financial and investment management. In this sense, for 2021, the company's priorities were focused on ensuring safe operations, accelerating innovation and digital transformation and implementing our commitments to sustainable development.



In September 2021, the coalition undertook to collectively invest more than US\$500 billion with a focus on SDG and to link about 50% of all corporate funding to sustainability performance, with plans to issue hundreds of billions of dollars in new sustainable financial instruments.

Aligned with Braskem's medium and long-term commitments to reduce CO2 emissions by 15% by 2030 and achieve emission neutrality by 2050, the short-term goals are (i) a reduction of 250kt /year in 2022 from energy efficiency and renewable energy solutions throughout 2021; and (ii) expansion of green ethylene production capacity, scheduled for the end of 2022, at the Triunfo plant in Rio Grande do Sul from 200,000 to 260,000 tons per year. Regarding the commitment to expand the I'm green™ portfolio, in December 2021, the first mechanical recycling line in Brazil began operations, as a result of the partnership between Braskem and Valoren. The plant, located in Indaiatuba, has the capacity to transform around 250 million packages into 14 thousand tons of high quality post-consumer resin per year.

ESG Day

In 2021, during an event held by the company for investors (ESG Day), we launched the commitments assumed for 2025, 2030 and 2050, as well as the advances in Braskem's sustainability strategy over the last decade. The commitments are allocated in 7 dimensions, connected to Braskem's materiality matrix, and consider global challenges and trends for 2030, in line with the UN 2030 Agenda and the Paris Agreement.

[Click here](#)  [To access the document.](#)

Tax Report |GRI 103-2, 103-3 | 207|

Braskem acts responsibly concerning the tax management of its businesses, complying with applicable tax laws, rules and regulations, whether locally or internationally, in a timely manner. Thus, Braskem's tax management must be exercised with excellence, managing risks appropriately, through internal controls that minimize the occurrence of tax contingencies, and contributing to increase the profitability of businesses in Brazil and abroad. Since 2021, Braskem has been publishing the Tax Report in order to provide more transparency to the market about its tax strategy and management.

[Click here](#)  [To access the document.](#)





Manufactured Capital

|GRI 103-2, 103-3 | 301|

From our industrial assets, logistics centers, and other facilities, we produce a wide range of chemical and plastic products. Since 2018, we have been formally committed to the circular economy, making recycling a business unit and expanding the circular logic in the production chain and our product portfolio. In this way, the **Elimination of Plastic Waste** dimension of our sustainability strategy guides the main challenges of manufactured capital for the coming decades.



Dimension 3 ELIMINATION OF PLASTIC WASTE

One of the main challenges of the petrochemical industry is the proper disposal of plastic waste. One of the most effective and sustainable ways to address this issue is through recycling. Thus, this dimension outlines ways to make Braskem a reference in the development of the recycling value chain in all the regions where it operates and a leader in the area in the Americas. We set the goal of expanding the sale of products with recycled content to 300,000 tons by 2025 and 1 million tons by 2030.

For more details on the advances in this dimension

[click here](#)



Learn more about our public stance in favor of the circular economy

[Click here](#)





Performance in Manufactured Capital

In 2021, our fixed assets represented US\$37.2 billion, with a production capacity of 21.4 million tons of chemicals and plastic resins. Our production capacity for recycled resins ended at 62,000 tons and we advanced by 25.6% the project of expansion of the green ethylene capacity.

Operational Performance

Operating Rate and Sales

Brazil

In Brazil, the petrochemical complexes operated at a utilization rate of 81%, which mainly reflects the scheduled general maintenance turnaround at the complex in ABC, São Paulo. The green ethylene utilization rate was 101% in the year, a historic annual record for Braskem, due to the growing demand for Green PE and the continued positive industrial performance.

Resins sales volume in the Brazilian market decreased in relation to 2020 (-5%), mainly explained by the contraction in resins market share, mainly due to the scheduled general maintenance shutdown at the petrochemical complex in ABC, São Paulo, and the higher import volumes. Meanwhile, the reduction in exports (-23%) is explained by the prioritization of the Brazilian market, and by the lower product availability for sale.

Main chemicals sales volume in the Brazilian market increased compared to 2020 (+13%), reflecting the stronger demand for main chemicals, led by gasoline, benzene, and butadiene. Meanwhile, the reduction in exports (-5%) is explained by the prioritization of the Brazilian market.

As for PVC, the average utilization rate, considering the plants in the states of Alagoas and Bahia, was of 65%, up from 2020 (+2 p.p.) explained mainly by stronger demand and the Covid impacts in second quarter of 2020. The PVC sales volume in Brazilian market came to 495,000 tons, down from 2020 (-6%), explained mainly by the Company's lower market share given the higher volume of PVC imports. The Company imported 149,000 tons of caustic soda in 2021 with the goal of serving the domestic market.

United States and Europe

In the United States and Europe, Braskem continued to operate with a utilization rate above the industry average to close the year at 87%, considering the average of the two regions.

In USA, sales volume increased by 7% compared to 2020, mainly explained by the stronger demand in the period, as well as the expansion in production capacity after the startup in September 2020 of the commercial production at the PP plant (Delta) in Texas. In September, Braskem commemorated one year of commercial production at its new polypropylene production line (Delta). With production capacity of 450,000 tons per year, the new line produced over 365,000 tons in its first full year of commercial operations, despite the challenges posed by Winter Storm Uri, which devastated the country.

In Europe, the increase of 11% in sales volume in 2021, when compared to 2020, occurred due to the greater availability of products for sale and increased demand in the period.

Mexico

Braskem Idesa ended the year with an average utilization rate of 66%, being that the Fast Track solution to obtain raw material accounted for 35% of total ethane supply in the year. In Mexico, sales volume decreased by 25% in relation to 2020, mainly explained by the lower product availability for sale due to the lower utilization rate in the year.

Braskem Idesa and Pemex sign the definitive amendment

In 2021, Braskem Idesa, a joint venture signed in 2010 between Braskem and the Mexican group Idesa, achieved its priority objectives: the signing of the definitive agreement for the supply of ethane with the Mexican state-owned company Pemex and the expansion of the operation to import ethane, which includes the construction of a new terminal for importing the raw material.

In September, an amendment to the ethane supply contract was signed, which changes the minimum supply of ethane to 30,000 barrels per day until the ethane import terminal starts operating or the deadline of February 2022 and gives Braskem Idesa the preference to buy all the ethane that Pemex has available and not consume it in its production process until 2045, at prices according to international references.

Expansion of the ethane import operation in Mexico

In addition to the definitive amendment, an agreement was signed with Petróleos Mexicanos (Pemex), Pemex Logística, and other government entities, which establishes support measures for the project to build an ethane import terminal, capable of meeting the total need for raw material from Braskem Idesa. Expected to start operating in 2024, the terminal has an estimated investment of US\$400 million and was approved by the Boards of Directors of Braskem and Braskem Idesa. The project aims to complement the ethane supply in Mexico and enable Braskem Idesa to operate at full capacity, with access to new sources of raw materials.

Elimination of Plastic Waste



Start of operation of the 1st Braskem mechanical recycling plant

In December 2021, a recycling line entered into operation in Indaiatuba, in São Paulo's inland, developed in partnership with Valoren, a waste management company. With an investment of R\$67 million, the unit has a production capacity of 14,000 tons of polyethylene and polypropylene per year from post-consumption waste.

The objective is to have a mechanically recycled product of superior quality than what is found on the Brazilian market, making way for the entry of post-consumer resins in markets where there is less penetration, thus increasing their potential demand.

14 thousand tons/
year of recycled material, the
equivalent to a reduction of
250 million plastic
packaging per year in landfills.

Sales of recycled content products: 145% growth in 2021 |GRI 301-3|



Our portfolio of products with recycled content includes chemicals and resins, which are commercialized under the brand I'm' green™ Recycled. In 2021, sales of products with recycled content increased by 145% compared to 2020. Sales of I'm' green™ resins increased 175% in the same period. By 2025, we are committed to increasing sales to 300,000 tons, which represents about 10% of the sales volume of PE and PP in Brazil⁽¹⁾ in 2021.

The increase in sales occurred for different reasons:

Recycled content products sales (ton)	2021 (A)	2020 (B)	Chg,(A)/(B)
Recycled	22,181	9,067	145%
Chemicals*	1,975	1,725	14%
Resins	20,206	7,341	175%
Brazil	10,138	2,675	267%
Unites States and Europe	3,405	1,810	88%
Mexico	6,663	2,766	141%

* Chemical sales occur only in Brazil.

- ▶ **Brazil:** increased sales of recycled resins mainly due to the increase in clients and progress in the expanded resin portfolio with recycled content.
- ▶ **The United States and Europe:** higher product availability in the year, due production normalization after impacts of the Covid-19 pandemic and greater supply of raw materials.
- ▶ **Mexico:** increased availability of recycled resins, based on advances in the development of the recycled market.

(1) PE and PP sales volume in Brazil in 2021: 2,998,422 ton (source: Valuation book).
(2) Sale of recycled resins only.

▶ Braskem will increase to **1 million tons** its sales volume of products with recycled content by 2030.



ISCC Plus certification for alternative raw materials

In 2021, Braskem became the first Brazilian company to receive the International Sustainability and Carbon Certification [ISCC] for the use of alternative raw materials, the ISCC Plus. Thus, the company's industrial units in the South and Southeast of Brazil will be able to test and produce new polymers from different inputs, with the sustainability of circular products credited and recognized.

An example of alternative raw material is pyrolysis oil - a chemical process that breaks down thermoplastic resin molecules from the heat. To date, ISCC Plus certification was only valid for the I'm green™ bio-based polyethylene production, which is made from sugar cane ethanol.

Braskem also received certification for all of its production plants in Germany and its office in the Netherlands, responsible for commercial operations throughout Europe.

In the United States, the company had its warehouses certified, allowing markets to be developed with sustainable products – biopolymers or resins made from recycled products – produced by units in other regions.

The perspective is that the North American plants will be certified in 2022, guaranteeing sustainability in all links in the chain. In Brazil, there is an ambition to extend certification to plants in the Northeast.

Braskem provides stand-up-pouch packaging for Mãe Terra

Braskem and Antilhas, a Brazilian company acknowledged by the market for its innovative packaging, began supplying Mãe Terra with the mono-material stand-up pouch (SUP) packaging, brought to market in 2019. The new product will be used in the food sector for the first time.

Monomaterial packaging is produced from a single raw material, a characteristic that ensures a high level of recyclability, generating a post-consumption recycled resin of a higher quality with a greater range of possible applications.

The technology brings other additional benefits to the operating process: up to 50% less electric power consumption, and up to 95% less volatile organic compounds, which reduces GHG emissions.

Supply of post-consumer material

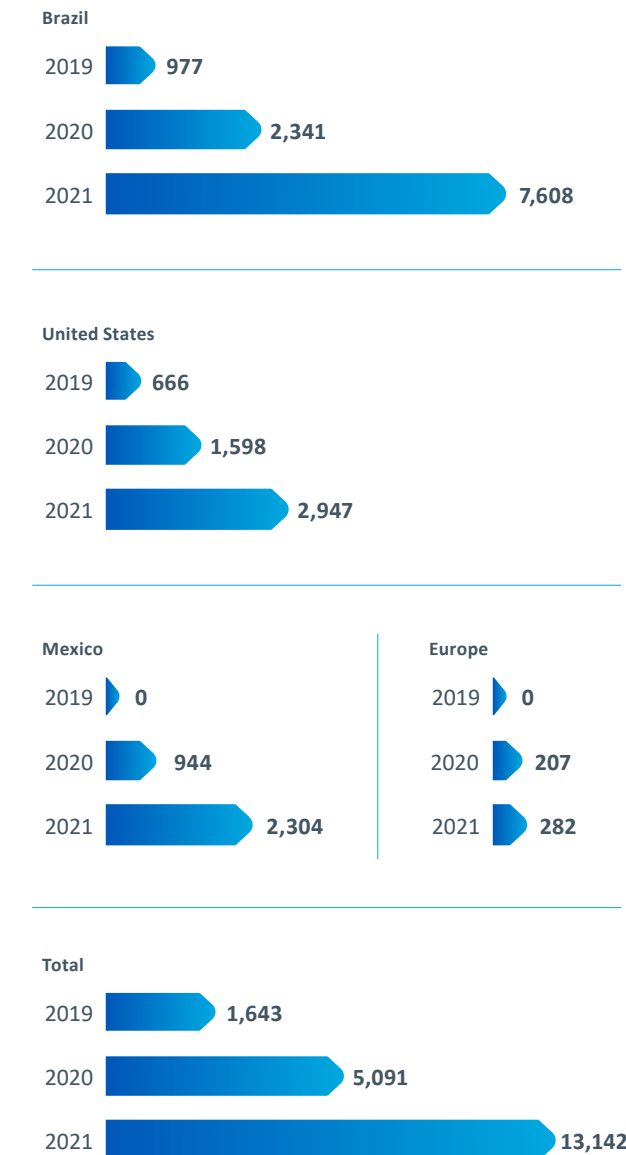
[GRI 301-2]

We aim to recover 1.5 million tons of plastic from the environment by 2030, which represents 19% of the volume of naphtha consumed in 2021⁽³⁾.

Thus, in 2021 we strengthened and expanded our partnerships with partner recyclers in Brazil: Barreflex, Cimflex, Clean Plastic, Ecopel and Wise, in addition to supplying resins, they also partially supply the plastic waste. We continue to look for partners to expand access to recycled feedstock (plastic waste).

(3) Naphta consumption in 2021: 8,104,566.11 tons.

The volume of post-consumer material used in Braskem's production (ton)



The partnership between Braskem Idesa and recycler Alcamare

In 2021, Braskem Idesa signed a long-term cooperation agreement with Alcamare, Mexico's largest recycler, for the development of food-grade recycled material. The agreement represents access to the new high-quality recycled market, which will complement Braskem Idesa's portfolio, and should have a growth rate almost three times higher than that of non-recycled resins in the coming years.



Natural Capital

[GRI 103-2, 103-3 | 302, 303, 305, 306]

Through our activities, we transform renewable and non-renewable natural resources into chemicals and plastics, having sustainable development as a guiding principle. In our new sustainability strategy, two relevant dimensions were defined to address the challenges attributed to natural capital: **combating climate change** and **operational eco-efficiency**.



Dimension 4 COMBATING CLIMATE CHANGE

This dimension relates to the reduction and neutralization of the emission of Greenhouse Gases (GHG), in contribution to the fight against climate change and the goals of the Paris Agreement. We challenged ourselves to reduce our emissions by 15% by 2030, based on 2020⁽¹⁾, and achieve carbon neutrality by 2050. For that, we focus on the energy efficiency of our operations and the use of clean energy, the expansion of businesses involving chemicals and polymers from renewable sources, as well as investment in carbon capture technologies.

We are also committed to the climate resilience of our operations, particularly about water security. In 2030, we will increase to 100% the water security index, which assesses water stress, that is, supply risk, at industrial units. Our long-term goal is to ensure that all water used by Braskem comes from sources with low supply risk.

For more details on
advances in this dimension

[click here](#)



Dimension 5 OPERATIONAL ECO-EFFICIENCY

This dimension seeks to increase the operational efficiency of industrial units, to use natural resources in a sustainable way sustainably environmental risks and impacts. Our priority is to increase energy efficiency, to contribute to the goals established in the climate change dimension. We are working primarily on capturing and standartization, in addition to identifying priority plants, in order to reach specific targets regarding the generation of hazardous solid waste and, water polluting load.

For more details on
advances in this dimension

[click here](#)



(1) The calculus considers the last three years average (2018, 2019, 2020).

Climate Change



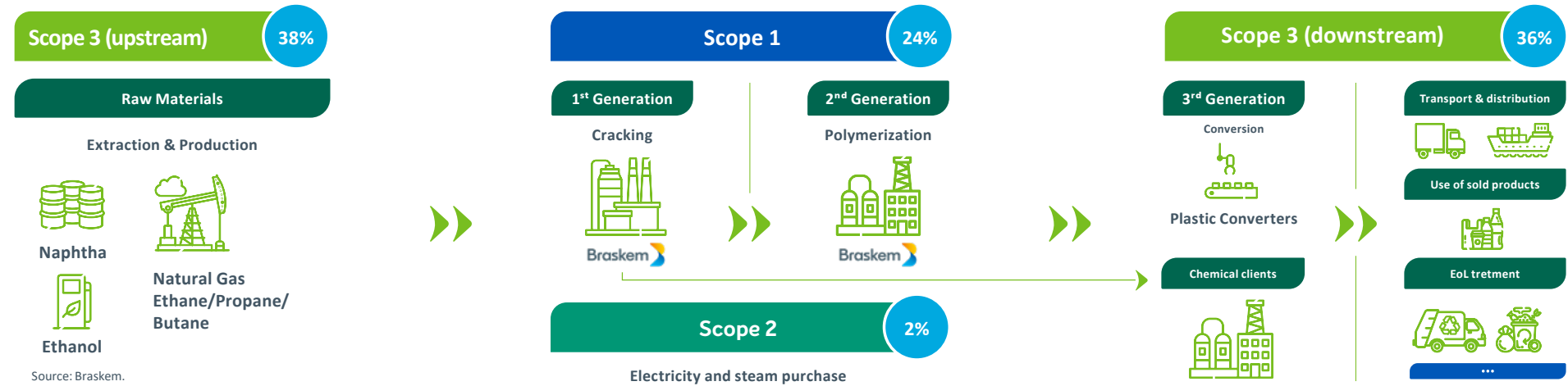
GHG emission [RT-CH-110A.2]

Our 2030 goals intensify the efforts we have been making in terms of climate change mitigation. In 2008, we structured the internal management of the topic, aiming to implement measures to reduce the impact of our GHG emissions on the environment and anticipate potential risks and business opportunities arising from climate change.

As a result, we started to count our emissions inventory - subject to external verification by an independent third party since then, which covers 100% of our global operations.

The inventory is accounted for and verified in accordance with the guidelines of The Greenhouse Gas (GHG) Protocol – Corporate Accounting and Reporting Standard – Revised Edition from WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development) – (2004 Revised Edition), “2006 IPCC (Intergovernmental Panel on Climate Change) Guidelines for National Greenhouse Gas Inventories”, “Especificações do Programa Brasileiro GHG Protocol: Contabilização, Quantificação e Publicação de Inventários Corporativos de Emissões de Gases de Efeito Estufa – Segunda Edição (Accounting, Quantification and Publication of Corporate Inventory of Greenhouse Gases Emissions – Second Edition)”.

Emissions map



GHG emission classification

Indirect emissions, scope 3 (upstream):

1. Purchased goods and services
2. Capital goods
3. Fuel- and energy-related activities
4. Upstream transportation and distribution
5. Waste generated in operations
6. Business travel
7. Team member commuting
8. Upstream leased assets

Direct emissions, scope 1:

- > **Industrial**
 - Mobile combustion
 - Stationary combustion
 - Fugitive Emissions – Refrigeration
 - Fugitive Emissions – Leakage
 - Fugitive Emissions – Insulating gas
 - Solid Waste
 - Liquid effluents
- > **Corporate:**
 - They include corporate units.
- > **Biogenic emissions**
 - Emissions from burning renewable fuels (biomass, ethanol, biodiesel, etc.).

Scope 2 indirect emissions:

- Electrical Energy – Location-based
- Electrical Energy – Market-based
- Steam purchase

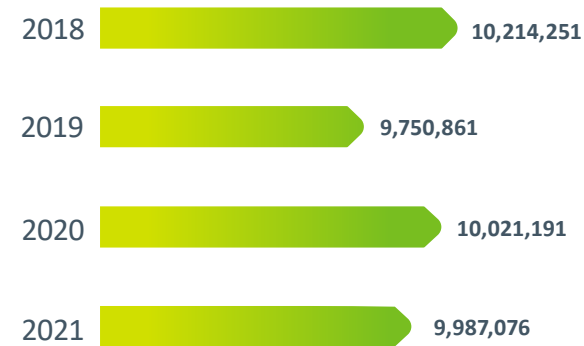
Indirect emissions, scope 3 (downstream):

9. Downstream transportation and distribution
10. Processing of sold products
11. Use of goods and services sold
12. End-of-life treatment of sold products
15. Investments

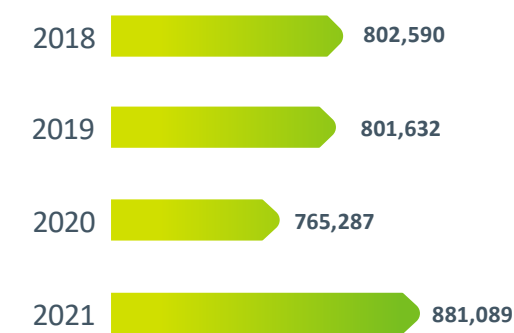
* Greenhouse Gas Protocol, establishes global standards for measuring and managing GHG emissions from public and private sector operations, supply chains, and mitigation actions.

Braskem publishes its GHG Emissions Inventory every year, in accordance with the GHG Protocol guidelines. In 2021, we had a slight decrease of 0.3% in scope 1 emissions and a relevant increase of 20% in scope 2 emissions. However, due to the increase in production, the carbon intensity was 5% lower than the previous year, ending 2021 at 0.637 tCO₂e per ton of production. Regarding scope 3, we improved our reporting premises as a whole, mainly related to the refinement of feedstock type/ location emission factors. Next, more details about the result of each scope.

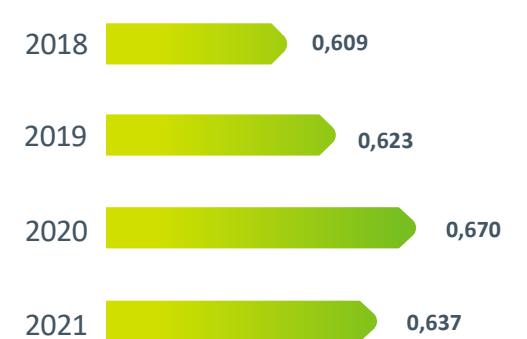
Greenhouse Gases Direct Emission (scope 1) (ktCO₂e)⁽¹⁾
|GRI 305-1|



Greenhouse Gases Indirect Emission (scope 2) (ktCO₂e)⁽¹⁾
|GRI 305-1|



Greenhouse Gases Emission Intensity (tCO₂e/t produced)
|GRI 305-1|



(1) As of 2022, the reference values for global warming potential (GWP) have changed and are in line with the IPCC Fifth Assessment Report (AR5). Therefore, the numbers for scopes 1, 2 and 3 have been updated, considering this new premise..

Scope 1

Most of Braskem’s scope 1 emissions are concentrated at the basic chemical plants, where feedstock (naphtha, condensate, ethane, propane or ethanol) is transformed into plastic products. About 97% of these emissions come from stationary combustion, that is, fixed assets such as furnaces and boilers, where fuels are burned to generate energy for our processes. In 2021, despite the increase in production, emissions had a slight decrease in relation to the previous year (-0.3%), mainly due to maintenance shutdowns at the Q3 unit.

Scope 2

Scope 2 emissions increased by 15% compared to 2020. The purchase of consumed electric energy, which represents around 80% of scope 2, increased 38% in relation to the previous year. The reported variation is mainly justified by a 105% increase in the emission factor of the Brazilian grid in 2021 compared to 2020, together with a 20% increase in electricity consumption due to the return of operation of the PVC unit in Alagoas, which led to a 154% increase in emissions from plants in Brazil. In 2020 there was no consumption in this unit, due to the geological phenomenon.

The plants in Mexico also contributed to the variation in scope 2 emissions, mainly due to a 94% increase in electricity consumption to supply the

interruption of natural gas supply by the Centro Nacional de Control de Gas Natural (Cenagas) between December 2020 and February 2021.

The United States and Europe reduced emissions by 10% and 14%, respectively, in relation to 2020, due to reductions in emission factors.

Emissions from purchased and consumed steam decreased by 27% compared to the previous year, mainly due to an absolute reduction of 22% in Braskem’s steam consumption, mainly from PE8 due to the general maintenance shutdown at the ABC unit.



11th time gold seal in the GHG Protocol and 6th time in the leadership of CDP Clima

In 2021, we were recognized for the 11th consecutive time with the gold classification of the Brazilian GHG Protocol Program (PBGHG) for the complete coverage of greenhouse gases emissions (scopes 1, 2 and 3) and for the third-party verification accredited in the 2020 inventory, and for the 7th consecutive time we achieved leadership position at CDP Clima, with an A- grade.

Industrial Decarbonization Program

In 2021, we launched the Industrial Decarbonization Program, with the main goal of structuring a business plan and advancing in initiatives that promote a 15% reduction in our absolute CO₂e emissions (scopes 1 and 2) by 2030. The Program relates to the Manufactured Capital and is based on the company's carbon inventory, includes 2 important pillars:

- a) Culture and Process: development of industrial mindset linked to GHG emissions reduction, and construction of the means to support this strategy
- b) Main lines of action, structured in:
 - **Governance** – Implementation of management approach that guides business decision-making that aligns with our GHG goal.
 - **Energy efficiency** – Reduction of GHG emissions through energy integration and optimization initiatives, with and without CAPEX.
 - **Energy matrix** - Increase the share of renewable energy and fuels in Braskem's energy matrix.
 - **Transformative projects** – Implementation of key initiatives capable of greatly reduce GHG emissions from the main emitter complexes.

In Culture and Process, several initiatives were developed in 2021, specially the launch of a learning platform for Decarbonization Training Program, with a focus on training industrial teams and a single plat-

form for monitoring, managing, and consolidating ongoing and planned GHG reduction initiatives. In addition, in 2021, we revised our investment policy and included ESG factors, but mainly **internal carbon pricing** as an evaluation factor in the decision-making process of certain Braskem investments lines. In line with the Company's Global Investment Policy, the GHG emissions from each project are now calculated as expenses or revenues in addition to cash flow projections. Pricing has three main functions:

1. It prepares Braskem to deal with international carbon market prices in the future by limiting regulatory risks and promoting a competitive advantage.
2. It accelerates investments in carbon neutral technologies;
3. It strengthens our image and reinforces our commitment to fighting climate change.

In relation to Main lines of action, a global roadmap was developed in the, where more than 50 emission reduction initiatives have been mapped so far, at different levels of maturity and implementation complexity, with a reduction potential in line with the 2030 target. Energy matrix leads participation in the roadmap, followed by energy efficiency.

In addition to focusing on the medium term, Braskem sets annual goals, included in the Senior Executives' Action Programs, in order not only to contribute to reducing emissions, but also to provoke a change in the mindset of the company.

In 2021, we set a goal to map industrial decarbonization levers throughout the year that would contribute to a reduction of 250 kt/year CO₂e (scopes 1 & 2) as of Jan/2022. At the end of 2021, we validated the implementation of initiative that will result in a 285 kt/year CO₂e reduction, exceeding the target by 14%.

Some initiatives were already implemented in 2021 and are worth mentioning within the Decarbonization Roadmap:

Plants in Germany will use renewable energy

As of 2022, Braskem Europe implemented a strategy for the purchase of renewable energy for 100% of its electricity consumption between 2022 and 2024. With this strategy, a reduction of around 80% in greenhouse gas emissions (scope 2) is projected for the European units within the period.

Start of wind farm operation in Bahia

The wind farm Folha Larga Norte, in Campo Formoso (BA), of EDF Renewables, began operation in 2021. With an investment of more than R\$1.5 billion, the wind farm was made possible by contracting energy sales in federal auctions and the free market - in the latter case with the conclusion of the commitment with Braskem as an anchor consumer. Braskem committed to buying energy from the project for 20 years.

Renewable energy participation on Braskem energy matrix

[SASB RT-CH-130a.1]

Total renewable energy (%)



Renewable energy purchased (%)



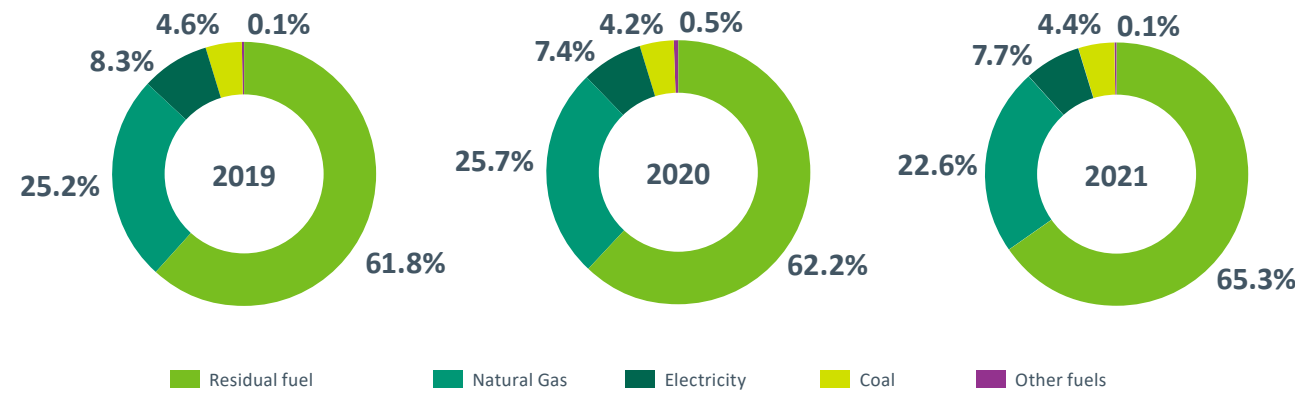
Renewable electrical energy (%)



Braskem and Veolia: renewable energy from biomass

Also, in 2021, Braskem and Veolia signed a partnership of more than R\$400 MM of investment. The project foresees the production of more than 900 thousand tons of eucalyptus biomass steam to be used as renewable energy sources supported by 20 years of contract, a milestone for Braskem on its transition to a parent company renewable energy. With start of operation scheduled for 2024, this initiative will generate a positive socio-environmental impact and the creation of more than 500 jobs throughout the project.

Energy consumption by type in relation to the total consumption (%)



Electrical Energy Optimization at Braskem Idesa

In 2021, Braskem Idesa contributed, among other achievements, with a reduction of 78 kt CO₂e/year through an inspiring initiative of continuous improvement. This is a change in the strategy of the operational site that led to a reduction on steam production and, as a consequence, on the natural gas consumption. and with it the consumption of natural gas. This work was possible due to a detailed, integrated and multidisciplinary analysis that involved the optimization of electric power generation and the adoption maintenance and equipment inspection best practices, in order to guarantee the site reliability.

Vesta Project: modernization of the ABC petrochemical complex

In 2019, Braskem began the modernization of the electrical system in the ABC petrochemical complex, in São Paulo, in partnership with Siemens. The investment of R\$600 million (considering the contributions of the two companies) includes a technological update of the system that serves the cracker, with the exchange of steam turbines for high-throughput electric engines, supported by a new cogeneration plant supplied with residual gas from the petrochemical production process.

Braskem's resources are in partnership with Siemens, responsible for building and operating the high-efficiency cogeneration system through a long-term contract.

The 1st phase of the project was implemented during the cracker's scheduled shutdown with the implementation of part of the electric motors, what resulted in gains of more than 30 kt/year CO₂e.

Throughout 2022, we plan to start up the co-generation module and to evaluate other electrification process.

► With modernization complete, the estimate is **11.4% reduction in water consumption** and **6.3% in CO₂ emissions** from the unit.

Braskem becomes self-producer of renewable energy

In 2020, Braskem signed a contract for the acquisition of wind energy from Casa dos Ventos, one of the pioneers and major investors in the development of renewable projects in this segment in Brazil. The supply of this renewable source began in January 2022, contributing to the reduction of more than 700 thousand tons of CO₂e over the 20-year contract.

In addition to the purchase of energy, in February 2022 Braskem opted to acquire a stake shareholder in wind farms becoming a self-producer power. This initiative is aligned with the ambitions of two of the seven dimension of the company sustainable development strategy: operational eco-efficiency and change climate.

For 2022, our goal is to map initiatives to achieve a 300kt/year of CO₂e (scope 1 and 2), starting in January, 2023.

Energy consumption

[GRI 103-2, 103-3 | 302, 302-1, 302-3, 302-4]

The energy consumption indicator was 10.80 GJ/t, a reduction of 3.8% compared to 2020, due to initiatives to improve efficiency energy, mainly on the petrochemical complex in Bahia, which achieved historical record in this indicator, a reflection of projects and initiatives for process improvement, with and without investments, and continuous scenario optimizations of energy between units on that complex.

Indicator - energy consumption (GJ/T)

[GRI 302-3]



Carbon Removal

For us, carbon removal is linked to the production of chemicals and polymers made from renewable raw materials. We are pioneers and market leaders in the use of sugarcane ethanol in the chemical process. Through the development of proprietary operational technologies and know-how, our operation promotes carbon capture in the sugarcane planting process, transformed into ethanol by our suppliers, which will be used in the production of chemicals and plastics. Thus, the CO₂ removed in this process will be the basis for compensating our emissions based on the insetting methodology.

I'm green™ bio-based sales, our Green Polyethylene

In recent years, demand for Braskem's I'm green™ bio-based resin has been growing consistently, reaching a historic sales volume record in 2020. In 2021, demand continued at a high level, leading to the green ethylene plant utilization rate of 101%, compared to 87% in the previous year – this increase in the level of operation is also a consequence of the high industrial performance. On the other hand, sales were lower compared to 2020 (down 2%) due to the impacts of the global logistical restriction on the export supply chain.

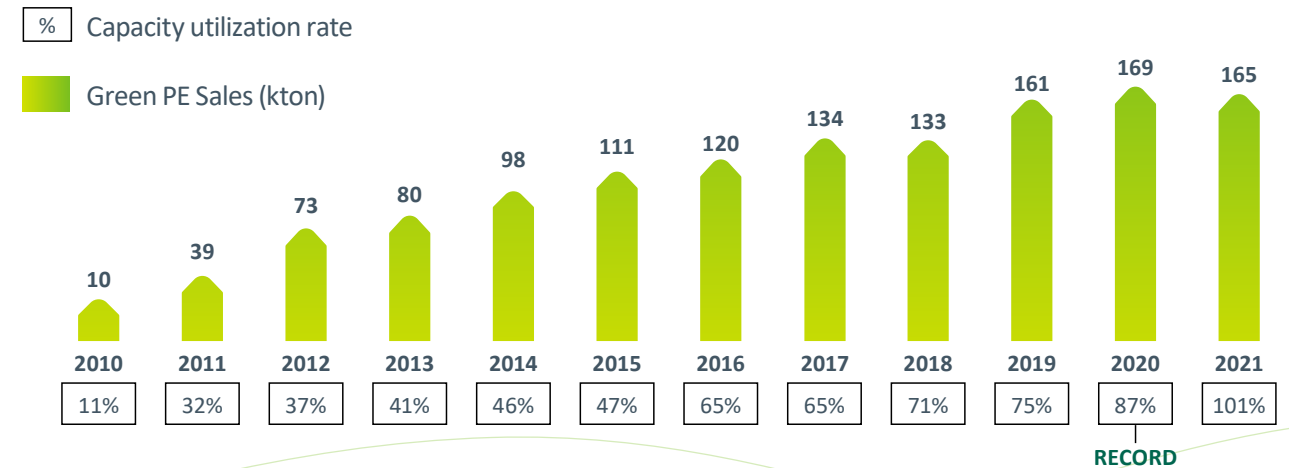
Expansion of production capacity of green ethylene: + 60,000 tons/year



Since 2010, Braskem is leader and pioneer in the production of green ethylene, made from sugarcane ethanol. The unit, which today has a capacity of 200 thousand tons per year, captured the investment of US\$ 290 million, at the time, in the Petrochemical Complex of Triunfo (RS).

In 2021, Braskem announced the expansion of the unit by 60 thousand tons, rising to 260 thousand tons of capacity in the year. The expansion project, budgeted at US\$ 61 million, started in 2021 and is expected to start operating in the fourth quarter of 2022.

Green ethylene is the feedstock for the production of green polyethylene, sold under the brand I'm green™. Between 2010 and 2020, I'm Green™ avoided the emission of at least 5.54 million tonnes of CO₂ – equivalent to more than one year of automotive emissions in the city of São Paulo –, in addition to removing CO₂ in its production process.



Our goal is to increase the production capacity of green polyethylene I'm green™ to **1 million tons by 2030.**

Partnership with the Thai SCG Chemicals

Braskem signed in 2021 a memorandum of understanding with SCG Chemicals, one of the largest petrochemical companies in Thailand and an industry leader in Asia, to conduct feasibility studies for joint investment in a bio-ethanol dehydration plant for the production of bioethylene and I'm green™ polyethylene. If implemented, cooperation can double the capacity of bio-PE I'm green™.

If the feasibility studies are approved between the parties, the production facility will be located in Map Ta Phut, Rayong, Thailand. This project is in line with Braskem's following objectives: (i) carbon neutrality by 2050, (ii) diversify and expand the industrial footprint, (iii) reinforce global leadership in biopolymers to meet customer needs and (iv) further develop more sustainable solutions in Circular Economy.

Partnership for licensing of Braskem green ethylene

In 2021, the subsidiary of Braskem in the Netherlands signed an agreement with the North American Lummus Technology LLC for the joint licensing of the green ethylene technology Braskem in two projects, one under development in North America and another under analysis in Thailand.

The partnership with Lummus, with its process and technology licensing capacity, provides a growth basis for this alternative from a renewable source.

Investments to double bioadditive production for gasoline

Braskem has doubled its ETBE (ethyl tert-butyl ether) in Brazil, an automotive gasoline bioadditive produced in part from ethanol. The company invested more than R\$5 million in the conversion of its MTBE unit (methyl-tertiary-butyl ether), in the Triunfo Complex (RS). The solution represents a sustainable alternative to MTBE, produced from methanol.

Considering the measurement method used in the Renovabio program, and standard conversion factors of the Brazilian Petroleum Agency (ANP), for each ton of ETBE produced, an estimated 847 kg of CO₂ emission is prevented compared to MTBE.

As a result, it contributes towards mitigating climate change, besides meeting sustainability criteria in the most demanding markets.

Carbon Capture

[Click here](#)



Find out more details at
Intellectual Capital



Scope 3 |GRI 305-3|

In 2021, Braskem’s scope 3 emissions totaled about 30 million tons of CO₂e (upstream and downstream), divided into 15 categories according to the GHG Protocol.

More than 85% of these emissions belong to only three categories: 1) purchase of inputs and raw materials, 10) processing of products in the customer chain and 11) sale of finished products (fuels). Given the relevance of the impact of the purchase of inputs and raw materials, which alone corresponds to 43% of the scope 3 emissions of the Braskem, during 2021 we carried out a study with the consultancy Carbon Minds to analyze in greater detail the sources of emissions of naphtha and condensate, raw materials of greater impact on our inventory.

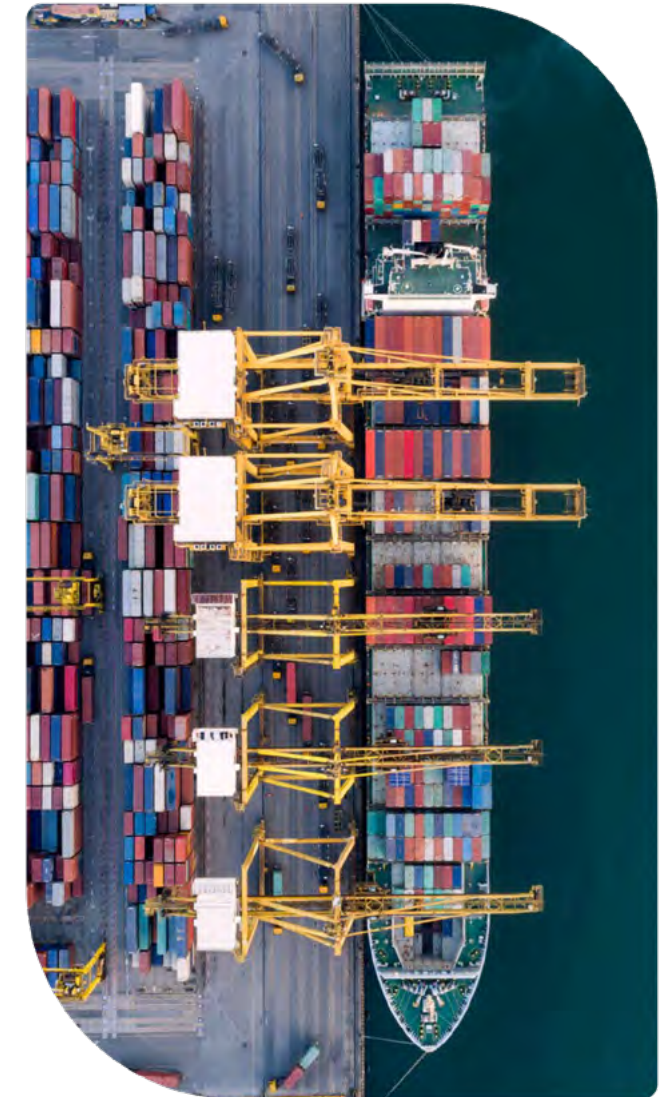
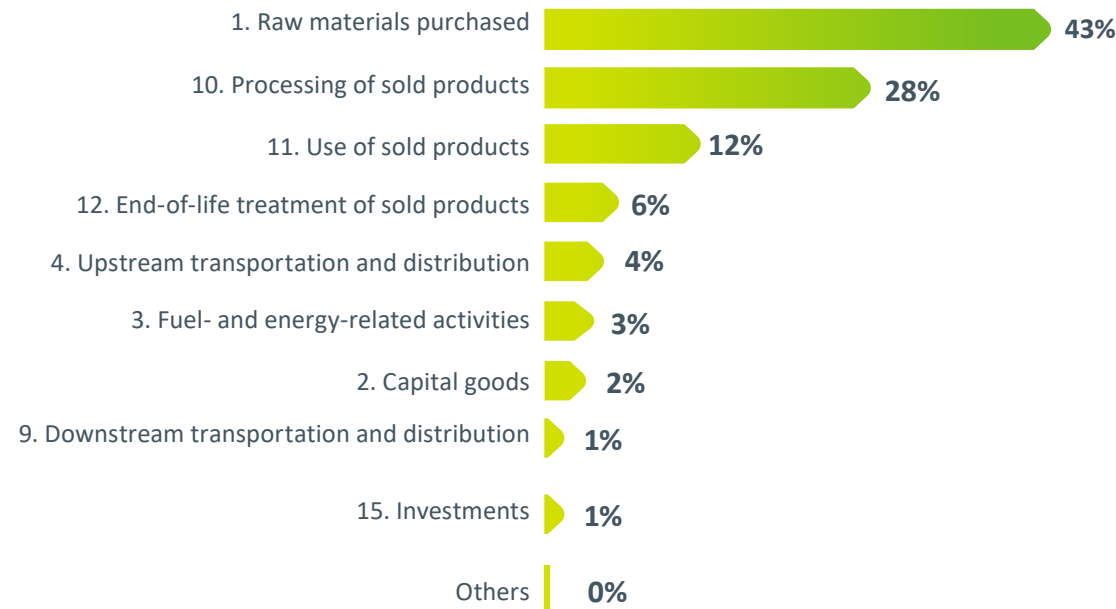
In the case of naphtha, we aimed to understand impacts according to different origins and/or production processes. This information is valuable because, in addition to make the emissions volume more accurate, it also brings greater support for strategic and more sustainable decision-making in terms of the raw material supply chain. The improvement on the calculation methodology was responsible for a relevant increase of emissions of the category, and it represents a great part of the increase in Scope 3 emissions from the Braskem.

The same methodology was applied to recalculate 2019 and 2020 scope 3 emissions.

For the next years, we intend run a similar assessment to categories 10 and 11, seeking for work together with the customer chain to mitigate these emissions.

► Last year, we carried out the first shipment – onboarding process – of **emission-compensated naphtha**, with **Trafigura**. The load offset and reduced carbon emissions associated with the raw material.

Scope 3 emissions categorias participation (%)



Climate adaptation and

Water security | GRI 103-2, 103-3 | 303, 303-1, 303-2, 303-4, 303-5, SASB RT-CH-140a.3 |

Climate adaptation

Between 2014 and 2015, we developed a study to identify climate opportunities and risks in 100% of our operations. Based on this, we create an adaptation plan with actions to mitigate or reduce all the most significant potential climate risks. In 2021, we reached 91.2% of the actions planned for that year were completed, which led to the fulfillment of 77% of the established plan. We concluded actions related to four climate threats, epidemic risk, impact on energy use due to indirect water use, strong storms, and heat waves, in seven industrial units.

Also in 2021, Braskem started to update the climate risk assessment, having as a reference the requirements of the TCFD initiative, contemplating in addition to physical risks, also transition risks. The conclusion of this assessment is scheduled for 2022, also updating the climate change adaptation plan, with actions to mitigate the main potential risks - climatic, physical, and transitional.

Water security

Water is a fundamental resource for our operations, as it is used for cooling and steam generation throughout the petrochemical process and is incorporated into our products. In this way, scarcity, potentially caused by climate change resulting from GHG emissions, presents a risk to our business, as it can have a significant impact on the continuity of operations and incur increased costs. For these reasons, this risk is integrated into the corporate risk matrix and the mitigation actions of the long-term strategy.

Our goal for 2030 is that 100% of the water collected for use in our operations comes from safe sources, that is, that industrial units have guaranteed sustainable access to adequate amounts of water of acceptable quality, using the resource in a socially fair way, environmentally sustainable and economically beneficial.

To this end, in 2015 we carried out a study on the water stress of the basins on which our operations depend. Among the risks identified, those classified as high are droughts and floods, mainly in the Northeast and Southeast regions of Brazil, considering the present (2015) and future (2040) scenarios. For each risk classified as high, action plans were defined, which are incorporated into the water security plans of each industrial unit.

In 2021, the global water security index was 70%, with a 4 percentage points of reduction compared to 2020. This reduction occurred mainly due to the reduction of water consumption from safe sources in the regions of Bahia and ABC/SP, both in Brazil. In Bahia, this reduction was due to the lower resource availability, so there is a greater uptake of surface water. In ABC, the reason was interruption of the unit to maintenance shutdown, thus reducing absolute consumption of water in this region, which Aquapolo is the main supplier and the major contributor for our water security in the region.

Water Security Index



Water Reuse Index⁽³⁾



(3) The methodology for calculating the water reuse index has changed to exclude process improvements that are inherent to the technology used on plants. This change also modified the values of the water security index, as this indicator uses the water security index reuse as one of the calculation elements.

Recognition in water efficiency: CDP's List



Due to the efficient management of water resources, in 2021 Braskem was included for the fifth consecutive time on the global "A-List" of water use by the Carbon Disclosure Program (CDP), a non-profit environmental organization that selects the best publicly traded companies in the world about aspects of sustainability.



Water consumption

As for water consumption, in 2021, our eco-efficiency was 4.19 m³/t, which was an improvement of 2.8% on the previous year and 1.7% below the target stipulated for the year. Reductions were due to the start of the water consumption reduction project for cooling of some systems; optimization of cooling tower cycles; reduction of leaks and minimization of losses; and lower generation of effluents at Braskem Idesa.

Water Consumption |GRI 303-5|

	2018	2019	2020	2021
Total water consumption (m ³) ⁽⁴⁾	75,715,960	72,389,471	69,341,060	70,745,786
Indicator – Water consumption (m ³ /t)	4.28	4.31	4.31	4.19

(4) From all areas, including areas with water stress.

Water Resilience Coalition

Since July 2019, the company has been part of the CEO Water Mandate, a platform of the United Nations Global Pact (UN) that brings together more than 150 companies committed to advancing water resource management.

In defining its Water Security strategy, Braskem takes CEO Water Mandate requirements as a reference, focusing on its direct operations, the supply chain and water basins management, as well as collective actions, among others.

In 2021, we made progress in collective actions that have the objective of engaging civil society, intergovernmental organizations, affected communities and others businesses to promote water sustainability and climate resilience.

As a result of participating in COP26, Braskem joined throughout 2021 were the WRC – Water Resilience Coalition, of the Global Compact, and the “Race to Resilience”, of the UN Framework Convention on Change Climate Change (UNFCCC). The latter is a initiative that seeks to accelerate, by 2030, the actions of non-governmental organizations in the fight against climate change. The focus is on helping the most vulnerable communities on this topic by implementing initiatives that build resilience and mitigate the physical impacts of changes, such as extreme heat, drought and floods. These initiatives strengthen our water security strategy, as the projects that we intend to engage will be developed in high water risk basins in the regions of our operations.

resumption of operation of the chlor alkali unit in Alagoas, increased production in our new PP plant in the United States, and the greater utilization rate of our petrochemical plants in Rio Grande do Sul and Bahia.

Effluents |GRI 303-2|

In all our units, the management of effluents is based on release standards set by local legislation and internal procedures. Some industrial plants also have laboratories capable of analyzing effluents and creating patterns for internal environmental quality assessment.

Each region where we operate is unique, so we respect its characteristics of operation, including the concern with the substances of interest and the composition of effluents. These substances and their limits are listed in country-specific legislation and/or region or operating licenses.

At Braskem, liquid effluents have four general destinations: release into superficial water bodies; ocean release; third-party treatment; and ground sprinkling. For each of the destinations, there are specific quality standards of the effluent released that consider the characteristic of the receiving body. In the case of ground sprinkling, the effluent treatment is carried out internally by the Integrated Effluent Treatment System Liquids (Sitel). For the effluents sent for third parties, the responsibility for monitoring the quality of the effluent is of the third company, which is also responsible for the treatment and to attend the established effluent quality standards - Braskem monitors the effluent analysis results constantly.

Braskem consumes reused water from Aquapolo

Since 2012, Braskem has been using reused water from the Aquapolo project, which transforms wastewater into industrial quality water, and is the largest initiative of its kind in South America. As a result, between 2012 and 2021, more than 60 million cubic meters of reused water was consumed by the company in their processes. Operations in the ABC region of São Paulo practically consumes 100% of the water from this type of source, mitigating the scarcity risks in the region – in 2014, amid the Southeast drought crisis, ABC operations continued normally due to the project.

Aquapolo is the result of a partnership between the Basic Sanitation Company of the State of São Paulo (Sabesp) and GS Inima Industrial, and supplies reused water for the petrochemical complex of Capuava and industries in the ABC region of São Paulo.

Operational eco-efficiency



We understand the relevance of sustainable development, and we seek to go beyond compliance with environmental legislation. We invest in technologies and initiatives that aim to make our operations increasingly eco-efficient, optimizing the use of natural resources and reducing negative impacts on the environment. In 2021, our eco-indicators were positively impacted by the

Effluent generation |GRI 303-4|

	2018	2019	2020	2021
Total effluent generation (m ³)	20,981,429	21,922,812	19,672,409	20,479,434
Indicator - Effluent generation (m ³ /t)	1.19	1.31	1.22	1.21

Waste |GRI 103-2, 103-3 | 306, 306-1|

Braskem monitors its hazardous and non-hazardous waste as part of its Health, Safety, Environment, Quality, and Productivity Policy. Based on local regulations and specific quality procedures for each unit, Braskem constantly seeks efficiency in waste management, having as its basic principle order of priority: 1. Non-generation; 2. Reduction; 3. Reuse; 4. Waste treatment; 5. Waste disposal with an environmentally adequate final destination.

Meeting the priority scale aims to increase eco-efficiency, reduce waste treatment costs, and prevent environmental liabilities. Braskem requires contracted third parties to maintain the same standard of processes and quality that it adopts in its management.

The waste generation eco-indicator was 2.43 kg/t, a 9% increase compared to 2020, explained by scheduled stoppages in several plants, which caused greater generation of waste from maintenance services.

Waste generation (kg) |GRI 306-3|

	2018	2019	2020	2021
Total waste generation (kg)	37,669,700	37,002,579	35,892,667	41,027,838
Indicator – waste generation (kg/t)	2.13	2.20	2.23	2.43

Air emissions

Significant atmospheric emissions(t)⁽¹²⁾ |GRI 305-7, SASB RT-CH-120A.1.|

	2021
NOx	10,014
SOx	5,373
Volatile organic compounds (COV)	6,965
Toxic air pollutants ⁽¹³⁾	459
Particulate matter (MP)	953
Others ⁽¹⁴⁾	6,150

(12) The methodologies used are recommended by local environmental agencies. Locations where there is no measurement, recognized methods for estimation (emission factors) are used estimates, such as US EPA AP-42.

(13) Includes toxic air pollutants and PAHs (hazardous air pollutants).

(14) Includes total hydrocarbons and carbon monoxide.

Braskem performed a reassessment of its atmospheric emissions inventory process, supported by an external consultancy. The goal is to adopt a single standard among the different regions in which it has industrial activity, with the premise of maintaining compliance with the requirements of the respective local environmental agencies and federal legislation.

In this process, opportunities for improvement were found:

- Discussion on emission sources non-combustible.

- Possibility of emission factors equalization considering appropriate condition to our emission sources according to U.S. E.P.A.
- Data standardization regarding the extension of campaigns and equipment load.
- Update of the methodology for monitoring SOx and NOx.

Based on this, the atmospheric emissions for 2021 were calculated already adopting the new improvements.



Social and Relationship Capital

[GRI 102-12, 103-2, 103-3 | 203, 413 | RT-CH-210a.1]

The bonds we build with our stakeholders are the basis for the long-term sustainability of our business. We seek to promote the economic and social development of the locations where we operate, prioritizing people’s safety and raising awareness about plastic disposal.

With our clients and suppliers, we promote ethical, competitive, and lasting relationships. About the government, we seek to respond promptly to the demands and requirements of the authorities.

Finally, we work to ensure best practices in terms of governance and transparency to our shareholders and other stakeholders in the financial market.

This capital is directly related to the **social responsibility and human rights** dimension of our 2030 strategy.



Dimension 6

SOCIAL RESPONSIBILITY AND HUMAN RIGHTS

This dimension of the strategy encompasses several themes. However, about social and relationship capital, it specifically connects to our goals in social responsibility and human rights, as we seek, through our community engagement initiatives, to strengthen ties with the people who live around our operations, as well as reduce human rights risks in the value chain.

For more details on
advances in this dimension

[click here](#)



Social Responsibility and Human Rights

Global strategy on social responsibility (GRI 413-1)

Seeking to achieve the goals established in the Social Responsibility and Human Rights dimension, we reviewed the strategic pillars that guide our social actions, having equity as guiding principles diversity and inclusion, relationships and partnerships, ethics, transparency and business connections. The actions aim to bring social impact and strengthen Braskem’s relationship with the surrounding communities and society.

Social Impact
Promote actions that generate social transformation and local development, respecting specific characteristics of each region.

Relationship
Establish relationships of trust and reputation with surrounding communities and with society.



Sustainable community engagement

Engagement Framework is a methodology that aims to coordinate the implementation of Braskem’s engagement strategy for each surrounding community, both for offices and industrial units. The Framework evaluates, prioritizes and monitors voluntary and mandatory actions with the objective of enhancing positive impacts and minimizing negative ones in each location.

We finalized the pilot project started in 2020 in Bahia and started the project in Duque de Caxias. In this pilot project, the following impacts were identified as priorities:

Environmental Impacts	Socioeconomic Impacts	Human Rights
<ul style="list-style-type: none"> › Atmospheric emissions › Effluents › Hazardous materials › Waste › Noise › Health and safety of the community, including accidents, fires, explosions, and leaks 	<ul style="list-style-type: none"> › Tax payments › Hiring of labor › Boosting the economy, either by the direct investment by the organization (local purchases) or through its supply chain (community spending by suppliers and team members) › Price inflation and competition for local infrastructure (e.g. roads) 	<ul style="list-style-type: none"> › Right to life and personal safety › Right to lifestyle, culture, and traditional livelihoods (traditional people) › Right to private property, housing and to privacy and family life › Right not to undergo forced labor, child labor, or sexual exploitation › Right to a healthy environment (post-consumption plastics)

Global investments in socio-environmental impact

	2018 ⁽¹⁾	2019 ⁽¹⁾	2020 ⁽²⁾	2021 ⁽²⁾
Benefited people	199,281	533,447	236,944	758,828
Invested Value (R\$)	20,784,666	23,456,561	32,719,105	38,527,623

(1) Include investments on Maceió Case.

(2) Include Covid-19 actions and its social consequences.

Our investments in socio-environmental impact are carried out through ISPs (Private Social Investment), donations and the volunteer program in all locations where we operate.

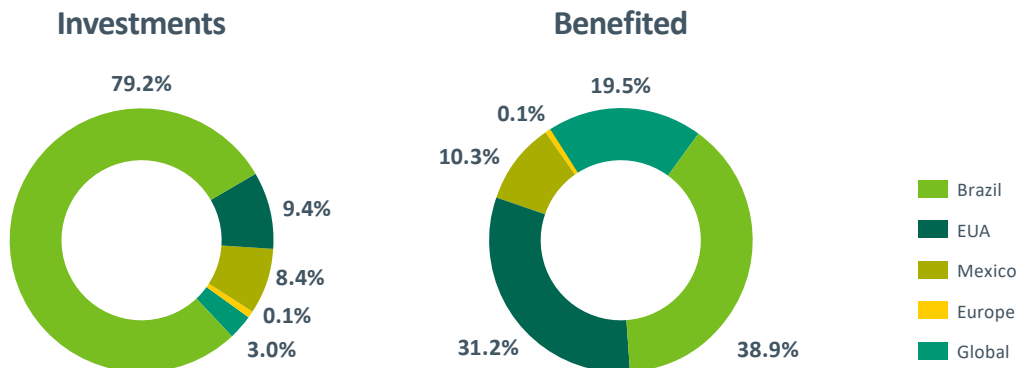
In 2021, 58% of the people benefited by our investments were related to the volunteer program and ISPs that cover the three long-term causes we contribute to: education, circular economy and local entrepreneurship and innovation. About 39% benefited

from donations to mitigate the impacts of Covid-19, which have been carried out since 2020, and 3% of people were impacted through other projects.

We increased the number of people benefited by about 220% compared to 2020, as in that year socio-environmental impact actions were limited by the pandemic. The volume of investments increased approximately 18% as a result of the donation campaign to combat hunger.

Investments and benefited people in 2021, by region

(ISP + donations + volunteering)



Socio-environmental Programs

Global socio-environmental impact in 2021 (ISP + donations + volunteering)

Beneficiaries

- ▶ **758,828** people
- ▶ **200** schools
- ▶ **+5,000** students
- ▶ **+2,500** professors

Volunteering

- ▶ **1,970** volunteers
- ▶ **19%** engagement
- ▶ **+R\$400** thousand donated
- ▶ **24** cities

Circular Economy

- ▶ **40** recycling cooperatives
- ▶ **1,211** sorters
- ▶ **24.3 ton** sorted plastic waste

The results are distributed among several global socio-environmental programs, in line with the pillars of our social responsibility strategy.

Access the main programs and their impacts in 2021.

[Click here](#)



▶ Global Volunteering Program and Donations

The program seeks to encourage team members to act directly with institutions close to their locations. In addition, task forces are organized, which bring together team members and guests to carry out voluntary actions, as was done in 2021 about the Covid-19 pandemic, with the donation of food baskets.

To learn more, go to Chapter 5.

[Click here](#)



In 2021, the actions were performed remotely, without direct contact with the beneficiaries. There were 1,100 volunteers in six countries with about 21,000 beneficiaries.

▶ Sponsorship of the Brazilian paralympic team

We have renewed the sponsorship contract with the Brazilian Paralympic Committee (CPB) until April 2022. The ongoing partnership with Braskem will enable the development of the Brazilian para-athletics team, both domestically and internationally, with the support of actions towards initiation of high performance at the Paralympics Training Center, in São Paulo (SP) as well as in CPB Reference Centers in other regions in Brazil.

Braskem Sponsorships and Donations.

[Click here](#)



Dialogue with communities

[GRI 413-2]

From the adverse impacts perceived by communities where we operate, we act with priority to ensure people's safety and transparent and contributive dialogue with communities affected by impacts from our operations. Our channels are open to the public to communicate any demand, through the communication channels of each industrial unit. Currently, in addition to the Maceió Case presented in Chapter 5, we are in dialogue with two communities:

Madre de Deus, Bahia

The Eviction Program for Environmental Treatment (PDTA, in portuguese) ended the phase of submitting proposals for evicting the stretch of Rua Santos Dumont, adjacent to the land owned by the CCC (Colloidal Carbon Company), in Madre de Deus (BA). The objective of the PDTA was to support the municipality in the eviction of the area, for the continuity of the environmental treatment.

With the finalization of the proposals and the consequent vacating of the area, the environmental treatment of the CCC land can be continued. In 2003, Braskem was invited by Inema, the environmental agency of the state of Bahia, to support environmental treatment because of its extensive technical knowledge of chemical products. Braskem, which has never operated in Madre de Deus (BA), also financially and operationally supported the PDTA, aiming to continue the environmental treatment.

Mauá, São Paulo

In 2020, residents of the Jardim Silvia Maria neighborhood – Mauá and other neighborhoods close to the ABC petrochemical complex (SP) started a complaints process related to “oily black soot” appearing in external areas and inside homes. Within the month that it occurred, CETESB technicians visited several companies associated with the ABC petrochemical complex Committee for industrial development and other industries in the region to identify if evidences and causes could be associated to their production process. Cofip represents Braskem as well as the other 15 committee member companies in this case discussion.

Public audiences have already been held by the Extraordinary Commission on Environment and Rights of the Animals of the Municipality of Mauá to address the situation with communities. COFIP continues in dialogue with the authorities to address issues relating to complaints.

Braskem shut down its equipment at the ABC Petrochemical Complex every six years for planned maintenance and takes measures to act safely and with environmental protection. In 2021, during the scheduled shutdown that took place, additional measures have been implemented to minimize any discomfort that may be felt by the community in relation to possible odors.

▶ Our **communication channels** are open for any dialogue. Mauá residents that want to obtain more information can stay in touch with Braskem by calling 0800 77 00 108 or accessing the website www.braskem.com.br/contact-us

Human Rights

Braskem operates by the UN Guiding Principles on Business and Human Rights (UNGPs), which covers the internationally recognized rights expressed in the International Bill on Human Rights and the International Labor Organization (ILO) Declaration. Our Global Sustainable Development Policy, approved by the Board of Directors, reinforces our commitment to the topic, also expressed in the Braskem Code of Conduct and the Code of Conduct of Third Parties.

UN Global Pact and United Nations High Commissioner for Human Rights (OHCHR) recognize Braskem for good practices in Human Rights

In 2021, the Office of the United Nations High Commissioner for Human Rights (OHCHR) and the UN Global Pact, within the scope of the project Responsible Business Conduct in Latin America and the Caribbean (RBCLAC), have recognized Braskem for its practices related to the preservation of Human Rights. After screening, 12 cases were selected, two of them from Braskem, Social Responsibility and Human Rights and Public Report on Human Rights.

[Click here](#)



for more details on the award.

First global human rights audit

In 2021, we conducted a new Human Rights audit, the first on a global scale, to identify and assess negative impacts in this context, to update and level high and medium risks, as well as review the prioritization of management. During the process, we conduct a documentary analysis, interviews with team members and leaders, interviews with representatives from the surrounding communities and local experts, as well as an analysis of public domain and press information.

The report with the results was completed in early 2022, and then we started meetings with local leaders. The purpose is for us to have our action plans still defined in 2022, to manage 100% high and medium Human Rights risks. Our plans and deadlines will be reported to all stakeholders.

► Our goal is to manage **100%** of the moderate and high risks in human rights by 2030.

Our first due diligence on this topic began in 2016, focused in Brazil operations, and resulted in the first Human Rights Risk Matrix. To ensure an integrated risk management, Braskem also included in 2017, the risks of human rights violations in the Corporate Risk Matrix. The matrix is monitored by the Board of Directors and the Senior Management, and reassessed biannually, ensuring a periodic and systematic review of the risks and opportunities for improvement. The same will be carried out for the new risks identified at the review started in 2021.

In 2021, we met **80%** of the action plans established based on the 2017 risk matrix.

Program for victims of harassment

Since 2020, we have been aligning and designing a structured plan between the Compliance, People and Organization, and Sustainable Development areas for handling and welcoming victims of moral and sexual harassment, one of the human rights risks reported in 2017. We already have provisions for complaints – such as the Ethics Line Channel – and treatment of the aggressor, but we also want to offer a program to the victims.

In mid-2021, Braskem’s legal team joined the work, which is organized on three fronts, all in the development phase: I – guidance document on how to act; II – welcoming structure, which must be integrated into the Comprehensive Welfare program, as a psychological service; and III – training and communication. On this last front, in 2021 we had already performed a live streaming on harassment for Braskem team members. The program is expected to be ready in 2022.

Partnerships | GRI 102-13|

It is clear for us that, in order to achieve our goals in sustainable development, partnerships with our stakeholders are essential. Therefore, in 2021, we started and continued several collaborative works to enable paths to a carbon neutral circular economy.

Cooperation between Braskem and BASF

Since 2021, Braskem and BASF have started a cooperation project to accelerate the transformation of the chemical sector, focusing on challenges related to recycling and carbon neutrality. The initiatives include mechanical recycling flow structure of plastics for grain storage – known as silo bags – for the agribusiness industry.

As a result, the recycled plastics solution is expected to be available on the Brazilian market by the end of 2022. Other initiatives of the partnership include using raw materials from renewable sources and/or recycled.

Partnership between Braskem and Cosan

Braskem joined Cosan in 2021, a group made up of energy and logistics companies, to explore synergies and leverage the circular economy and carbon neutrality. The companies will jointly seek initiatives on four fronts: reduction of carbon emissions, reduction of energy consumption, reduced use of natural resources and promotion of good environmental and social practices.

Relevant partnerships for the sustainable development

Dimension	Partner	Year	Description	Benefit
	Valoren	2021	Recycling facility construction in São Paulo	Increase of recycling resins production capacity
	Tecipar	2020	Plastic waste sorting	Increase of plastic waste availability for recycling production
	Moolécula	2021	Plastic waste collection through a cashback system	Increase of plastic waste availability for recycling production
	Veólia	2022	Purchase of renewable energy	CO ₂ emission reduction
	Casa dos Ventos	2021	Purchase of renewable energy	CO ₂ emission reduction
	EDF	2018	Purchase of renewable energy	CO ₂ emission reduction
	Canadian Inc.	2020	Purchase of renewable energy	CO ₂ emission reduction
	Voltalia	2020	Purchase of renewable energy	CO ₂ emission reduction
	Lummus	2021	Green ethylene technology licensing	Increase of biochemicals and biopolymers production capacity
	SCG Chemicals	2021	Evaluation of joint investment on a new green ethylene plant in Thailand	Increase of biochemicals and biopolymers production capacity
	SENAI, UFRJ e FCC	2020	Advanced recycling technology development	New alternatives for recycling
	Universidade de Illinois	2020	Development of CO ₂ capture technology	New alternative for emission reduction
	Valoren e Nexus	2022	Advanced recycling technology development	New alternatives for recycling

Coalition

Blue Keepers (Brazil)

In 2020, we adhered and sponsored the Brazilian forum that centralizes efforts from various sectors to combat plastic pollution in aquatic environments through waste management and infrastructure development, based on the Global Compact Network of Brazil.

The project Blue Keepers is composed of different short, medium and long-term action fronts:

- ▶ Broad national diagnosis to understand the problem and prioritize areas and forms of action, carried out by the Oceanographic Institute of the University of São Paulo (USP)
- ▶ Emergency actions to remove plastic waste from the environment
- ▶ Execution of pilot projects in different profiles of municipalities
- ▶ Create of content and scientifically based information on the topic

For more information related to this initiative, access Blue Keepers website (portuguese only)

[Click here](#)



In 2021, we completed the diagnostic stage carried out by the Oceanographic Institute of USP. The study provides a national overview of plastic pollution, including poorly managed waste generation hotspots. This data will be the basis for

the unfolding of the next stages of the project, to be started in 2022, which include: prioritization of municipalities for the elaboration of an action plan and implementation of a pilot solution, according to the local situation.

Other partnerships for the sustainable development

Dimension	Coalition	Year	Description	Benefit
	Cyclix	2021	Increase plastics recycling rate from 10% to 90% from innovative solutions in the United States	Braskem joined the consortium in 2021 and is one of founding members
	Water Resillience Coalition	2021	See in Natural Capital	See in Natural Capital
	The Polypropilene Recycling Coalition	2020	Increase access to polypropylene recycling in the United States to ensure that this material is widely recovered and reused in end markets	US\$ 6 million of projects approved by the coalition that will contribute to a 6% increase on the access of recycled polypropylene
	CEO Water Mandate	2020	See in Natural Capital	See in Natural Capital
	CFO Task Force	2020	See in Financial Capital	See in Financial Capital
	Operation Clean Sweep	2019	Global initiative from plastics industry to reduce pellets – plastic flakes and powders – waste to the environment	Mexico became a OCD Blue Member
	Alliance to End Plastic Waste	2019	Sectoral coalition that is committed to investing in projects and technologies to end the disposal of plastic waste in the environment, especially in the oceans.	Approval of three additional projects, reaching 12 projects approved, with an investment of US\$ 5.9 million, out of US\$ 15 million that we have committed until 2023.

Clients

Reputation survey: best result in our history

Braskem has been monitoring its reputation since 2010 through an annual survey carried out with different stakeholders. The study assesses perceptions on emotional aspects, degree of esteem, admiration, empathy and trust, as well as rational indicators in seven dimensions: products and services, innovation, work environment, governance, citizenship, leadership and performance.

In 2021, Braskem’s reputation score was between 60 and 69 points, in the different dimensions, the best result ever achieved since the beginning of the historical series. One of the main vectors of this increase is related to clients, which went from an average to strong grade assessment, with a score between 70 and 79 points. In addition, there were increases in all the rational aspects evaluated, highlighting the evolution of the public perception regarding Braskem’s governance and leadership.

Virtual Braskem week

Holding of the company’s first fully virtual event. The event included stands that offered clients content linked to Braskem’s commitments to circularity and carbon neutrality. We also offered lectures on topics involving plastics, chemicals and society, as well as individual assistance with sustainability specialists.

Suppliers

|GRI 103-2, 103-3 | 205, 308, 412, 414, 102-9, 412-1, 412-3|

The Procurement area plays an important role in the longevity of the business by seeking competitiveness, financial gains, efficiency and compliance. It operates in the contracting of services (industrial and corporate), in the acquisition of equipment and direct and indirect materials, providing resources for the operation of industrial plants and for the administrative areas.

Despite the adverse scenarios imposed by the pandemic, weather conditions, unbalanced supply chains and logistical constraints, we were able to guarantee the supply of raw materials, goods and services for our operations globally in 2021 without major impacts.

We continue with the agenda of strengthening process governance, in which we concluded, throughout the year, several initiatives focused on simplifying processes, digitization and improving the experience of the agents involved in the company’s purchasing process. Some examples are the implementation of new purchase channels, such as electronic catalogs (e-commerce) and the P-card Credit Card in Brazil, resulting in a faster and easier way to buy at Braskem.

Climate action among value chain

We are an influent part in our value chain and because of that we are dedicated to defining the climate change strategy with clients and suppliers.

In 2021, we firmed a partnership with Ecovadis, one of the largest sustainability rating companies for global supply chains, to assess supplier environmental, social and governance management. We completed the pilot assessment of 108 suppliers considered critical from an operational, environmental and social point of view.

Since 2016, we have invited our critical suppliers for the assessment of the CDP Supply Chain and, in 2021, we had 87% engagement for Climate and 79% for Water questionnaires, which made us one of the leading companies in the CDP Supplier Engagement Rating.

Government

Trade associations investment |GRI 102-13|

Region	2021 Disbursement (R\$)	Entities (number)
Brazil	27,484,247.88	82
USA	12,961,848.67	28
Mexico	2,104,005.32	9
Europe & Asia	2,994,589.59	8
Total	45,544,691.46	127

ISO 37001 Certificate for the Anti-Bribery Management System



In 2021, we went through the certification audit that, after analyzing documentation, testing transactions and interviewing team members, did not identify any non-compliance that would represent an impediment to obtaining the certificate. .

Certificate of Authorized Economic Operator (AEO), by the Brazilian Federal Revenue Service

In 2021, Braskem received the AEO certificate, granted by the Federal Revenue Service of Brazil to operators in the international logistics chain that meet the highest levels of safety, compliance and reliability established by the customs agency.

This acknowledged strengthen relationship with international partners and brings several benefits that reduce time and cost in the import process. With this credential, Braskem boosts its activities internationally and reinforces its image as an increasingly competitive, responsible and compliant company.



Intellectual *Capital*

It is through intellectual, together with technological resources, that we acquire a competitive advantage while bringing solutions to the challenges of sustainable development. That's why we've also included a long-term objective in our sustainability strategy that unites these two points: **sustainable innovation**.



Dimension 7

SUSTAINABLE INNOVATION

We understand that sustainable innovation is transversal to Braskem's business since the path to sustainable development necessarily passes through Innovation and Technology (I&T). Thus, we invest in technology and disruptive innovation, directly or through partnerships, to enable the transition process to a carbon-neutral circular economy, based on the development of increasingly cleaner solutions. By 2030, we aim to achieve a Sustainability Index above 90% in the project portfolio.

For more details on
advances in this dimension.

[click here](#)



Sustainable Innovation



Investments in innovation and technology (I&T)

Our investments in I&T, including operating expenses and investments in fixed assets, grew 25% in 2021, compared to the previous year, an increase explained by the resumption of projects after the effects of Covid-19. In December 2021, the portfolio of I&T projects included 223 projects⁽¹⁾ for the development of new products, markets and processes, with a Net Present Value (NPV) of US\$ 2.5 billion. A relevant part of this amount is from long-term initiatives and greater technological complexity, divided into platforms for the development of new technologies, the creation of new product families and the conquest of new markets.

In addition to using our own resources to finance innovation and technology structure, we seek funding in the market, including with innovation promotion agencies, inside and outside Brazil. In 2021, several projects were approved by funding agencies, including the multinational project InRep: an integrated approach to plastic recycling in Europe. The Engineering Research Center for Placticulture, in Brazil, and the dynamic crosslinking project for better recycling of EVA (Ethylene Vinyl Acetate Copolymer), funded by the US Department of Energy and scientifically led by Braskem. These and other projects will help Braskem use disruptive technologies to achieve our carbon neutral and circular economy goals.

Part of the investment in I&T projects occurs through partnerships: with startups, universities, technology licensor and other companies, including competitors in some areas. In 2021, we hired an external consultancy and strengthened the open innovation area in terms of the number of members to map out cooperation opportunities more efficiently.



► **R\$302.8 million**
invested in R&D in 2021

► **81%** of fixed expenses in innovation destined to sustainability in 2021

► **R\$81 million**
million obtained in tax benefits for innovation

- Brazil **R\$50 million**
- United States **R\$29.7 million**
- Europe **R\$1.3 million**

Intellectual Capital Performance

	2020	2021	2021 vs. 2020
Members I&T (number)	292	303	3.8%
Facilities in I&T (number)	13	13	-
Investments in I&T ⁽²⁾ (R\$ million)	242.5	302.8	25%
Sales of products launched during the last five years ⁽³⁾ (% sales volume)	17	14	3 p.p.
Sustainable indexes (%)	80	81	1 p.p.

(1) Relates to projects of market innovation.

(2) Refers to I&T fixed expenses and capital expenditure.

(3) Modified polymers that present improved property when compared to existing grades. New green polymers will be considered new, even with the same properties as comparable fossils.

Innovation platforms

The innovation portfolio addresses strategic objectives and leverages R&D resources across five platforms:

Biomass into chemicals: technologies for converting plant-based raw materials into chemicals, materials, and other value-added products.

Material replacement: technology and product solutions to replace existing materials.

Recycling: technologies for converting plastic waste into value-added products. It includes chemical and mechanical recycling technologies and processes.

Next-Generation process: new processes and technologies for existing and future assets that improve carbon and energy yields and create performance differentiation.

CO₂ in chemicals: technologies to directly convert CO₂ into chemicals, materials, and other value-added products. Includes catalytic and biotechnological solutions.

Product innovation

[SASB 410.a]

The importance of Braskem’s innovation program reflects the good results in the launch of new polyolefin products in all regions: around 14% of the consolidated sales volume come from products launched⁽⁴⁾ in the last five years. In 2021, 21 new resin grades were added to the portfolio, with emphasis on:

- ▶ Two new polypropylene resins developed for the automotive sector for use inside and outside of vehicles, with high rigidity and low levels of Volatile Organic Compounds (VOC).
- ▶ Resin developed for the agro segment intended for drip irrigation systems, with excellent processability and low level of gels in thin-walled tubes.
- ▶ New polypropylene resin launched for sealing layer in flexible BOPP packaging, complementing the portfolio of specialties. In addition, 13 new I’m green™ polyethylene resins were launched, reinforcing our commitment to sustainable innovation.

(4) Products launched in the last five years: the concept includes (i) modified products that show improved property when compared to existing grades; and (ii) new green polymers, which will always be considered new, even with the same properties as comparable fossils; and considers products launched in the last five years from the project launch date.

▶ Our goal is to achieve a Sustainability Index greater than **90% in the project portfolio** by **2030**.



Braskem’s sustainability index

In 2020, we developed and started implementing the Sustainability Index in all of Braskem’s innovation and technology projects, ensuring ensure alignment with sustainability.

All initiatives that are in the planning stage must respond to a questionnaire. For each aspect related to sustainability – water, energy, chemical safety, GHG emissions, and circularity – a project can have a positive, negative, or neutral impact. This evaluation receives an average grade for each initiative. There will be

governance to understand the neutral and negative projects to prioritize them and, if necessary, they will be rejected if there is no adequate justification for the project to remain.

We ended 2021 with 126 projects in innovation and technology, 102 of which had a positive impact on sustainable development, which resulted in a sustainability index of 81%. Projects include benefits such as water savings, energy savings, chemical safety (process/product), greenhouse gas emissions, and circularity.

Innovation structure

Braskem has its research area, with members and centers around the world:

- › **303 Members** dedicated to research and development.
- › **2 Technology and Innovation Centers (CTI)**, one in Triunfo (RS, Brazil) and another in Pittsburgh (PA, United States).
- › **2 Technical Centers focused on polymers**, one in Wesseling (Germany) and the other in Coatzacoalcos (Mexico), and 7 pilot plants.
- › **1 Renewable Chemicals Research Center** in Campinas (SP).
- › **1 Process Technologies Development Center** in Mauá (SP).

As for assets dedicated to research and development, in 2021 there were investments of over R\$85 million in our centers focused on Innovation and Technology. Approximately 43% of the amount was allocated to the CTIs in Triunfo, Pittsburgh, and Wesseling to automate the laboratories, to increase productivity and access to new technologies.

We are also advancing in the expansion work of the CTI in Triunfo, totaling R\$50 million in investments – of which R\$26 million will be applied only in 2021. Among these investments is Recycling Island, a structure implemented in 2021 to test the performance of recycled resins and develop innovative and sustainable products.

Transform for Value: process efficiency

In parallel with the development of technology and innovation, in 2020 we created the Transform for Value (TfV) program to coordinate, accelerate and give agility and flexibility to our areas. The program is divided in five work fronts:

Continuous improvement: projects that seek to increase the productivity of industrial operations, improve the quality of our products and inputs and optimize costs, from the solution of inefficiencies, waste, and variability of operations.

Transformation Office: projects related to synergy and greater efficiency in corporate and industrial processes in transformational projects with a high impact on the organization.

Digital Center: created in 2018, the digital center seeks to implement digital technologies to drive the evolution of strategic elements of our business and processes.

Capex e C&P: projects related to investments in fixed assets, to increase our competitiveness and industrial productivity in the short term.

Energy: projects related to the pipeline of initiatives that contribute to our 2030 climate change goals, with a focus on energy efficiency and renewable energy procurement.

Throughout 2021, TfV continued to evolve, both in the mapping of new opportunities and in the implementation of initiatives, having around 600 initiatives in more advanced stages of maturity, with a value capture of US\$ 277 million/year, above the target, which was US\$ 160 million/year.

Partnerships for innovation

Recycling: Partnership with SENAI and UFRJ

Since 2018, Braskem has been making efforts to develop catalysts to improve the quality of products generated in the chemical recycling process of plastic. The company has worked in partnership with the Polymer Engineering Laboratory of the Alberto Luiz Coimbra Institute for Graduate Studies and Engineering Research at the Federal University of Rio de Janeiro (UFRJ) and with the Senai Institute for Innovation in Biosynthetics and Fibers.

In the most recent phase of the research, which began in 2020, Fábrica Carioca de Catalisadores (FCC S.A.) also entered the partnership to develop an R&T project for chemical recycling of post-consumer plastics. Throughout 2021, the team dedicated itself to the design of a semi-pilot unit and the development of the first catalysts.

The contract for this last stage was obtained after Braskem participated in a selection process opened by Senai, through a public notice. The investments in this phase are estimated at R\$2.7 million, including the financial and human resources of the institutions and companies involved.

Climate Change

Research for a renewable alternative for PET bottles

Since 2017, Braskem and the Danish company Haldor Topsoe, a world leader in providing technology and services to the chemical and refining industries, have been working on the development of technology to produce MEG (monoethylene glycol) made from sugarcane, the bio-MEG.

MEG serves as a raw material to produce PET, a resin used mainly for the manufacture of bottles. The project passed an important stage at the end of 2020: the first demonstration-scale production of bio-MEG. In 2021, we continue to move toward the final stage of the project.

The technology will also produce, in smaller quantities, MPG (monopropylene glycol), a product with applications ranging from unsaturated polyester resins (UPR), very common in civil construction, to cosmetics.

The technology has achieved important milestones in 2021, such as producing bio-MEG samples at the demonstration plant in Lyngby, Denmark, and testing this product in key applications.

Capturing and using CO₂

Since 2019, Braskem has been studying and mapping opportunities related to capturing and using CO₂. As a result, a partnership was entered into with the University of Illinois at Chicago (USA) in late 2020 to research a development pathway for ethylene that captures and converts CO₂ emitted from industrial processes.

In this project, Braskem has contributed to the review and validation of the university's theoretical and experimental studies, in addition to helping with planning to scale the technology.

In 2021, there was a significant advance in discoveries, from which important results were verified, equal to or superior to similar works, related to selectivity and productivity in the capture and conversion of CO₂ into chemicals such as ethylene.

At the same time, throughout 2021, a front of studies and projects was created dedicated to the subject of capturing and using CO₂ within the Innovation and Technology area. The objective is to expand knowledge and accelerate the development of alternative technologies to address CO₂ emitted from industrial sources.

Innovation in the value chain

Braskem Labs



Started in 2016, Braskem Labs is a startup acceleration platform, with programs focused on businesses that generate positive social and/or environmental impact from solutions that use chemistry and/or plastic, carried out in partnership with the Quintessa accelerator. The objective is to encourage this entrepreneurial ecosystem and, at the same time, find solutions for Braskem's business challenges.

The main areas of activity of the startups we are looking for are: agribusiness, biotechnology, packaging, infrastructure and construction, sustainable chemistry, mobility and health.

Between 2016 and 2021, Braskem Labs accelerated 112 startups, of which 96% are still in the market.

Braskem Labs in 2021

388 subscribers

19 accelerated startups

45% of those selected with solutions aimed at circular economy

Co-sponsors:
Johnson & Johnson, Grendene, Oxiteno and Sherwin-williams

Braskem Design Challenge



The competition that annually brings together designers from all over the country in the search for innovative and more sustainable packaging for major brands. In 2021, it reached its ninth edition.

Those selected are gathered in multidisciplinary teams and, in three-day events (hackathons), seek specific solutions for different companies.

All participants undergo training on fundamental concepts for the realization of a good project that seeks to combine design, innovation, and sustainability.

Clients support

In our innovation centers, we also work together with our clients to develop solutions based on chemicals and plastics.

In 2021, we supported 163 clients in Brazil with approximately 15 thousand analyses; 75 clients in the United States, around 8,500 analyses; and in Europe, 66 clients were served, with more than 8 thousand analyses.

Cazoolo: sustainable packaging

Braskem allocated R\$20 million to the construction of a Circular Packaging Development Center, the Cazoolo, in São Paulo (SP), scheduled to open in the first half of 2022. The center will be a innovation hub, through which the company can make partnerships – with clients, brand owners, designers, startups, etc – to develop more sustainable packaging, based on Design for Environment (DfE) and in Life Cycle Analysis (LCA) concepts.



- About the Report
- SASB Content Summary
- GRI Content Summary
- Limited Assurance Report

Appendix

About *the Report*

|GRI 102-21, 102-40, 102-42, 102-43, 102-44, 102-47, 102-48, 102-49, 102-51, 102-53, 102-54|

Braskem's Integrated Annual Report is produced and published annually since 2007 and covers all the fiscal year of 2021 – from January 1st to December 31st. Events after this date and until the final approval date of the document, on May 26th 2022, were also reported.

The document covers the main activities of the company, considering the legal entities over which Braskem has operational control and/or consolidates information in its financial statements.

This report presents the performance of the Braskem in all capitals considered in the company's business model – financial, human, intellectual, manufactured, social and relationship – and that impact its main stakeholders. At the same time, the report makes it possible to know the pillars of our sustainability strategy 2020-2030 and its cross-business performance, material topics considered by Braskem and the company's strategy and business model. In this way, the content brings together the entire ESG theme related to Braskem, in addition to economic information and financials for 2021. Eventual information reformulations are inserted throughout the report through texts or explanatory notes.

The Integrated Annual Report 2021 was developed in compliance with Resolution No. 14 of the Brazilian Securities Exchange Commission (CVM), of December 9, 2020, which made it mandatory for publicly traded companies, when deciding on the preparation and dissemination of the integrated reporting, to fulfill the requirements of Technical Guideline CPC 9 – Integrated Reporting, issued by the Pronouncements Committee Accounting (CPC). Additionally, it determines that the integrated reporting shall be subject to limited assurance by an independent auditor registered in the CVM, in accordance with the rules issued by the Brazilian Federal Accounting Council (CFC). We follow criteria and concepts internationally recognized, such as those of the International Integrated Reporting Council (IIRC), and the Global Reporting standards Initiative (GRI) under Essential standard, and the Sustainability Accounting Standards Board (SASB), for the Chemicals sector. As a way of keep the document concise, we highlight part of the indicators on it and we keep the full data in an online center, with unlimited access.

Braskem's governance bodies, including the Board of Directors, reviewed this report on May 26th 2022. The Integrated Annual Report 2021 also underwent an external evaluation, conducted by KPMG.

Dúvidas, críticas e sugestões podem ser encaminhadas para braskem-ri@braskem.com.br

Click here 

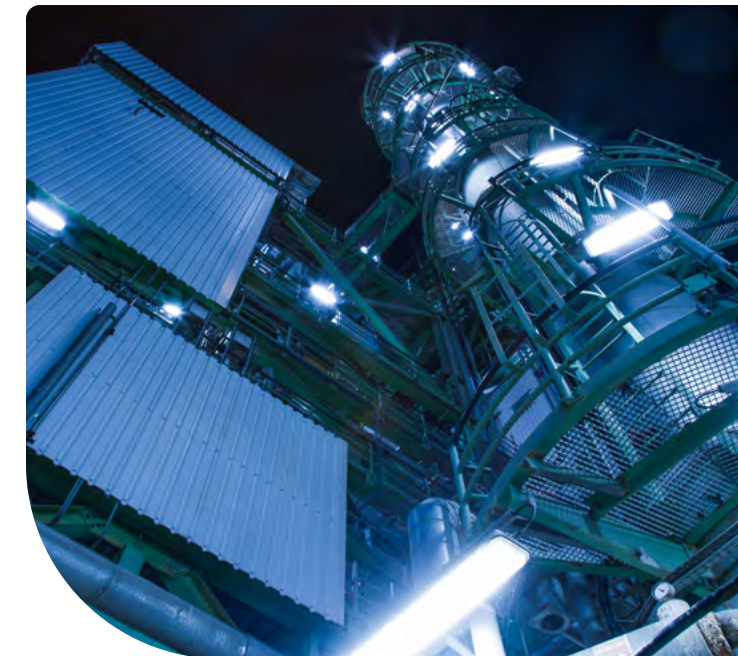
Materiality

The topics covered in this report are material for the company's strategy, as they affect its ability to generate long-term value, either negatively or positively, as defined by our materiality matrix, revised internally in 2020. The matrix considers the risks of the company and indicates the main elements that guided the construction of the Commitments 2020-2030, as well as the correlation of these with the Sustainable Development Goals (SDGs) of the United Nations (UN).

Braskem periodically assesses its materiality to define your long-term goals and support its sustainable development strategy. It encompasses a structured process, through consultation with interested parties, which aims to keep Braskem in the focus of reaching its purpose of improving people's lives through chemistry and plastic.

Learn more 

As a company in the petrochemical industry and supplier of raw materials for different value chains that use plastic products, Braskem permanently focuses on specific activities associated to the impacts of its business, such as health and security, economic-financial results, team members' development, local community development eco-efficiency of its operations, plastic post-consumption, among others.



SASB (Sustainability Accounting Standards Board Index)

Disclosure Topic	Indicator	Metrics	Reference	ODS
Greenhouse Gas Emissions	RT-CH-110a.1.	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	www.braskem.com/esgdashboard	13
	RT-CH-110a.2.	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	52	13
Air Quality	RT-CH-120a.1.	Air emissions of the following pollutants: (1) NOX (excluding N2O), (2) SOX, (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	61	3, 12
Energy Management	RT-CH-130a.1.	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	54	7, 9
Water Management	RT-CH-140a.1.	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	www.braskem.com/esgdashboard	6, 9
	RT-CH-140a.2.	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	We were unable to consolidate this data globally for this cycle and Report. We are committed to improving our global management of this topic and intend to report on it in our 2022 Report.	6
	RT-CH-140a.3.	Description of water management risks and discussion of strategies and practices to mitigate those risks	59	6, 9
Hazardous Waste Management	RT-CH-150a.1	Amount of hazardous waste generated, percentage recycled	www.braskem.com/esgdashboard	12
Community Relations	RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	62	11
Workforce Health & Safety	RT-CH-320a.1.	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	38	8
	RT-CH-320a.2.	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	38	8
Product Design for Use-phase Efficiency	RT-CH-410a.1	Revenue from products designed for usephase resource efficiency	www.braskem.com/esgdashboard	11
Safety & Environmental Stewardship of Chemicals	RT-CH-410b.1	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment	www.braskem.com/esgdashboard	12
	RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	www.braskem.com/esgdashboard	12
Genetically Modified Organisms	RT-CH-410c.1	Percentage of products by revenue that contain genetically modified organisms (GMOs)	www.braskem.com/esgdashboard	12
Management of the Legal & Regulatory Environment	RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	www.braskem.com/esgdashboard	16
Operational Safety, Emergency Preparedness & Response	RT-CH-540a.1.	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Braskem does not disclose the description of the root causes, results and corrective actions of these events because they are numerous and sensitive information.	8
	RT-CH-540a.2	Number of transport incidents	Braskem does not disclose the description of the root causes, results and corrective actions of these events because they are numerous and sensitive information.	8
Production	RT-CH-000.A	Production by reportable segment	www.braskem.com/esgdashboard	8

GRI content index 102-55

GRI 101: Foundation 2016

GRI 102: General disclosures 2016

Standard	Page	Omission	SDG	IBC
Organizational profile				
102-1: Name of the organization	11			
102-2: Activities, brands, products, and services	11			
102-3: Location of headquarters	120, Lemos Monteiro street - Butantã - São Paulo/SP. Zip code 05501-050			
102-4: Location of operations	11			
102-5: Ownership and legal form	Publicly held corporation			
102-6: Markets served	11			
102-7: Scale of the organization	11			
102-8: Information on employees and other workers	www.braskem.com/esgdashboard		8, 10	
102-9: Supply chain	69			
102-10: Significant changes to the organization and its supply chain	No significant change during the period covered by the report.			
102-11: Precautionary principle or approach	As a principle and in accordance with the Health, Safety, Environment, Quality, and Productivity Policy, Braskem does not produce, handle, use, market, transport, or dispose of any product if unable to do so safely, with a minimum impact of the product on the environment.			
102-12: External initiatives	62			
102-13: Membership of associations	67			
Strategy				
102-14: Statement from senior decision-maker	5			
102-15: Key impacts, risks, and opportunities	24			Principles of Governance



GRI content index 102-55

GRI 102: General disclosures 2016	Standard	Page	Omission	SDG	IBC
Ethics and integrity					
	102-16: Values, principles, standards, and norms of behavior	14		16	
	102-17: Mechanisms for advice and concerns about ethics	19		16	Principles of Governance
Governance structure					
	102-18: Governance structure	16			
	102-19: Delegating authority	16			
	102-20: Executive-level responsibility for economic, environmental, and social topics	16			
	102-21: Consulting stakeholders on economic, environmental, and social topics	76		16	Principles of Governance
	102-22: Composition of the highest governance body and its committees	16		5, 16	Principles of Governance
	102-23: Chair of the highest governance body	16		16	
	102-24: Nominating and selecting the highest governance body	16		5, 16	
	102-25: Conflicts of interest	16		16	
	102-26: Role of highest governance body in setting purpose, values, and strategy	16			Principles of Governance
	102-27: Collective knowledge of highest governance body	16			
	102-28: Evaluating the highest governance body's performance	17			
	102-29: Identifying and managing economic, environmental, and social impacts	www.braskem.com.br/corporate-governance		16	
	102-30: Effectiveness of risk management processes	24			
	102-31: Review of economic, environmental, and social topics	www.braskem.com.br/corporate-governance			

GRI content index 102-55

GRI 102: General disclosures 2016	Standard	Page	Omission	SDG	IBC
Stakeholder engagement					
	102-40: List of stakeholder groups	76			
	102-41: Collective bargaining agreements	https://www.braskem.com.br/esgdashboard		8	
	102-42: Identifying and selecting stakeholders	76			
	102-43: Approach to stakeholder engagement	76			Principles of Governance
	102-44: Key topics and concerns raised	76			
Reporting practice					
	102-45: Entities included in the consolidated financial statements	The list of all entities included in the financial statements consolidated statements and other information can be found in Note 2 of the Financial Statements: https://www.braskem-ri.com.br/en/divulgacoes-documentos/annual-reports/			
	102-46: Defining report content and topic boundaries	https://www.braskem.com.br/material-issues-asseessment			
	102-47: List of material topics	76			Principles of Governance
	102-48: Restatements of information	76			
	102-49: Changes in reporting	76			
	102-50: Reporting period	2			
	102-51: Date of most recent report	76			
	102-52: Reporting cycle	2			
	102-53: Contact point for questions regarding the report	Questions, feedbacks, and suggestions about this report can be sent to braskem-ri@braskem.com.br or access https://www.braskem.com.br/contact-us			
	102-54: Claims of reporting in accordance with the GRI Standards	76			
	102-55: GRI content index	78			
	102-56: External assurance	91			

GRI content index 102-55

Material topics	Standard	Page	Omission	SDG	IBC
GRI 201: Economic performance 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issues-assestement			
	103-2: The management approach and its components	43			
	103-3: Evaluation of the management approach	43			
	201-1: Direct economic value generated and distributed	www.braskem.com/esgdashboard		8, 9	Prosperity
	201-2: Financial implications and other risks and opportunities due to climate change	www.braskem.com/esgdashboard		13	
	201-4: Financial assistance received from government	www.braskem.com/esgdashboard		16	Prosperity
	GRI 202: Market presence 2016				
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issues-assestement			
	103-2: The management approach and its components	www.braskem.com/esgdashboard			
	103-3: Evaluation of the management approach	www.braskem.com/esgdashboard			
	202-1: Ratios of standard entry level wage by gender compared to local minimum wage	www.braskem.com/esgdashboard		1, 5, 8	People
	202-2: Proportion of senior management hired from the local community	www.braskem.com/esgdashboard		8	
GRI 203: Indirect economic impacts 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issues-assestement			
	103-2: The management approach and its components	62			
	103-3: Evaluation of the management approach	62			
	203-1: Infrastructure investments and services supported	www.braskem.com/esgdashboard		5, 9, 11	
	203-2: Significant indirect economic impacts	29 and www.braskem.com/esgdashboard		1, 3, 8	

GRI content index 102-55

Material topics	Standard	Page	Omission	SDG	IBC	
GRI 204: Procurement Practices 2016						
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issues-assestement				
	103-2: The management approach and its components	69				
	103-3: Evaluation of the management approach	69				
	204-1: Proportion of spending on local suppliers	https://www.braskem.com.br/ESGDashboard			8	
GRI 205: Anti-corruption 2016						
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issues-assestement				
	103-2: The management approach and its components	19, 69				
	103-3: Evaluation of the management approach	19, 69				
	205-1: Operations assessed for risks related to corruption	24, https://www.braskem.com.br/ESGDashboard			16	
	205-2: Communication and training about anti-corruption policies and procedures	https://www.braskem.com.br/ESGDashboard			16	Principles of Governance
	205-3: Confirmed incidents of corruption and actions taken	https://www.braskem.com.br/ESGDashboard			16	Principles of Governance
GRI 206: Anti-competitive Behavior 2016						
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issues-assestement				
	103-2: The management approach and its components	19				
	103-3: Evaluation of the management approach	19				
	206-1: Legal actions for anti-competitive behavior, anti-trust and monopoly practices	https://www.braskem.com.br/ESGDashboard			16	

GRI content index 102-55

Material topics	Standard	Page	Omission	SDG	IBC
GRI 207: Tax 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	46			
	103-3: Evaluation of the management approach	46			
	207-1: Approach to tax	www.braskem.com/esgdashboard			1, 10, 17
	207-2: Tax governance, control, and risk management	www.braskem.com/esgdashboard			1, 10, 17
GRI 301: Materials 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	12, 47			
	103-3: Evaluation of the management approach	12, 47			
	301-1: Materials used by weight or volume	www.braskem.com/esgdashboard			8, 12
	301-2: Recycled input materials used	50			8, 12
	301-3: Reclaimed products and their packaging materials	49			8, 12
GRI 302: Energy 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	56			
	103-3: Evaluation of the management approach	56			
	302-1: Energy consumption within the organization	56			7, 8, 12, 13
	302-3: Energy intensity	56			7, 8, 12, 13
	302-4: Reduction of energy consumption	56			7, 8, 12, 13

GRI content index 102-55

Material topics	Standard	Page	Omission	SDG	IBC
GRI 303: Water and Effluents 2018					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	59			
	103-3: Evaluation of the management approach	59			
	303-1: Interactions with water as a shared resource	59		6, 12	
	303-2: Management of water discharge-related impacts	60		6	
	303-3: Water withdrawal	www.braskem.com/esgdashboard		6	
	303-4: Water discharge	61		6	
	303-5: Water consumption	60		6	
GRI 304: Biodiversity 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	www.braskem.com/esgdashboard			
	103-3: Evaluation of the management approach	www.braskem.com/esgdashboard			
	304-1: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	www.braskem.com/esgdashboard		6, 14, 15	Planet
	304-2: Significant impacts of activities, products, and services on biodiversity	www.braskem.com/esgdashboard		6, 14, 15	
	304-3: Habitats protected or restored	www.braskem.com/esgdashboard		6, 14, 15	
304-4: IUCN Red List species and national conservation list species with habitats in areas affected by operations	www.braskem.com/esgdashboard		6, 14, 15		

GRI content index 102-55

Material topics	Standard	Page	Omission	SDG	IBC
GRI 305: Emissions 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	51			
	103-3: Evaluation of the management approach	51			
	305-1: Direct (Scope 1) GHG emissions	53		3, 12, 13, 14, 15	Planet
	305-2: Energy indirect (Scope 2) GHG emissions	53		3, 12, 13, 14, 15	
	305-3: Other indirect (Scope 3) GHG emissions	www.braskem.com/esgdashboard		3, 12, 13, 14, 15	
	305-4: GHG emissions intensity	53		13, 14, 15	
	305-6: Emissions of ozone-depleting substances (ODS)	www.braskem.com/esgdashboard		3, 12	
	305-7: Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	61		12, 14, 15	
GRI 306: Waste 2020					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	61			
	103-3: Evaluation of the management approach	61			
	306-1: Waste generation and significant waste-related impacts	61		3, 6, 12, 14	
	306-2: Management of significant waste-related impacts	www.braskem.com/esgdashboard		3, 6, 12	
	306-3: Waste generated	61		3, 6, 12, 14, 15	
	306-4: Waste diverted from disposal	www.braskem.com/esgdashboard		3, 12	
	306-5: Waste directed to disposal	www.braskem.com/esgdashboard		6, 14, 15	


GRI content index 102-55

Material topics	Standard	Page	Omission	SDG	IBC
GRI 307: Environmental Compliance 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	24			
	103-3: Evaluation of the management approach	24			
	307-1: Non-compliance with environmental laws and regulations	www.braskem.com/esgdashboard		16	
GRI 308: Supplier environmental assessment 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	69			
	103-3: Evaluation of the management approach	69			
	308-1: New suppliers that were screened using environmental criteria	www.braskem.com/esgdashboard		16	
GRI 401: Employment 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	www.braskem.com/esgdashboard			
	103-3: Evaluation of the management approach	www.braskem.com/esgdashboard			
	401-1: New employee hires and employee turnover	38		5, 8, 10	Prosperity
	401-2: Benefits provided to full-time employees that are not provided to temporary or part-time employees	www.braskem.com/esgdashboard		3, 5, 8	
	401-3: Parental leave	41 and www.braskem.com/esgdashboard		5, 8	

GRI content index 102-55

Material topics	Standard	Page	Omission	SDG	IBC
GRI 403: Occupational health and safety 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	38			
	103-3: Evaluation of the management approach	38			
	403-1: Occupational health and safety management system	www.braskem.com/esgdashboard		8, 3	
	403-2: Hazard identification, risk assessment, and incident investigation	www.braskem.com/esgdashboard		8	
	403-3: Occupational health services	www.braskem.com/esgdashboard		8	
	403-4: Worker participation, consultation, and communication on occupational health and safety	www.braskem.com/esgdashboard		8, 16	
	403-5: Worker training on occupational health and safety	www.braskem.com/esgdashboard		8	
	403-6: Promotion of worker health	www.braskem.com/esgdashboard		3	People
	403-7: Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	www.braskem.com/esgdashboard		8	
	403-8: Workers covered by an occupational health and safety management system	www.braskem.com/esgdashboard		8	
	403-9: Work-related injuries	38 and www.braskem.com/esgdashboard		3, 8, 16	People
	403-10: Work-related ill health	www.braskem.com/esgdashboard		3, 8, 16	
GRI 405: Diversity and equal opportunity 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	41			
	103-3: Evaluation of the management approach	41			
	405-1: Diversity of governance bodies and employees	38, 42		5, 8	Principles of Governance; People
	405-2: Ratio of basic salary and remuneration of women to men	www.braskem.com/esgdashboard		5, 8, 10	People

GRI content index 102-55

Material topics	Standard	Page	Omission	SDG	IBC
GRI 406: Non-Discrimination 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	19			
	103-3: Evaluation of the management approach	19			
	406-1: Incidents of discrimination and corrective actions taken	42		5, 8	
GRI 412: Human rights assessment 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	69			
	103-3: Evaluation of the management approach	69			
	412-1: Operations that have been subject to human rights reviews or impact assessments	www.braskem.com/esgdashboard			2, 6
	412-2: Employee training on human rights policies or procedures	www.braskem.com/esgdashboard			2, 6
	412-3: Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	www.braskem.com/esgdashboard			1, 2, 6
GRI 413: Local Communities 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	62			
	103-3: Evaluation of the management approach	62			
	413-1: Operations with local community engagement, impact assessments, and development programs	63		The impact assessments, in the pilot phase, were completed in Bahia and started in Duque de Caxias-RJ, therefore, local development programs based on the needs of local communities will be reported in the future.	5, 8, 10
	413-2: Operations with significant actual and potential negative impacts on local communities	65		The negative impacts in Mauá-SP are being investigated by all parties involved.	5, 8, 10

GRI content index 102-55

Material topics	Standard	Page	Omission	SDG	IBC
GRI 414: Supplier social assessment 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	69			
	103-3: Evaluation of the management approach	69			
	414-1: New suppliers that were screened using social criteria	www.braskem.com/esgdashboard		5, 8, 10, 16	
GRI 415: Public Policy 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	19			
	103-3: Evaluation of the management approach	19			
	415-1: Political contributions	https://www.braskem.com.br/centraldeindicadores			16
GRI 416: Customer health and safety 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	www.braskem.com/esgdashboard			
	103-3: Evaluation of the management approach	www.braskem.com/esgdashboard			
	416-1: Assessment of the health and safety impacts of product and service categories	www.braskem.com/esgdashboard			12
	416-2: Incidents of non-compliance concerning the health and safety impacts of products and services	www.braskem.com/esgdashboard			16

GRI content index 102-55

Material topics	Standard	Page	Omission	SDG	IBC
GRI 417: Marketing and labeling 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	www.braskem.com/esgdashboard			
	103-3: Evaluation of the management approach	www.braskem.com/esgdashboard			
	416-1: Assessment of the health and safety impacts of product and service categories	www.braskem.com/esgdashboard			12
	416-2: Incidents of non-compliance concerning the health and safety impacts of products and services	www.braskem.com/esgdashboard			16
	417-3: Casos de não conformidade em relação a comunicações de marketing	www.braskem.com/esgdashboard			16
GRI 418: Customer privacy 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	www.braskem.com/esgdashboard			
	103-3: Evaluation of the management approach	www.braskem.com/esgdashboard			
	418-1: Substantiated complaints concerning breaches of customer privacy and losses of customer data	www.braskem.com/esgdashboard			16
GRI 419: Socioeconomic compliance 2016					
GRI 103: Management approach	103-1: Explanation of the material topic and its boundary	https://www.braskem.com.br/material-issuesassessment			
	103-2: The management approach and its components	19			
	103-3: Evaluation of the management approach	19			
	419-1: Non-compliance with laws and regulations in the social and economic area	www.braskem.com/esgdashboard			16

Credits

Braskem

Carolina Rodrigues Pignata
Gabriela Linhares Bacarin
Marina Muniz Rossi
Tamiris Yuri Sakamoto
Thiago Gonçalves
Vittoria Neves Picarelli

TheMediaGroup

Consulting, content and design

Imagens

Brand Center Braskem
Getty Images

Assurance

KPMG GRI 102-56

