

## Braskem's Positioning on Biodiversity, November 2025.

### Relevance of biodiversity

At Braskem, we recognize that the conservation of biodiversity and associated ecosystem services is a global challenge and that companies have an important role in this agenda, seeking to adopt practices in line with the United Nations Sustainable Development Goals and considering the Kunming-Montreal Global Biodiversity Framework (GBF). In view of this, we integrate environmental, social and governance management practices into our operations and value chain, understanding the conservation and promotion of biodiversity as an essential part of our business strategy.

The chemical sector is present in [95%](#) of all manufactured goods globally<sup>1</sup> and serves as the basis for practically all other industries, as well as a source of innovative solutions to complex challenges of humanity. Braskem is a pioneer and world leader in the production and supply of [plastics made from plants](#). We are committed to generating better understanding and structured actions for the agenda of biodiversity conservation and ecosystem services, intrinsically connected with climate change, water and circularity, which are already priorities for the company and clearly incorporated into our [corporate strategy](#) and [long-term objectives](#) element.

Braskem recognizes the importance of biodiversity and its role in sustaining ecosystem services on which we depend as a species and society. Since 2020, "biodiversity and land use" has been a material topic for the company, currently classified as medium relevance both for Braskem and for stakeholders in our [materiality matrix](#)<sup>2</sup>, according to participatory reviews in 2020 and 2022. The biodiversity and ecosystem services<sup>3</sup> agenda gains even more relevance in the transformational moment that the company is experiencing under the strategic direction of **switch to gas, fly up to green**, reflected in the feasibility of projects to increase gas-based capacity and in the implementation of renewable-based ones.

### Connection with the business and ongoing initiatives

Braskem values and encourages good social and environmental practices throughout its chain. According to a report by [WEF and PwC](#) (2020), it is already known that most of the chemical sector's nature dependencies and ecosystem services are hidden in its supply chain, with more than 50% of its gross value added classified as high or moderate dependence. The use of biomass to produce plastics made from plants, renewable raw material, is directly dependent on natural resources and

---

<sup>1</sup> Nature Positive: Role of the Chemical Sector, WEF. April 2024.

<sup>2</sup> The materiality matrix is a fundamental tool and indicates the relevant topics for Braskem's performance in relation to sustainable development. Its elaboration process takes into account international references and frameworks to understand potential negative and positive impacts of the business model, including consultation with stakeholders, assessment of corporate risks and opportunities associated with the identified topics.

<sup>3</sup> Ecosystem services: in a simplified way, ecosystem services can be understood as benefits provided by nature, such as water supply and purification, provision of genetic material, provision of biomass, air filtration, among others. As recognized by several studies and pointed out by the *International Finance Corporation* ([IFC, 2012](#)), due to the role of biodiversity in sustaining ecosystem services, impacts on biodiversity can negatively affect the provision of such services.

ecosystem services for its planting and development. Since the start of production of I'm green™ bio-based polyethylene in 2010, and striving for responsible sourcing oriented towards sustainability, Braskem has implemented a code of conduct for suppliers of ethanol from sugarcane. In 2016, we evolved to the development and application of the Responsible Ethanol Purchasing Program ([RESP](#)). The RESP<sup>4</sup>, updated in 2023, in addition to being based on social aspects, human rights, and labor practices, aims that forests and ecosystems are protected and restored, biodiversity and ecosystem services are conserved, and the impacts of climate change are reduced. Specific biodiversity requirements are required as an eligibility criterion in the different degrees of maturity and compliance of ethanol suppliers to Braskem and include demonstration of (i) that there has been no conversion of native forest since 2008 in the sugarcane production area – in commitment to a deforestation-free chain – and that it complies with Permanent Preservation Areas and Legal Reserves; (ii) communication process with workers, community and potential hunters/fishers, in order to prevent illegal hunting and fishing with predatory practices; (iii) have fire monitoring methods, as well as measures to restore forest and compensate for areas that have suffered loss of habitat/biodiversity; (iv) have a biodiversity management plan (BMP) prepared and updated regularly. The BMP should encompass the management and creation of habitats by growing and maintaining a mixed population of native herbaceous species, shrubs and trees to create habitats of high biodiversity value. The program also has requirements related to correct soil management, reduction of pesticide use through integrated pest management, and encouragement of regenerative agriculture practices. To ensure supplier compliance, annual internal sample audits are carried out, as well as verification by certification bodies accredited for Bonsucro and ISCC+ certifications.

In its own operations, Braskem is committed to eliminating pollution, one of [the contributing vectors for the direct loss of biodiversity](#), focusing on the [elimination of plastic waste](#), the [efficient use of natural resources](#), notably water and energy, and combating [the effects of climate change](#), with emission reduction targets and *net zero* commitment by 2050. Potential impacts and risks are managed both from recognized health, environment and safety standards – such as the ISO 14001 certifications obtained, in voluntary initiatives in the chemical industry, such as Responsible Care® and Responsible Performance®, in the company's participation in [Operation Clean Sweep](#), and from a perspective of risk analysis and legal compliance for NOx emissions, SOx, VOCs<sup>5</sup>, particulate matter and PAHs<sup>6</sup>.

In addition to legal compliance and conditions provided in environmental licenses, Braskem has several initiatives that are connected to the biodiversity and ecosystem services agenda:

---

<sup>4</sup> The RESP is based on four guiding principles: management and ethics, quality, environment, social responsibility and human rights, and is reviewed whenever necessary to ensure alignment with global governance requirements and mitigate social and environmental risks in the chain.

<sup>5</sup> VOCs: Volatile Organic Compounds.

<sup>6</sup> Includes toxic air pollutants and hazardous air pollutants.

**(a) Responsible Ethanol Purchasing Program (PCRE)** – biodiversity conservation and combating climate change as central objectives of the Program, accompanied by criteria for supplier eligibility, as described above.

**b) Management of socio-environmental risks linked to the operation** – risks mapped within the Health, Safety and Environment agenda. This document highlights the one referring to soil and water conservation, duly addressed in our [2030 objectives](#) of implementing 100% of the annual plans for mitigating socio-environmental risks.

**c) Life Cycle Analysis (LCA) of products** – the LCA approach evaluates different impact categories, including eutrophication (terrestrial, freshwater and marine), as well as ecotoxicity, land use, water scarcity, water use and use of mineral resources.

**d. Corporate risk management** - among the risks monitored in Braskem's corporate portfolio, 3 operational and strategic risks are identified that, in some way, are related to the biodiversity conservation agenda and ecosystem services: "Non-Adaptation to the Low Carbon Economy", "Socio-environmental Damage" and "Climate Damage". These risks are properly detailed and have specific action plans.

**e. Climate Transition Plan** – the plan addresses climate mitigation, management and adaptation actions to risks, as well as water security. In its 2030-50 decarbonization roadmap, it presents a series of opportunities and risks linked to technological routes that allow such an achievement, including opportunities to gain energy efficiency, thus contributing to the reduction of the use of natural resources, known to be one of the main direct vectors of biodiversity loss ([IBPES](#)).

**f. Sustainability assessment of raw materials.** In 2025, Braskem developed its own tool to support the decision-making process on renewable raw materials and their sustainability attributes. Currently, the methodology encompasses 8 macro-themes, each covering indicative evaluation criteria oriented towards sustainability. For example, deforestation and land use are mentioned – the latter, a material topic for the company along with biodiversity – water vulnerability, food security, and greenhouse gas emissions and energy. Indicators such as regenerative agriculture practices and land use change are some of the criteria evaluated. The initiative guides the company's new projects in the bio-based business and seeks to identify raw materials that are better positioned in terms of sustainability.

**g. Climate adaptation and water security plan** – ecosystem services such as climate regulation, regulation of rainfall patterns, flood mitigation, storm mitigation, and soil erosion control service, just to name a few, are essential so that risks linked to climate change can be mitigated. The climate adaptation and water security plan maps and addresses transition and physical risks, as well as opportunities for the agenda.

**h. Human rights due diligence** – the promotion of the human right to a clean and healthy environment for all people, including those who belong to the communities surrounding our operations, is part of the objectives of [human rights due diligence](#) in the company, as well as the right

of access to water, thus connecting to the biodiversity agenda, mainly from the perspective of ecosystem services of provision.

**i. Brazilian Biodiversity Law and Nagoya Protocol** – Products made from natural ingredients from biodiversity may involve activities subject to rules that regulate access to genetic heritage and associated traditional knowledge, that is, research or technological development carried out on a sample of genetic heritage, as well as the sustainable use of such genetic resources, including potential benefit sharing and biodiversity conservation. At the international level, the Nagoya Protocol stands out and, at the national level, the Brazilian Biodiversity Law (Law No. 13,123/2015 and Decree No. 8,772/2016), under which products from our bio-based portfolio, such as Green PE, Green EVA, Green Wax, Bio-HLR and green solvents, are included. Braskem operates in accordance with Brazilian biodiversity legislation, having access registrations with the Genetic Heritage Management System - SISGEN and verifies potential application of the Nagoya Protocol in all countries where it operates. In this way, traceability of the inputs used and full compliance with the legal and regulatory requirements applicable in our research and technological development activities involving biodiversity resources, both Brazilian and exotic, are conferred. In addition, Braskem has an internal and external consulting team dedicated to the topic, as well as played an important role in advocacy with regard to the developments of national and international standards for the chemical sector.

**j. Prevention of the loss of plastic resins for rivers and oceans** – with a focus on prevention, on a voluntary basis and in observation of circularity, Braskem joined *Operation Clean Sweep* (OCS), being certified by OCS Blue, the result of the company's efforts to prevent pellets, flakes and powders from reaching the environment.

## Integrated agenda and vision of the future

Based on ongoing initiatives, Braskem seeks to go further and in an integrated manner. Thus, in line with the best knowledge available and practiced for the sector, Braskem will deepen its analysis of its interfaces with aspects of nature, with a special magnifying glass for biodiversity and ecosystem services, guided by the main vectors of biodiversity loss identified by IPBES, *Science-Policy Platform on Biodiversity and Ecosystem Services*, and in compliance with guides and tools such as TNFD<sup>7</sup> - *Taskforce on Nature-related Financial Disclosures*, ENCORE<sup>8</sup> and others. In this process, the company will also observe as one of the guides, the principle of the hierarchy of impact mitigation.

---

<sup>7</sup> [TNFD](#): It's a global market-led, science-based, government-backed initiative. The recommendations and guidance provide organizations with a risk management and disclosure framework to act on nature-related dependencies, impacts, risks, and opportunities. They are designed to provide useful decision-making information to capital providers and other stakeholders. Its additional guidance helps organizations identify and assess their nature-related issues.

<sup>8</sup> [ENCORE](#) *Exploring Natural Capital Opportunities, Risks and Exposure*), widely and globally used, "s a free, online tool that helps organisations explore their exposure to nature-related risk and take the first steps to understand their dependencies and impacts on nature. The ENCORE tool is maintained and continuously improved by Global Canopy, UNEP FI and UNEP-WCMC, who together form the ENCORE Partnership."

In an initial effort to be continuously polished and anchored in the ENCORE tool, Braskem starts from the following framework applicable to the chemical industry in terms of potential dependencies and impacts related to ecosystems and, therefore, biodiversity. This framework is configured as a guiding starting point, and may vary depending on future analyses, locations and improvement of methodologies. Therefore, it does not necessarily reflect the company's operations.

#### MANUFACTURE OF CHEMICALS OPERATION - DEPENDENCIES AND POTENTIAL PRESSURES (IMPACTS)<sup>9</sup>

##### Potential Dependencies on ecosystem services

- Water supply
- Rainfall pattern regulation
- Soil and sediment retention
- Solid waste remediation
- Water purification
- Water flow regulation
- Flood mitigation
- Storm mitigation



Chemical industrial plant

##### Potential Impacts

- Disturbances (e.g. noise, light)
- GHG emissions
- Emissions of non-GHG air pollutants
- Emissions of toxic pollutants to water and soil
- Volume of water

Source: ENCORE Methodology. Valuation based on "Manufacture of chemicals and chemicals by ISIC Division"/"Manufacture of basic chemicals by ISIC Group Class"; "Manufacture of other chemicals"; "Manufacture of plastics and synthetic rubber in primary forms". As of July 2025, classification.

Note 1: The above representation considers potential impacts and dependencies classified as "medium", "high", or "very high" materiality according to the ENCORE public tool. It is worth noting that only the potential impacts "disturbances", "GHG emissions" and "water volume" are considered by the methodology to be the most significant for the chemical industry.

Aware of the importance of the biodiversity agenda and committed to its conservation, as next steps in building an in-depth and integrated approach to our business, the company will carry out a more granular biodiversity assessment for its operations and supply chain soon, creating bases for defining locations and actions to prioritize, as well as potential specific objectives. The company will do this **(i)** gradually, expanding the scope and deepening of the assessment of impacts, dependencies and risks in biodiversity and ecosystem services, as we gain experience and understanding on the subject, as recommended by TNFD in its [Additional sector guidance Chemicals<sup>9</sup>](#); **(ii)** in an integrated manner with Braskem's already more advanced climate, water and circularity agendas, with provision for stakeholder engagement whenever appropriate; and **(iii)** following the deployment and advancement of existing and potential *frameworks, guidelines* and regulations in Nature.

This biodiversity positioning is endorsed by company's high leadership<sup>10</sup>.

<sup>9</sup> Referring to version 1.0, June 2024.

<sup>10</sup> The instances of governance of director and vice-presidency participated in the development and approval of this document prior to its publication.