

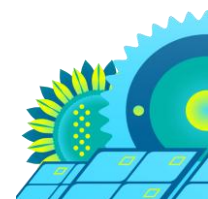
**Climate Change
and energy
transition
supplement
2025**



**PETROBRAS.
LEADER IN A
JUST ENERGY
TRANSITION
IN BRAZIL**

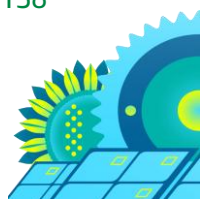


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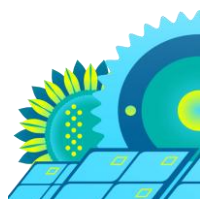
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Letter from the Chairman of the HSE Committee of the Board of Directors

We are pleased to present this new edition of the Climate Change and Energy Transition Supplement. This instrument fosters transparency and dialogue with our stakeholders. This year, we added energy transition to the document title. This change reflects our engagement with solutions across multiple sectors, including the expansion of our bioproducts portfolio and investments in renewable power generation, carbon capture, and nature-based solutions. We are committed to moving the company forward responsibly and transparently, aligning our strategy with society's needs and the challenges of climate change.

Science confirms global warming is real and requires immediate action. Meanwhile, energy demand rises as economies develop and social well-being improves.

Our strategic planning considers the Brazilian context, where the main source of greenhouse gas (GHG) emissions is land-use change rather than the energy sector. We have the most diversified and renewable energy matrix among G20 members. However, our per capita energy consumption remains below the global average. In this context, we seek to reduce GHG emissions and decarbonize operations while ensuring a safe and affordable energy supply for society.

Investments in the energy transition will total US\$ 13 billion over the 2026–2030 period, covering decarbonization of operations, profitable diversification, and research, development, and innovation (R&D&I).

Emissions management, climate risks, and opportunities are now central to our strategy and governance. Our ambition is to achieve carbon-neutral operational emissions by 2050, supporting Brazil's commitments, and we have already made significant progress.

We are committed to being part of the solution. The energy transition needs innovation, investment, and open dialogue to succeed. We move ahead, reconciling oil and gas production with diversifying into low-carbon businesses. Our purpose is to provide energy that creates prosperity and well-being for society—ethically, fairly, safely, sustainably, and competitively.

Rosangela Buzanelli Torres

Chairman of the HSE Committee

Member of the Board of Directors

Letter from the President of Petrobras and Energy Transition and Sustainability Executive Officer

This new edition of the Climate Change and Energy Transition Supplement shows that, in recent years, Petrobras has advanced along its decarbonization pathway, reaffirming its commitment to reducing greenhouse gas emissions. Since 2015, we have reduced methane emissions by 62%, and in 2025 we surpassed the 80 million tonnes of CO₂ reinjected into the pre-salt, consolidating our technological leadership in carbon capture (CCUS). We have maintained the lowest emissions intensity in Exploration and Production (E&P) activities in the industry, as a result of a strategy that combines operational efficiency with technological innovation.

The Brazilian context, marked by a diversified energy mix and growing energy demand, presents significant opportunities for expanding renewable energy sources. Fossil fuels will continue to play a significant role, given the projected growth in demand in the country's energy planning. Our ambition is to maintain Petrobras's share in energy supply through 2050, balancing our focus on oil and gas—which remains essential for Brazil's energy security and for the economic viability of the energy transition—with responsible expansion into low-carbon energies and bioproducts.

In 2025, we made progress on structural issues related to both emissions' mitigation and climate adaptation capacity. Key highlights include advances in developing the Carbon Neutral Program—which identifies cost-effective opportunities for decarbonizing our operations—actions to enhance transparency through a "technology roadmap," and the alternatives assessed and prioritized for medium- and long-term decarbonization.

The new cycle of strategic investments expands the focus on bioproducts, including ethanol, biodiesel, and biomethane. We have also invested in co-processed products, such as Diesel R5, SAF (sustainable aviation fuel), and Bunker B24, which are already contributing to short-term emissions reductions. At the same time, the strategic partnership with Lightsource bp marks our entry into utility-scale solar energy, an important step in diversifying our portfolio. We remain committed to reconciling the energy transition with value creation and the energy security of our country.

Magda Chambriard

President of Petrobras

William França

Energy Transition and Sustainability Executive Officer

Executive Summary



Executive Summary

We address the challenges of **climate change** and **energy transition** and their implications for **our business**, and we seek **transparency** through the publication of this **Climate Change and Energy Transition Supplement**.

This **report** presents key information on our climate change and energy transition **risks and opportunities**, as well as our **vision, actions, and commitments** related to this topic, in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), which form the basis for the development of new climate-related disclosure standards, including IFRS S2 Climate-related Disclosures, issued by the International Sustainability Standards Board (ISSB).

Brazil has achieved remarkable progress, with renewables accounting for **50% of the energy mix** and **88.2% of the electricity mix** by 2024—well above global averages (**16%** and **32%**, respectively).

In the transportation sector, the country stands out with **25.5% liquid biofuels**, compared to **4% globally**, establishing itself as the world's second-largest producer. These results reflect decades of structural public policies, including Proálcool, RenovaBio, and, more recently, the Fuel of the Future Law.

This context highlights the unique characteristics of the country's emissions profile. In 2022, Brazil recorded approximately **2 GtCO₂e** in greenhouse gas (GHG) emissions, of which **71% were associated with land use, land-use change, and forestry (LULUCF)**, as well as agriculture and livestock. The energy sector accounted for only **21%** of these emissions—a proportion significantly lower than the nearly **70%** observed globally. The oil and gas sector accounts for **12%** of emissions from the **national energy sector**, equivalent to just **2%** of **Brazil's** total emissions.

Globally, Brazil's total emissions correspond to **3.5%** of total global **emissions**, and the Brazilian **energy sector** accounts for **1% of total emissions** from the global energy sector.

Brazil's Nationally Determined Contribution (NDC) sets a target to reduce emissions by **59% to 67% by 2035** (compared to 2005 levels) and achieve **climate neutrality by 2050**. The country's strategy includes expanding renewables, advancing biofuels, and electrifying and modernizing mobility.

The energy transition must occur in a **fair and inclusive** manner, balancing ambitious climate goals with the need to overcome **energy poverty** and implement structural measures to combat deforestation. **Per capita energy consumption** remains low, equivalent to **one-quarter** of the consumption observed in developed countries and below the global average, reinforcing the need to expand energy supply in support of socioeconomic development.

In this context, we reaffirm our vision as expressed in the **Strategic Plan 2050 (SP 2050)**, combining **continuity and competitiveness** in **oil and gas** exploration with profitable expansion into **low-carbon businesses**.

We currently account for **31% of the country's energy supply**, a position we intend to maintain through 2050, ensuring the supply required for sustainable **economic development** alongside the progressive expansion of low-carbon sources. Diversification alternatives complement each other over time, and our entry into business segments occurs in line with **regulatory and market developments**.

We incorporate **uncertainties** related to the global energy market into our three **corporate scenarios**, which present different **paces for the energy transition**. All scenarios indicate a long-term reduction in oil consumption, at varying rates. Despite this reduction, even under our fastest and most ambitious energy transition scenario, **new Exploration and Production (E&P) projects** remain necessary due to the natural decline of existing fields.

Petrobras stands out for its **dual resilience: economic and environmental**. The **carbon intensity** of the oil we produce is below the global average, according to the International Association of Oil and Gas

Producers (IOGP), reflecting operational efficiency, loss reduction, and continuous improvement initiatives. From an economic perspective, the **Brent break-even price of US\$25/bbl for our portfolio** highlights the robustness of our E&P assets and projects, reinforcing our financial sustainability.

We have a proven track record in **managing risks** related to climate change and the energy transition, integrated into corporate governance and systematically assessed at different hierarchical levels. Risks are classified as **transition risks** (related to adaptation to a low-carbon economy) and **physical risks** (linked to the physical impacts of climate change). Their assessment follows corporate risk governance procedures, with periodic reporting to the Executive Board and the Board of Directors.

Our strategy is guided by our ESG commitments: **reducing our carbon footprint; protecting the environment; caring for people; and acting with integrity.**

We highlight our **operational emissions reduction commitments**:

- **30% reduction** in absolute operational emissions by 2030 (compared to 2015)
- Elimination of **routine flaring** by 2030
- **GHG intensity** of **15 kgCO₂e/boe** in **E&P** and **30 kgCO₂e/CWT** in **Refining** by 2030
- **Methane emissions intensity** in upstream operations of **0.20 tCH₄/1,000 tHC** by 2030

Additionally, we aim to achieve **net zero by 2050**, while **maintaining annual emissions** below 55 MMtCO₂ and **near-zero methane** emissions by 2030.

We **reduced absolute emissions** from our operational activities by 36%, reaching a total of 50 million tCO₂e by 2025. We also reduced **direct methane emissions** by 62% between 2015 and 2025, and for the third consecutive year received the Gold Standard Pathway designation from the Oil and Gas Methane Partnership (OGMP), recognizing our methane emissions management implementation plan across upstream, midstream, and downstream operations.

Our **2026–2030 Business Plan** (BP 2026–30) allocates **US\$13 billion**—12% of total investments—to energy transition initiatives, covering **operational decarbonization, low-carbon energy, bioproducts, and R&D&I.**

To advance the **decarbonization** of our activities, we established the **Carbon Neutral Program**, a cross-functional tool designed to manage the mitigation of operational emissions through an integrated view of initiatives developed across multiple business areas. In addition, we maintain a climate change **governance** structure that ensures **cross-functional integration** of this topic across all segments in which we operate, with GHG emissions metrics linked to **variable compensation** for all employees.

We have developed **technological roadmaps** that guide short-, medium-, and long-term **mitigation actions** aligned with our commitments and ambitions. In the short term, priority is given to initiatives focused on **operational efficiency** and **loss reduction**, such as reducing natural gas and diesel consumption through equipment modernization, energy integration, and continuous monitoring of gas losses (flaring, venting, and fugitive emissions). In the medium and long term, **electrification** and **CCUS** technologies take center stage, together with **disruptive** innovations with significant mitigation potential.

To advance the offering of low-carbon solutions, the **BP 2026–30** places greater emphasis on **bioproducts**, which present strong synergies with our operations. We produce and market **Diesel R**, we anticipated the commercialization of **SAF** (sustainable aviation fuel), and supply vessels with **bunker fuel** containing renewable content. We conduct **Life Cycle Assessments** (LCA) of our products to meet the requirements of voluntary and regulated markets, which demand information on product carbon intensity and low-carbon solutions.

Projected growth in demand from traditional sectors, combined with new electrification needs, is expected to drive expansion in **renewable power generation**, particularly after 2030. We seek partnerships in solar photovoltaic and onshore wind power to capture commercial and self-generation opportunities, in addition to evaluating investments in the **energy storage** segment, either independently or through partnerships. A highlight is the strategic partnership with Lightsource bp to drive the development of renewable energy projects in Brazil, particularly in the solar segment.

O projeto piloto de CCS São Tomé (litoral norte do estado do Rio de Janeiro) prevê a injeção de 100 mil tCO₂ por ano em reservatório salino.

We plan to operate in **low-carbon hydrogen**, focusing on developing businesses and products to meet internal and external market demand. Our first pilot plant, located at the Vale do Açu Thermal Power Plant (Rio Grande do Norte), has a capacity of 2 MW and is scheduled to begin operations in the first half of 2026.

We are also evaluating the implementation of **CCUS** hubs in Brazil, aimed at providing services to offset both our own emissions and those of third parties. The São Tomé CCS pilot project (on the northern coast of the state of Rio de Janeiro) plans to inject 100,000 tCO₂ per year into a saline reservoir.

Emissions offsets derived from carbon credits are considered **complementary tools** within our decarbonization strategy. These credits may be nature-based, leveraging the potential of forests, soils, oceans, and marine algae, or generated through technological solutions.

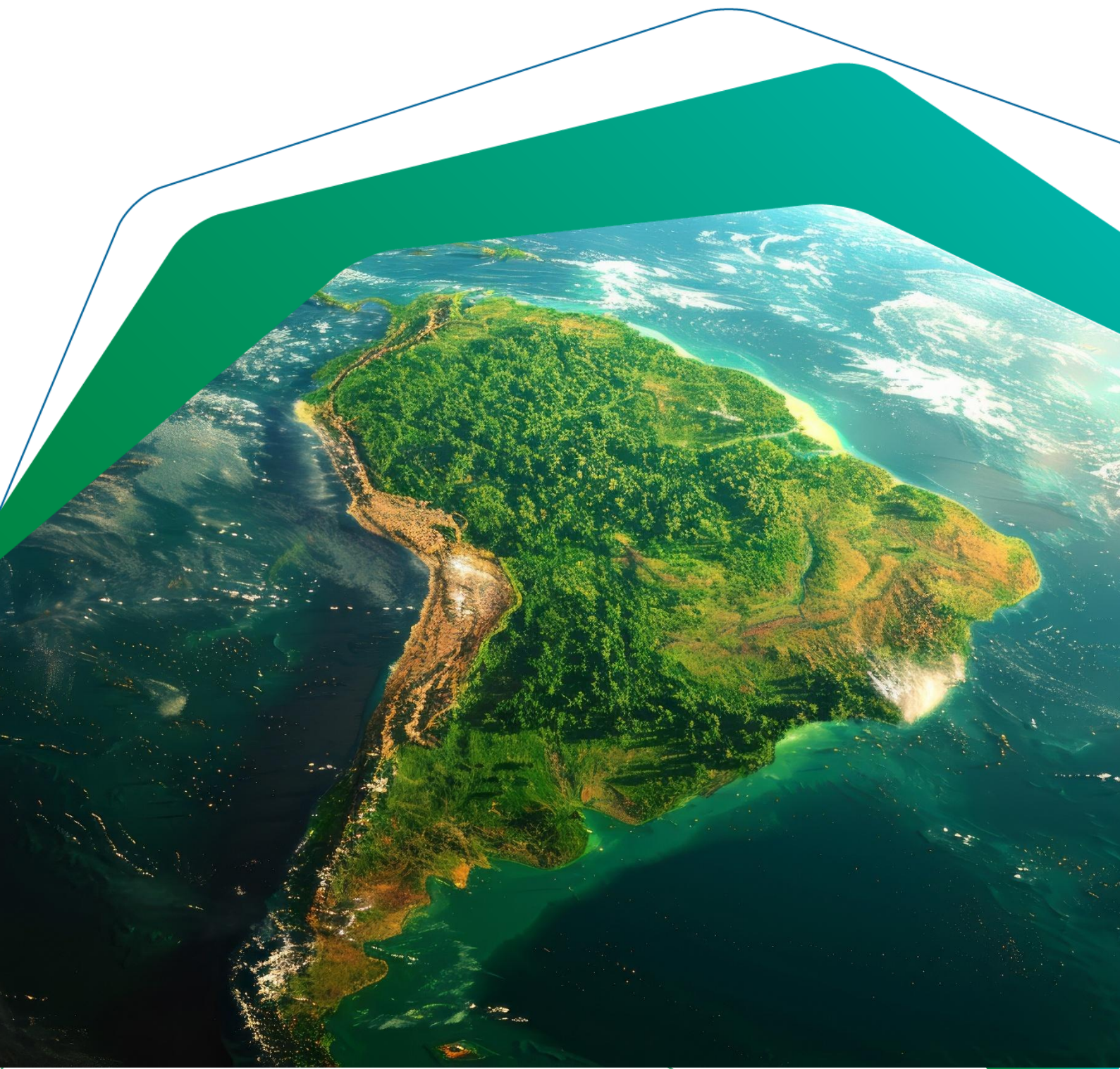
We launched **ProFloresta+**, focused on acquiring carbon credits from ecological restoration projects in the Amazon, as well as a public call for proposals titled **Nature-Based Solutions for Climate Adaptation and Resilience in Cities**, reinforcing our efforts in climate adaptation. We participate in several voluntary **socio-environmental** projects which, in addition to contributing to GHG emissions reductions, generate significant social and environmental benefits.

Our commitment extends beyond internal activities, seeking to engage different sectors of **society** in recognition that climate change and the energy transition require coordinated action among multiple stakeholders.

We adopt transparent, proactive, and collaborative **advocacy** practices. We participate in forums and establish partnerships in initiatives that strengthen our commitment to a just energy transition and to science and innovation, such as **Carbon Countdown** — an initiative that brings together different sectors of society to develop the largest inventory of carbon stocks ever conducted in Brazil — and **AmazonFACE**, which studies the effects of atmospheric CO₂ concentrations on the Amazon rainforest and their implications for the global climate.

Thus, **SP 2050** encapsulates our trajectory as an integrated energy company committed to a just energy transition aligned with Brazil's socioeconomic development, industrial competitiveness, and energy security.

Brazilian Context and Overview



Brazilian Context and Overview

Brazil occupies a prominent position in the climate agenda, both as a major emerging economy and as a country whose energy system is already largely based on renewable sources (hydropower, biomass, wind, and solar), providing a structurally distinct starting point for the energy transition.

By 2024, Brazil had increased the share of renewables in its energy mix to 50%, driven by the accelerated integration of wind, solar, and bioenergy sources, resulting in an electricity mix that was 88.2% renewable. During the same period, renewables accounted for 16% of global total energy supply and 32% of global electricity generation.

These shares are consistent with long-term projections from global energy transition scenarios¹.

RENEWABLES IN ENERGY MATRIX



RENEWABLES IN ELECTRICAL MATRIX



Source: Prepared by the author based on World Energy Transition Outlook 2024: 1.5°C Pathway (IRENA, 2024), World Energy Outlook 2025 (IEA, 2025), and Brazilian Energy Balance 2025 (EPE/MME, 2025).

In 2024, Brazil's transportation sector energy mix consisted of 25.5% liquid biofuels (ethanol and biodiesel), compared to 4% globally, exceeding global projections for energy transition scenarios through 2050.²

BIOFUELS IN ENERGY CONSUMPTION IN TRANSPORTATION



Source: Prepared by the author based on the World Energy Outlook 2025 (IEA, 2025) and the Brazilian Energy Balance 2025 (EPE/MME, 2025).

¹ World 1.5°C 2050: The trajectory the world must achieve by 2050 to be consistent with limiting the global temperature increase to 1.5°C by 2100 compared to pre-industrial levels.

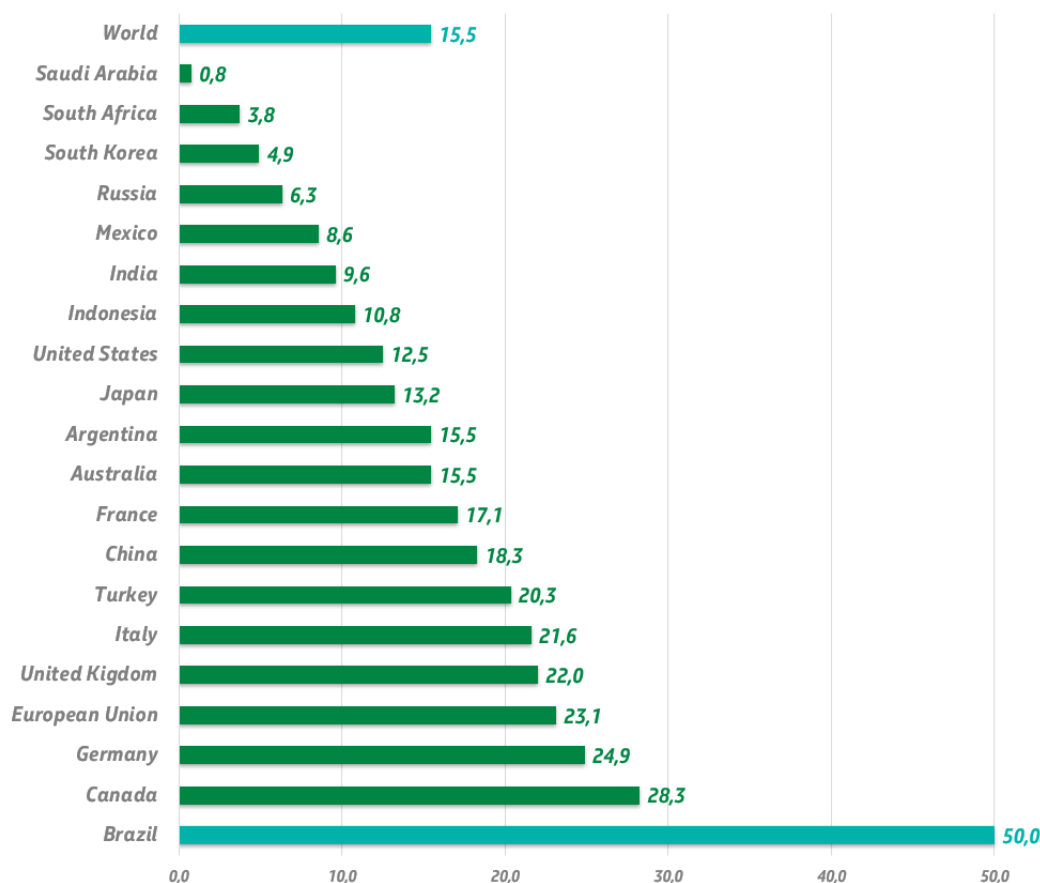
² In Brazil (2024), the energy mix includes 6.1% biodiesel and 19.4% ethanol; globally (2024), liquid biofuels account for 4% of the mix; in the 1.5°C World projections (2050), the share is expected to reach 12% for liquid biofuels and 1% for biomethane.

The share of biofuels in the energy mix has increased steadily in recent years.³ Brazil is the largest producer and consumer of biofuels in Latin America and the world’s second-largest producer of liquid biofuels.⁴ The country has mandatory blending requirements for ethanol in gasoline sold to end consumers, as well as for biodiesel in diesel fuel, and vehicles can also operate exclusively on hydrated ethanol. These measures aim to reduce the transport sector’s dependence on fuel imports, which represents the country’s largest share of final energy consumption⁵—as well as to reduce greenhouse gas (GHG) emissions.

The high share of renewables in the energy mix is the result of public policies and investments in renewable energy implemented in Brazil since the 1940s, initially through the development of hydroelectric generation and, beginning in the 1970s, through the promotion of biofuels, notably the National Alcohol Program (Proálcool). More recently, the National Biofuels Policy (RenovaBio) and the Fuel of the Future Law have played an important role. These public policies, implemented effectively and in an integrated manner over time, have been key instruments in promoting energy security, expanding infrastructure, and diversifying the energy mix.

Reinforcing its leadership position, Brazil has the most renewable energy mix among G20 countries.

G20: Share of Renewables in the Energy Matrix (%), 2024



Source: Prepared by the author based on the Statistical Review of World Energy 2025 (Energy Institute, 2025) and the Brazilian Energy Balance 2025 (EPE/MME, 2025).

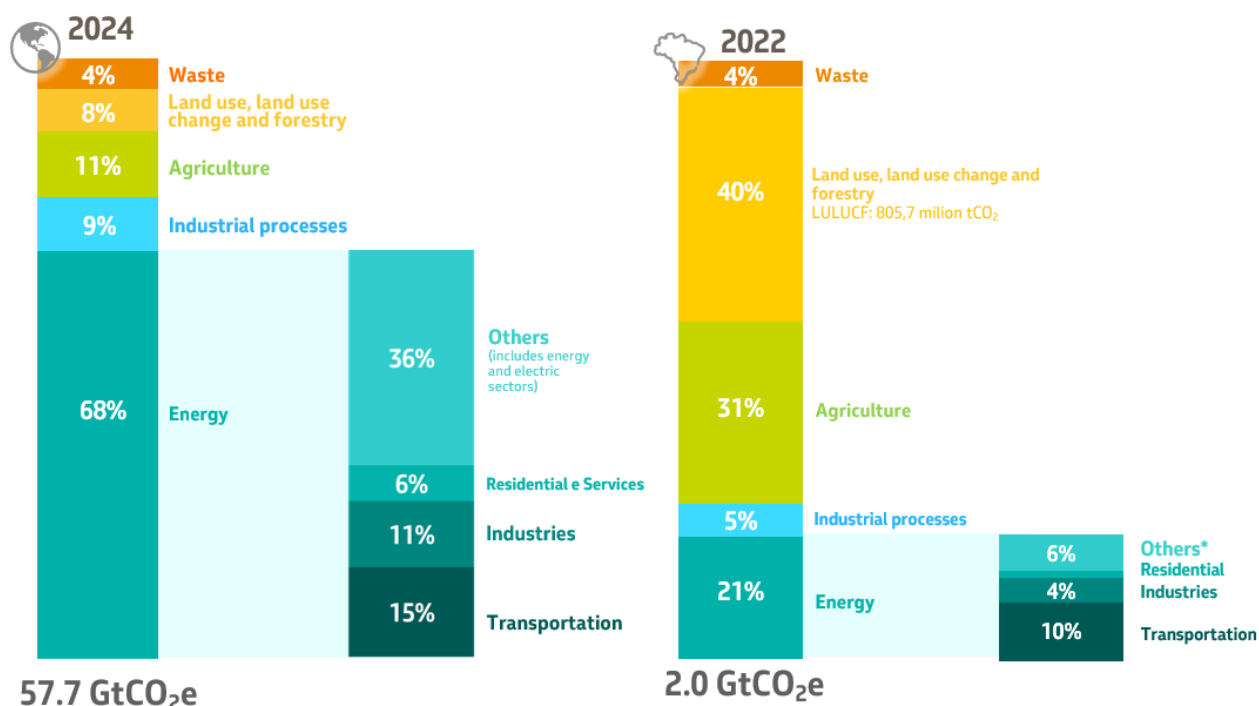
³ The share in 2023 was 22.5%. According to the Brazilian Energy Balance 2025, the increase in bioenergy consumption in 2024 compared to 2023 was driven by substantial growth in transport sector consumption of biodiesel (19.2%, or 1,128 ktep) and ethanol (15.6%, or 2,517 ktep).

⁴ WEO, 2025.

⁵ According to the Brazilian Energy Balance 2025, final energy consumption in Brazil’s transport sector reached 95,832 thousand tonnes of oil equivalent (ktep) in 2024, representing 35% of the final energy consumption mix, followed by the industrial sector with 91,417 ktep, accounting for 33% of the final energy consumption mix.

In 2022, Brazil’s total greenhouse gas (GHG) emissions were approximately 2 GtCO₂e, with 71% originating from land use, land-use change, and forestry (LULUCF) - including deforestation - as well as agriculture and livestock. The energy sector accounted for a smaller share, representing only 21% of total emissions - a figure well below the global average of nearly 70% (base year 2024) -highlighting the distinctive characteristics of Brazil’s energy mix compared to the global context.

Sector participation in total emissions World X Brazil Primary sources



*sectors: agriculture, services, energy, electric, fugitives

Source:

Global: Prepared by the author based on the Emissions Gap Report 2025 (UNEP, 2025)

Brazil: Prepared by the author based on the National Inventory 2024, base year 2022 / GWP AR5 (MCTI/SIRENE, 2025), and the Brazilian Energy Balance 2023, base year 2022 (EPE/MME, 2023)

▶ *The oil and gas sector accounted for 12% of energy-sector GHG emissions and approximately 2% of Brazil’s total emissions.⁶ In turn, Brazil’s total GHG emissions account for 3.5% of global emissions, while Brazil’s energy sector represents 1% of total GHG emissions from the global energy sector.⁷*

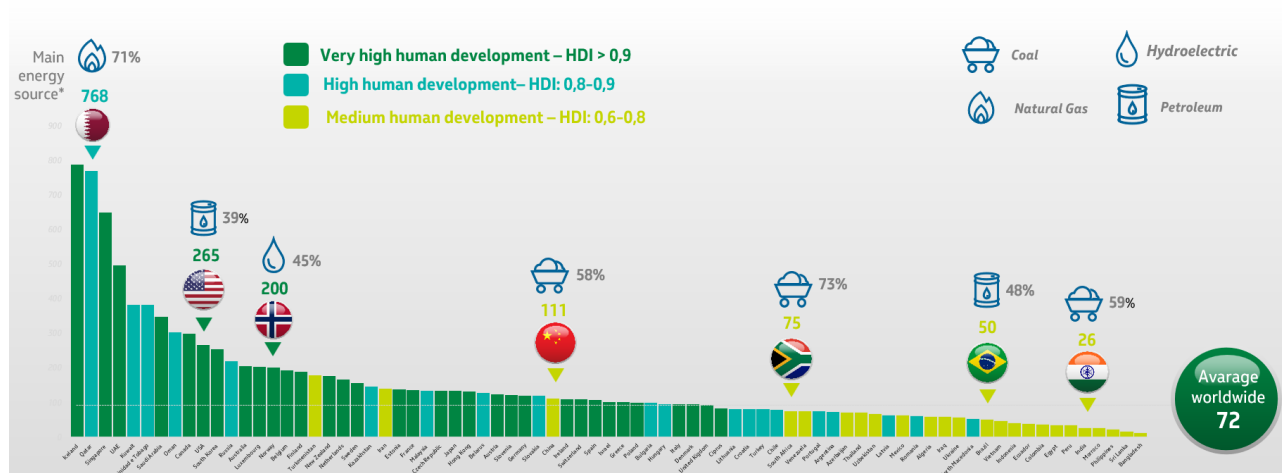
⁶ 2023 data extracted from the Greenhouse Gas Emissions and Removals Estimation System (SEEG).

⁷ Emission Gap Report (UNEP, 2023), GWP AR5 (MCTI/SIRENE, 2025) e Emissions Database for Global Atmospheric Research 2023 Report (JRC/IEA, 2023).

Energy consumption per capita in Brazil is approximately one-quarter of the per capita consumption observed in certain developed countries and remains below the global average.

Per capita energy consumption and Human Development Index (HDI)

Gigajoule of energy per inhabitant – 2024 data



*Total Energy Supply – primary energy supply
 Source: Statistical Review of World Energy 2025 (Energy Institute, 2025).

Brazil is already experiencing growing energy demand, driven by population growth, urbanization, and the need to expand access to essential services for the entire population. As quality of life and access to goods and services improve, energy demand is increasing across the transportation, residential, commercial, and industrial sectors. Consequently, per capita energy consumption in Brazil will need to rise to meet expanding socioeconomic needs.

In parallel with economic growth, Brazil is advancing its decarbonization agenda. The country has adopted consistent and ambitious targets for reducing emissions, aligned with the Paris Agreement and the objective of limiting global warming to 1.5 °C, while achieving climate neutrality by 2050. Brazil’s updated Nationally Determined Contribution (NDC) commits to reducing emissions by 59–67% by 2035 compared to 2005 levels.⁸

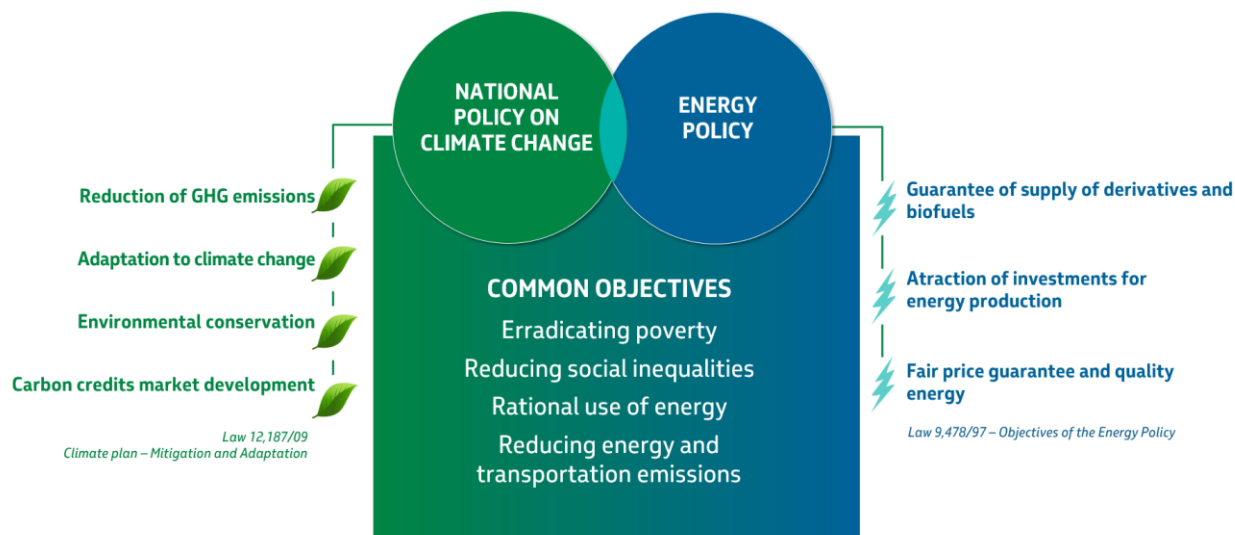
Achieving these targets requires measures to control deforestation and modify agricultural practices, while the energy sector’s contribution must focus on improving energy efficiency, electrification, and expanding the supply of sustainable fuels. The implementation of measures that enhance energy service efficiency, together with the gradual and increasing integration of sustainable fuels into the energy mix, can facilitate a fair, orderly, and equitable transition away from fossil fuels.

Emissions from the transportation sector are the largest within Brazil’s energy mix, accounting for 50% of anthropogenic emissions in 2024 due to high energy consumption.⁹ This underscores the importance of integrated planning focused on infrastructure modernization, supported by investments and public policies that promote innovation and efficiency in logistics, environmental sustainability, and safety, thereby fostering mobility, economic competitiveness, and the reduction of greenhouse gas emissions.

⁸ For more information on Brazil’s NDC, see: https://unfccc.int/sites/default/files/2024-11/Brazil_Second%20Nationally%20Determined%20Contribution%20%28NDC%29_November2024.pdf.

⁹ According to the Brazilian Energy Balance 2025 (EPE, 2025), total anthropogenic CO₂e emissions associated with Brazil’s energy matrix reached 431.3 million tCO₂e, with emissions from the transportation sector accounting for 214.3 million tCO₂e.

With the aim of aligning with international commitments and ensuring energy security, Brazil’s current agenda incorporates policies designed to support established energy sources, featuring a range of priority and cross-cutting initiatives to establish a legal and institutional framework that fosters a just and inclusive energy transition, addresses energy poverty, and ensures access to more sustainable energy sources.



Source: Business Plan 2026-30 (Petrobras, 2025).

The integration of the National Strategy for Adaptation and Mitigation of the National Policy on Climate Change, particularly through the Climate Plan, has been implemented as part of sectoral dynamics and energy planning, aiming to identify the most cost-effective alternatives for emissions reduction and the achievement of the intended objectives.

The definition of Brazil’s national greenhouse gas (GHG) emissions reduction target for 2035 included a detailed sectoral assessment of mitigation measures, reflecting the specific dynamics of each economic sector. Among the key actions to achieve these targets, initiatives addressing land-use change stand out, both in public and collective territories, as well as in private rural areas, which account for the largest share of national emissions.

In the energy sector, the main measures include the growth of renewable electricity generation, the sustainable expansion of biofuel production and use, and the decarbonization of urban mobility and transportation sectors. The plan also foresees the development of emerging carbon removal technologies associated with bioenergy production (BECCS), as well as the decoupling of economic growth from rising emissions, promoting a development trajectory compatible with long-term climate neutrality.

A just energy transition in Brazil represents a challenge that involves increasing per capita energy consumption to ensure access to basic needs for a significant portion of the population—still affected by energy poverty, particularly in the residential and commercial sectors—and expanding competitive energy sources to support industrial development. At the same time, this process must align with Brazil’s national GHG emission reduction targets, as established in its Nationally Determined Contribution (NDC), and with international cooperation, thereby enabling an orderly energy transition that balances renewable and fossil fuel production while taking regional capacities and needs into account.

Petrobras in the Just Energy Transition

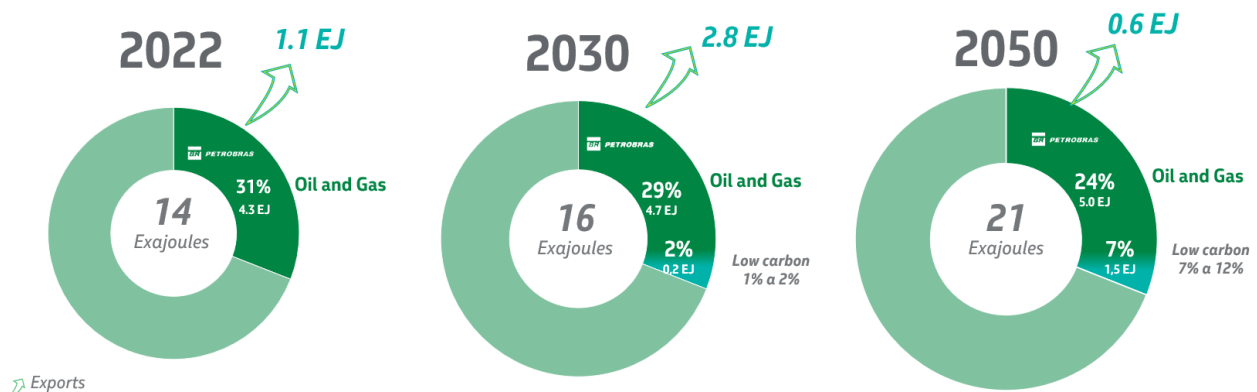


Petrobras in the Just Energy Transition

In line with Brazil’s commitments, our 2050 Strategic Plan sets out our trajectory as a Brazilian integrated energy company, a leader in the just energy transition, contributing to social well-being, industrial competitiveness, and energy security in Brazil.

We are mobilizing our assets, logistics, financial, technological, and human resources, as well as our innovation ecosystem and partnerships, to drive change and develop solutions that enable us to pursue this path.

We account for 31% of Brazil’s energy supply and aim to maintain this level of relevance through 2050, ensuring the provision of energy required for the country’s sustainable growth.



Notes:
 - In 2030 Petrobras' total portfolio of low-carbon projects will represent 1% (0.2 EJ) of energy supply.
 - Oil and oil products will all be sold on the domestic market by 2050, with a gradual reduction in exports.

Source: Business Plan 2026–30 (Petrobras, 2025).

We understand that reconciling the responsible exploration of oil and gas with low-carbon businesses is the path to advancing a Just Energy Transition. Demand for oil will remain significant across various energy transition scenarios, both in Brazil and globally. A significant portion of consumption is concentrated in hard-to-abate sectors, such as road freight transport, maritime transport, aviation, and the petrochemical industry, sectors particularly important for economic development. In Brazil, oil and gas demand is expected to remain resilient in the coming decades.

Oil and natural gas play a critical role in Brazil’s energy resilience, not only as reliable energy sources but also as economic stabilizers. Furthermore, natural gas has established itself as a strategic fuel for industrial use and electricity generation, serving as a key component of the energy transition by providing the flexibility needed to complement the variability of renewable sources such as solar and wind, thereby ensuring a reliable electricity supply during periods of lower availability.

In this context, exploring new frontiers with excellence is essential to replenish reserves and maintain oil and gas production, while expanding our portfolio into new energy sources. These measures are fundamental to ensuring the security of Brazil’s energy system and promoting a socially just transition.

Petrobras’ oil is cost- and carbon-competitive, with greenhouse gas (GHG) emissions per barrel produced below the global average¹⁰, reflecting production efficiency, reduced losses, and process improvements. These attributes provide dual resilience to our production.



¹ Breakeven Brent: the Brent price required to achieve a net present value of zero, considering only E&P projects and excluding the cost of previously made capital investments.
Source: Business Plan 2026–30 (Petrobras, 2025).

These factors provide a solid foundation for addressing future uncertainties and challenges related to climate change risks and opportunities, as well as the energy transition, as identified in different global energy transition scenarios.

¹⁰ Environmental performance indicator 2024 (IOGP, 2024).

Climate Change and Energy Transition Risks



Climate Change and Energy Transition Risks

We have a long-standing track record in analyzing and managing risks related to climate change and energy transition. Risk management is integrated into our corporate methodology, allowing for a comprehensive, systemic view of risk monitoring across all areas and hierarchical levels of the company.

Risk Management Governance

The corporate Enterprise Risk Management (ERM) area coordinates our risk management process, establishing an integrated and systemic methodology that standardizes analyses and manages responsibilities related to risks.

The identification, assessment, and treatment of risks are carried out by the organizational units in coordination with the corporate ERM area. The Climate Change and Decarbonization department is one such unit involved in the corporate process. This process, which seeks to understand exposure to business risks, engages employees from various disciplines, enabling them to identify, assess, propose treatments for, and report potential risks across the organization, covering risks of any nature, including social, environmental, and economic.

Under our risk management governance framework, each business risk is assigned to a designated responsible. Considering the dynamic nature of risks, we conduct reassessments of the business risk matrix at least twice annually.

In addition to updates requested by the corporate ERM area, employees acting as risk owners are responsible for maintaining and promoting the management of the risks under their scope, defining, monitoring, and controlling responses to these risks.

We employ systematic tools to support the identification of risks, regardless of their type. This process allows us to map the business risk, its associated controls, the probability of occurrence, and assess its impact and severity (probability versus impact).

Impact assessments consider five dimensions: financial, image/reputation, legal/compliance, environmental/life, and social. Risk analysis enables prioritization and allocation of efforts related to action plans necessary to minimize events with potential adverse effects and maximize those that may deliver benefits.

Risk management governance is structured to involve not only Senior Management but all hierarchical levels of the company, fostering collective engagement on this topic. Risk and opportunity identification is conducted with a focus on business sustainability and value creation, ensuring that decisions remain aligned with the company's strategic objectives.

Monitoring the management and mitigation of the most significant sustainability-related risks (threats and opportunities), including those associated with climate change and the energy transition, is the responsibility of the Safety, Environment, and Health Committee (CSMS). This committee also proposes preventive and corrective actions, when necessary, and reports its analyses to the Board of Directors (BD).

The set of threats related to climate change and the energy transition is considered strategic for achieving the company's objectives. Therefore, their evolution and management are reported to the Executive Risk Committee, the Executive Board (EB), the Statutory Audit Committee (CAE), and the Board of Directors (BD).

Risks Related to Climate Change and the Energy Transition

According to the Task Force on Climate-related Financial Disclosures (TCFD), risks associated with climate change are classified into two main categories: (1) **transition risks**, related to adaptation to a low-carbon economy; and (2) **physical risks**, which concern the physical impacts of climate change.

Transition Risks

Transition risks are associated with political, legal, technological, and market changes resulting from efforts to limit global warming and promote the transition to a low-carbon economy. The company currently monitors four types of risks:

a. Regulatory and Legal Risk

Monitoring is conducted through the continuous tracking of applicable climate regulations, which may result in additional costs or operational restrictions. This process ensures the early identification and interpretation of relevant changes. It also includes active participation in technical discussions with regulatory bodies and industry associations, enabling the organization not only to monitor regulatory developments but also to contribute to discussions and gain greater predictability regarding future requirements.

We maintain continuous vigilance regarding new climate requirements, such as emissions limits, technical standards, and compliance obligations, seeking to ensure full adherence to constantly evolving legislation and to prevent risks of penalties, disputes, or delays in implementing strategic initiatives.

Regarding Regulatory and Legal Risk, it is also important to highlight analyses aimed at anticipating potential impacts associated with carbon pricing, including regulated and voluntary mechanisms, by assessing effects on costs, competitiveness, and reporting obligations. We estimated the impact of this pricing scenario through portfolio value simulations, considering the costs arising from implementing a national "cap and trade" system as a mechanism to curb operational emissions, as established by Law 15.042/2024. This study considered the gradual implementation of the instrument and different carbon price ranges, varying over time from US\$ 10/tCO₂ to US\$ 146/tCO₂ in internal company scenarios and from US\$ 37/tCO₂ to US\$ 200/tCO₂ in International Energy Agency scenarios applicable to Brazil.

It is important to note that the carbon price impact has not been incorporated into the company's accounting estimates. Currently, due to uncertainties regarding the implementation and dynamics of the carbon market in Brazil, the Company considers it necessary to await the regulation of Law No. 15,042 in 2024, which establishes the Brazilian Greenhouse Gas Emissions Trading System (SBCE). This regulation will provide the necessary and sufficient details to reliably and reasonably assess the impact on the cash flows of Petrobras's assets and its CGUs. In October 2025, the Extraordinary Secretariat for the Carbon Market was established to organize the SBCE, which will issue the necessary additional regulation to implement Law No. 15,042 of 2024.

Regulated Carbon Market

On December 11, 2024, Law No. 15,042/2024 was enacted, establishing the Brazilian Greenhouse Gas Emissions Trading System (SBCE). The measure lays the foundation for the creation of a regulated carbon market in Brazil.

Within this market, the government sets emissions limits for companies, allocates “emission allowances” equivalent to these limits, and permits the trading of such allowances among regulated operators through a “cap and trade” system.

The law established the general rules applicable to the system, without specifying covered sectors or emissions limits. The text broadly defines the system’s principles and characteristics; its governance structure; the types of assets and their respective legal and tax nature; the attributes of the supporting technological infrastructure; certain obligations applicable to regulated entities; infractions and penalties; the principles of the National Allocation Plan, which will guide the distribution of allowances among regulated entities; and the guidelines for integration with the voluntary market.

A phased implementation schedule for the SBCE has been established, including a period of up to 12 months, extendable for an additional 12 months, for its regulation.

b. Market Risk

Market risk is monitored through structured analyses that assess the evolution of demand, prices, and competitiveness in the context of energy transition, as well as their impact on the company’s revenue. To this end, we develop corporate scenarios that incorporate global trends, the pace of decarbonization, technological changes, and economic volatility, enabling us to project potential future impacts on our business. Additionally, portfolio resilience studies are conducted to evaluate how each product or segment responds to different combinations of prices, regulations, and transformations in the energy market.

Competitiveness in relation to low-carbon fuels is monitored considering the advancement of solutions such as biofuels, hydrogen, and electrification, assessing substitution risks and business opportunities. In addition, price dynamics and demand elasticity are analyzed to identify vulnerabilities related to changes in consumer behavior, preferences for sustainable alternatives, and emerging competitive pressures.

In this context, particular note should be made of the approval of the National Climate Change Plan (Climate Plan) in 2025, which establishes the contributions of each sector to national efforts to reduce emissions and implement Brazil’s NDC through 2035, considering the specific characteristics of different stakeholders. Furthermore, the sectoral targets defined by Climate Plan will serve as references for the allocation of emission allowances within the scope of the SBCE.

c. Technological and Implementation Risk

Technological and Implementation Risk encompasses uncertainties related to the research, development, and deployment of new technologies, as well as the company’s ability to implement identified decarbonization initiatives. This risk is monitored through the continuous tracking of advances in decarbonization technologies, both internally and through participation in external forums, consortia, and innovation hubs.

Investments are made in Research, Development, and Innovation (R&D&I) to test and validate new solutions, enabling the early identification of those with the greatest application potential. At the same time, technological maturity is continuously assessed by analyzing readiness levels, operational limitations, integration challenges with existing infrastructure, and technical requirements for scalability. Cost-effectiveness analyses are also conducted, covering investment estimates, operating costs, energy efficiency, performance impacts, and economic viability projections.

Implementation challenges are also evaluated, including the availability of specialized suppliers, workforce training needs, risks of operational disruptions, and logistical constraints associated with the introduction of emerging technologies. In addition, factors such as competition for resources, prioritization across business segments, and financial considerations are considered.

d. Litigation and Reputational Risk

Litigation and Reputational Risk are monitored comprehensively, considering both institutional integrity and the perceptions of key stakeholders. We adopt transparency practices aligned with TCFD recommendations, disclosing information on climate risks, transition strategies, and GHG emissions performance, which helps strengthen the trust of investors and society.

Structured engagement with investors, civil society organizations, and the media supports the development of relationships grounded in accountability and consistency. Participation in sustainability indices and external assessments reinforces our credibility and enables continuous benchmarking against global standards. In addition, we monitor potential climate-related litigation, ensuring awareness of trends in legal actions and supporting the adoption of preventive measures.

This dimension also includes monitoring integrity requirements associated with carbon credit, ensuring that the credits used are of high quality and aligned with international best practices.

This set of actions aims to preserve our reputation and mitigate exposure to risks arising from operational failures, inconsistencies in communications related to climate change and the energy transition, as well as regulatory and legal challenges.

Physical Risks

Physical risks are classified into:

- i. **acute risks**, which refer to isolated events such as storms, heavy precipitation, or temperature extremes; and
- ii. **chronic risks**, which refer to long-term trends such as rising temperatures, changes in precipitation patterns, and sea level rise.

Our facilities are exposed to various physical risks related to climate change, including changes in wind patterns, waves, and ocean currents in offshore areas; freshwater availability constraints in onshore operations; as well as landslides, floods, droughts, wildfires, and heat waves.

Based on recent extreme weather events in Brazil and the company's in-depth assessments, in 2024 we expanded our analysis of climate-related physical risks by incorporating new factors prioritized based on materiality. These factors were maintained in 2025 and include:

a) Meteo-oceanographic Changes

To assess climate-related physical risks in oceanic regions, we conducted studies and developed climate regionalization models in partnership with Brazilian and international institutions. These collaborations generate high-quality data that supports the adaptation of operations.

Studies were carried out in partnership with the Institute of Astronomy, Geophysics, and Atmospheric Sciences of the University of São Paulo (IAG/USP) to simulate future atmospheric conditions, assessing scenarios RCP4.5 and RCP8.5 through 2060. The analyses used global CMIP5 models (MPI and HadGEM2-ES) and high-resolution CMIP6 models (HighResMIP: HadGEM3-GC31-HM, MRI-AGCM3-2-S, MPI-ESM1.2-XR, and ECMWF-IFS-HR). A dynamic downscaling technique was applied to provide a more accurate representation of climate phenomena in the Santos, Campos, and Espírito Santo basins. Based on the results, offshore structures in these basins are adequately designed to withstand the climate changes projected for the region.

Within the scope of offshore facilities, a system of physical risk indicators is being developed to support the integrated assessment of climate change impacts, including the reliability of design parameters and operational indicators, such as the risk of interruptions to offloading operations.

b) Water Scarcity and Extreme Drought

The company monitors, manages, and mitigates risks related to freshwater availability in its operations, which may arise from factors such as population growth, increasing consumption patterns, inadequate infrastructure, pollution, inefficient resource management, deforestation, wildfires, biodiversity loss, and climate change. Therefore, risk management encompasses both climate-related and non-climate-related drivers.

According to our assessment, the potential impact specifically resulting from climate change on freshwater availability for our facilities are not significant when compared with the other factors mentioned.

Risk monitoring is conducted in an integrated manner using several tools, including:

- WRI Aqueduct Water Risk Atlas, for water risk mapping;
- Water Scarcity Risk Index, developed by the Federal University of Rio de Janeiro (UFRJ), to prioritize facilities for further analysis;
- Studies on current and future water availability, including alternative supply sources;
- The Decision Support System developed by the University of São Paulo (USP), which uses CMIP5 climate models (HadGEM2-ES, BESM, MIROC5, and CanESM2) to assess risks and vulnerabilities related to water availability in our operations.

The physical risk associated with extreme drought primarily affects operations in northern Brazil due to reduced river levels, which impact navigability and river transport of cargo and products. To mitigate this risk and ensure operational continuity, tanker capacity was expanded through the addition of transshipment vessels, along with the evaluation of alternative fuel transportation methods.

c) Floods and Landslides

The assessment of flood and landslide risks was conducted using the AdaptaBrasil platform¹¹, developed by the Ministry of Science, Technology, and Innovation (MCTI) in partnership with the National Institute for Space Research (INPE), based on the Intergovernmental Panel on Climate Change (IPCC) (2014) framework, which combines three main dimensions: climate hazard, exposure, and vulnerability.

For climate hazard assessment, meteorological indicators are considered, such as maximum precipitation accumulated in one day (Rx1day) and over five consecutive days (Rx5day), derived from global and regional climate models (CORDEX/CMIP5). These models are calibrated to generate projections for the 2030s and 2050s under intermediate (RCP4.5) and high-emissions (RCP8.5)

¹¹ for more information, see <<https://adaptaBrasil.mcti.gov.br/>>.

scenarios, enabling the identification of areas more prone to intense rainfall events that may trigger floods and landslides.

The use of climate hazard data supports the prioritization of the most vulnerable assets and regions. By combining hazard data with asset-specific information on vulnerability and adaptive capacity, it is possible to identify which assets should be prioritized for the implementation of adaptation measures.

d) Wildfires

The Probable Futures¹² platform was used to map risks related to wildfires, extreme droughts, and heat waves at high spatial resolution. The maps consider six global warming scenarios (ranging from 0.5 °C to 3 °C above the pre-industrial average for 1850–1900), presenting minimum (5th percentile), central tendency (median or mean), and maximum (95th percentile) values for each location, supporting the analysis of future risks.

The *Wildfire Danger Days* parameter probabilistically estimates the increase in climatological wildfire risk, excluding human ignition factors. This indicator projects the number of days conducive to wildfires under future warming scenarios (+1.5 °C, +2 °C, +3 °C) compared with the historical baseline.

e) Heat waves

To assess heat wave risks, the *Days above 38 °C* parameter from the Probable Futures platform was used, which indicates the annual number of days with temperatures exceeding 38 °C in each region. Based on this analysis, Petrobras' Health department coordinated a working group to develop regional heat protection protocols, focusing on worker health and considering the specific characteristics of each region in Brazil.

¹² for more information, see <<https://probablefutures.org/>>.

Integrated Adaptation Plan

Building on the findings of the 2025 Climate Change Supplement, we highlight the progress achieved by the Adaptation Working Group, established in 2024 in response to extreme weather events in Brazil.

In 2025, the company strengthened existing immediate measures aimed at ensuring business continuity and operational safety, such as expanding tanker capacity to enhance resilience to extreme drought events, as well as training healthcare professionals to respond to climate-related emergencies. In the medium term, hydrological studies are being updated, and guidelines are being developed to protect workers during extreme heat waves. Over the long term, structural adaptation measures and the expansion of green spaces are being evaluated to progressively prepare the company for future climate-related events.

Based on these deliverables, objectives and key performance indicators were defined to support the implementation of the Climate Adaptation Plan, including climate risk management for assets, strengthening territorial and supply chain resilience, and enhancing adaptation governance integrated with ESG indicators.

The adaptation agenda has fostered multidisciplinary initiatives, such as the launch of the Public Call for Socio-environmental Projects on Nature-Based Solutions — Climate Adaptation and Urban Resilience, led by the Social Responsibility department in partnership with the Climate Change and Decarbonization department and the Ministry of the Environment. This initiative aims to support adaptation in vulnerable urban areas in the states of São Paulo and Rio Grande do Sul, promoting climate justice and urban resilience.

In addition, the company's Environment and Health division incorporated climate resilience analysis to prioritize actions defined in the Biodiversity Action Plans (PAB) for its assets. Furthermore, a multidisciplinary working group was established to develop protocols for protecting workers exposed to heat, reinforcing the company's commitment to health, safety, and adaptation to emerging risks.

The table below provides a summary of the main transition and physical risks related to climate change, including their categories, descriptions, time horizons, and the corresponding controls and actions planned by the Company. This structure is intended to present a clear and objective overview of the initiatives adopted to mitigate potential operational impacts, aligning risk management with the Company's commitments to sustainability and corporate resilience.

RISKS RELATED TO CLIMATE CHANGE AND THE ENERGY TRANSITION

RISK CATEGORY	RISK	DESCRIPTION	TIME HORIZON ¹³	KEY CONTROLS AND PLANNED ACTIONS
Transition Risks	<i>Market</i>	<p>> Increase in demand for low-carbon energy and products, together with preference for fossil products with lower GHG intensity in production processes, may reduce demand for oil and consequently lower fossil product prices. In Brazil, demand for fossil products may be affected, for example, by regulatory incentives such as the Future Fuel Law and sectoral developments arising from the National Policy on Climate Change and the National Energy Transition Policy, aiming to meet Brazil's emission reduction targets.</p>	Medium and Long Term	<p>> We consider, at different paces, restrictions on the sale of fossil products and/or incentives for commercialization of renewable alternatives in our corporate scenarios.</p> <p>> We perform portfolio value and resilience analysis compared with accelerated transition scenarios.</p> <p>> We assessed the exposure of the E&P portfolio and identified that 99% of our investment projects present positive NPV underprice assumptions from the IEA APS scenario (2024), aligned with the Paris Agreement.</p> <p>> We have made commitments related to carbon and established the ambition to achieve operational emissions neutrality by 2050.</p> <p>> We are expanding production and commercialization of low-carbon fuels and products, increasing our presence in ethanol, biodiesel and biomethane value chains, aiming to meet market demand and ensure adequate access to feedstock.</p> <p>> We invest in the development of new low-carbon businesses, such as renewable generation (wind and solar), low-emission hydrogen and carbon capture (CCUS).</p>

¹³ Criterion adopted for the time horizon: short term (1 year), medium term (1 to 5 years), and long term (over 5 years).

RISK CATEGORY	RISK	DESCRIPTION	TIME HORIZON ¹³	KEY CONTROLS AND PLANNED ACTIONS
Transition Risks	<i>Technological and Implementation</i>	> Loss of competitiveness due to non-implementation, or implementation of ineffective or non-cost-effective technologies to reduce GHG emissions from our operations and products.	Medium and Long Term	<ul style="list-style-type: none"> > We defined a significant share of low-carbon investments within the overall Research, Development and Innovation (R&D&I) portfolio. > We monitor technological developments in various external forums. > We allocate financial resources to accelerate adoption of technological options aimed at mitigation emissions through the Decarbonization Fund. > We establish performance and technological requirements for Investment Projects. > Progress in the Carbon Neutral Program, especially in its Disruption front.
Transition Risks	<i>Regulatory and Legal</i>	> Establishment of stricter regulatory requirements related to GHG emissions control and other climate-related requirements, potentially causing operational restrictions and financial penalties to our activities. In Brazil, one example is Law 15,042/2024, which establishes the Brazilian Emissions Trading System (SBCE), potentially generating additional costs for our operations.	Medium and Long Term	<ul style="list-style-type: none"> > We perform systematic monitoring of regulatory risk. > We participate in technical and strategic discussions regarding potential regulations and external stakeholder requirements. > We have undertaken commitments related to the carbon agenda and established the ambition to achieve net zero operational emissions by 2050. > We perform portfolio value and resilience analysis considering different carbon pricing scenarios.

RISK CATEGORY	RISK	DESCRIPTION	TIME HORIZON ¹³	KEY CONTROLS AND PLANNED ACTIONS
Transition Risks	<i>Litigation and Reputational</i>	> Litigation and/or reputational loss resulting from failure to meet climate commitments, perceived lack of transparency and/or acquisition of low-quality or low-integrity carbon credits.	Medium and Long Term	<ul style="list-style-type: none"> > We periodically monitor and assess carbon performance across different governance levels, including Senior Management. > We implement transparency actions, adopting TCFD recommendations as reference for disclosure of climate-related information. > We maintain dialogue with investors and society regarding our strategies and positioning on climate change and the energy transition through this Report, Sustainability Report, website, bilateral events and others. > We monitor our performance in several external assessment indices such as CDP and the Dow Jones Best-in-Class Index, conducting gap analysis. > We promote social and environmental responsibility associated with our business, positively impacting society and the environment, strengthening our reputation. > We implement actions defined in the Oil & Gas Methane Partnership 2.0 (OGMP 2.0) implementation plan, focused on transparency, quantification and management of methane emissions. > We structured the carbon credit acquisition process, strengthening governance and incorporating quality and integrity requirements.
Physical Risks	<i>Water Scarcity</i>	> Reduced water availability affecting onshore facilities.	Medium and Long Term	<ul style="list-style-type: none"> > We assess water availability (current and future) and alternative supply sources at priority facilities using customized tools, as described in Physical Risks. > We identify actions and projects aimed at reducing freshwater withdrawal, committing to reduce water intake by 40% by 2030 and increase water resilience.

RISK CATEGORY	RISK	DESCRIPTION	TIME HORIZON ¹³	KEY CONTROLS AND PLANNED ACTIONS
Physical Risks	<i>Meteoceanographic Changes</i>	> Changes in wind, wave and ocean current patterns may modify operational conditions of our assets.	Long Term	<ul style="list-style-type: none"> > We continuously develop regionalization studies of climate extremes for major offshore production basins. > We use updated metocean technical standards and specifications considering future climate projections for new offshore projects.
Physical Risks	<i>Landslide</i>	> Risk of landslides along pipeline corridors and surrounding areas.	Short, Medium and Long Term	<ul style="list-style-type: none"> > For critical pipelines we implement weather alert systems to trigger safety action plans and operational shutdown, optimized leak detection systems along pipelines, as well as geotechnical monitoring with instruments, inspections and specific procedures. > We assess and implement adaptive measures such as infrastructure redundancy and revision or development of meteorological thresholds for action plans.
Physical Risks	<i>Flooding</i>	> Risk of flooding of onshore facilities and surrounding areas.	Short, Medium and Long Term	> We update hydrological studies incorporating climate projections to adapt drainage infrastructure.
Physical Risks	<i>Extreme Drought</i>	> Reduction in river levels affecting operations in Urucu.	Short, Medium and Long Term	<ul style="list-style-type: none"> > We apply techniques to maintain operations such as increasing storage capacity through additional transshipment vessels and production modulation, ensuring operational continuity. > We assess alternative fuel transportation options.
Physical Risks	<i>Wildfire</i>	> Risk of fires in the surroundings of our facilities.	Short, Medium and Long Term	<ul style="list-style-type: none"> > We apply prevention techniques such as firebreaks, drone monitoring of fire hotspots and fire brigade training. > We prioritize Biodiversity Action Plan initiatives that support climate resilience in the surroundings of our assets.

RISK CATEGORY	RISK	DESCRIPTION	TIME HORIZON ¹³	KEY CONTROLS AND PLANNED ACTIONS
<i>Physical Risks</i>	<i>Heat Waves</i>	> Risk of heat stress impacting worker health.	Short, Medium and Long Term	<ul style="list-style-type: none"> > We develop and disseminate technical guidelines on the topic. > We reinforce Health Surveillance measures to anticipate heat wave situations and educate the workforce. > We assess activities, environments and functions most susceptible, aiming to adapt to the physical environment and Personal Protective Equipment (PPE).

Transition risks may affect the Company's accounting estimates recognized in its financial statements. With respect to physical risks, based on the risks currently identified, the Company does not expect climate change-related impacts to have a material effect on its accounting estimates. Further information on these estimates is provided in Annex 1, which reproduces the content of Note 5 on climate change in Petrobras' Financial Statements for the year ended December 31, 2025.

Scenarios & Resilience



Scenarios & Resilience

Scenarios

Our scenarios explore new possibilities and dynamics in the energy sector, which manifest themselves through perspectives ranging from geopolitical arrangements and conflicts to changes in consumer habits and behaviors, as well as new technologies and government policies.

Corporate scenarios help contextualize our position in the face of global challenges and reinforce the importance of strategic planning to align competitiveness and sustainability.

In all our corporate scenarios, we observe a slowdown and subsequent decline in fossil fuel sources, as well as growing demand for renewables and low-carbon solutions, with distinct patterns between developed and developing markets.

Our Corporate Scenarios

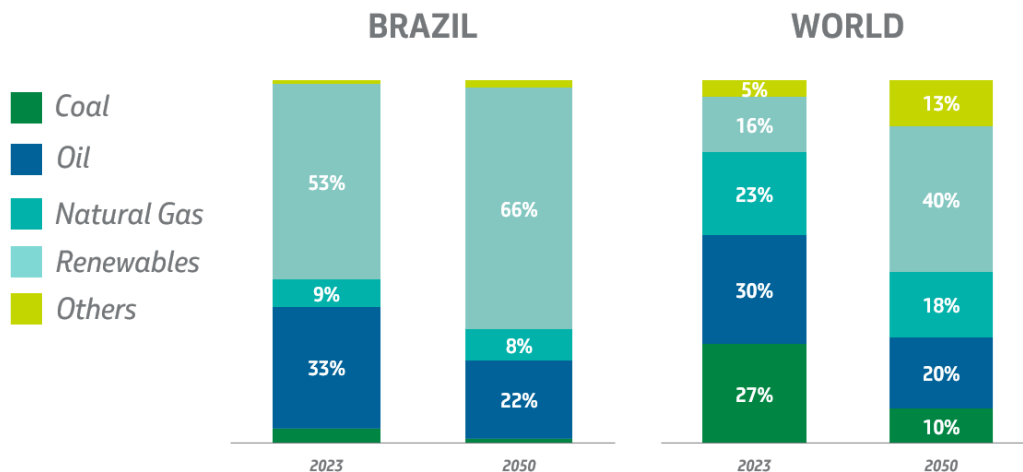
Adaptation: a scenario in which the pace of the energy transition is slow, requiring the world to adapt to the impacts of climate change.

Negotiation: a scenario characterized by a moderate pace of the energy transition, resulting from uncoordinated activism and complex negotiations that slow progress.

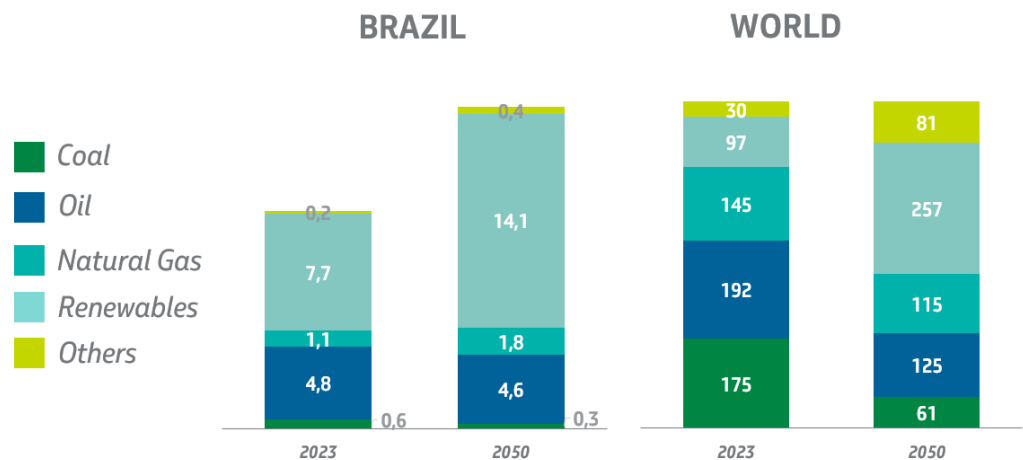
Commitment: a scenario characterized by an accelerated energy transition, driven by a broad, coordinated global commitment among countries.

Under the Negotiation Scenario, which serves as a reference for the 2026–2030 Business Plan, fossil fuels—currently accounting for approximately 46% of Brazil’s primary energy supply—are projected to represent about 34% by 2050, reflecting the continued expansion of renewable energy sources. Oil’s share in the energy mix is expected to decline from the current 33% to approximately 23%, while natural gas is projected to maintain a relatively stable share over the long term in Brazil’s energy mix, consistent with stronger growth in demand for renewable sources compared with oil. At the global level, fossil fuels are projected to account for approximately 50% of the energy mix, alongside a significant increase in the share of renewable energy sources, from 16% to 40%.

Energy Matrix Profile (%)



Energy Matrix Profile (EJ)



Source: World Energy Outlook 2025 (IEA, 2025) and 2026–2030 Business Plan (Petrobras, 2025).

Public policies, technology adoption, and consumer behavior are key drivers shaping Petrobras’ scenarios. They create different paths for alternative propulsion technologies and biofuel use in combustion-engine vehicles. By 2050, electric vehicles are projected to make up 42% of the light-duty fleet in the Negotiation scenario and 53% in the Commitment scenario. As for biofuels, the share of hydrated ethanol in the supply of Otto-cycle vehicles is projected to reach 43% in the Negotiation scenario and 52% in the Commitment scenario by 2050.

Financial Resilience Analysis

The assumptions underlying our Business Plan reflect potential future scenarios, accounting for uncertainties related to climate change, including mandates for sustainable fuels and shifts in consumer preferences for our products.

The Negotiation scenario, which serves as a reference for quantifying our plan, considers an oil price range from an average of \$63/bbl in 2026 to \$70/bbl in 2035—levels close to those in the International Energy Agency’s (IEA) 2024 Announced Pledges Scenario (APS), which corresponds to a 50% probability of limiting global temperature increase to below 1.7°C by 2100.

BRENT PRICE USD/BARREL	2035	2050
<i>PN 2026-30 Trading Scenario (Petrobras)</i>	70	70
<i>PN 2026-30 Commitment Scenario (Petrobras)</i>	50	50
<i>STEPS SCENARIO (IEA)</i>	80	76
<i>APS SCENARIO (IEA)</i>	67	58
<i>NZE SCENARIO (IEA)</i>	33	25

International Energy Agency (IEA) Scenarios

STEPS – Stated Policies Scenario: Updated in 2025, this scenario provides insight into the current trajectory of the energy sector based on a detailed analysis of the latest policy settings in countries worldwide. It considers energy, climate, and related industrial policies that are either in effect or have been announced. The objectives of these policies are not automatically assumed to be achieved; they are incorporated into the scenario only to the extent that adequate provisions exist for their implementation. The STEPS scenario is associated with a 50% probability of a global temperature increase of 2.4 °C by 2100.

APS – Announced Pledges Scenario: Released in 2024¹⁴, this scenario assumes that all national energy and climate targets—including long-term net-zero emissions goals and commitments under Nationally Determined Contributions (NDCs) — are fully and timely met. This represents a strong assumption, given that most governments are still far from having the necessary policies in place to achieve their long-term commitments. Even countries without long-term energy or emissions targets follow a different path from the STEPS scenario, as their investment decisions are shaped by - and benefit from - more pronounced cost reductions across a variety of clean energy technologies, made possible by the actions of other countries. The APS scenario is associated with a 50% probability of a 1.7 °C increase in global temperature by 2100. This scenario is consistent with the objectives of the Paris Agreement, which aims to decarbonize global economies and establishes, as one of its long-term goals, limiting the increase in global average temperature to well below 2 °C above pre-industrial levels, while pursuing efforts to limit the rise to 1.5 °C.

NZE – Net Zero Scenario: A normative scenario, updated in 2025, presenting a pathway for the global energy sector to achieve net-zero CO2 emissions by 2050, with advanced economies reaching net-zero emissions before others. This scenario models’ significant shifts in energy demand to achieve

¹⁴ The Announced Pledges Scenario (APS), included in previous editions, was not addressed in the World Energy Outlook 2025 (IEA, 2025). This scenario, which consists of the full and timely achievement of the main national energy and climate targets, such as the Nationally Determined Contributions (NDCs) of countries, was not analyzed by the IEA due to several countries not having released their new NDCs in 2025. Therefore, for comparison purposes, we remain with the projections of the APS scenario published in the WEO 2024 report.

neutrality by 2050, with a 50% probability of limiting the temperature increase to 1.5 °C above pre-industrial levels by 2100.

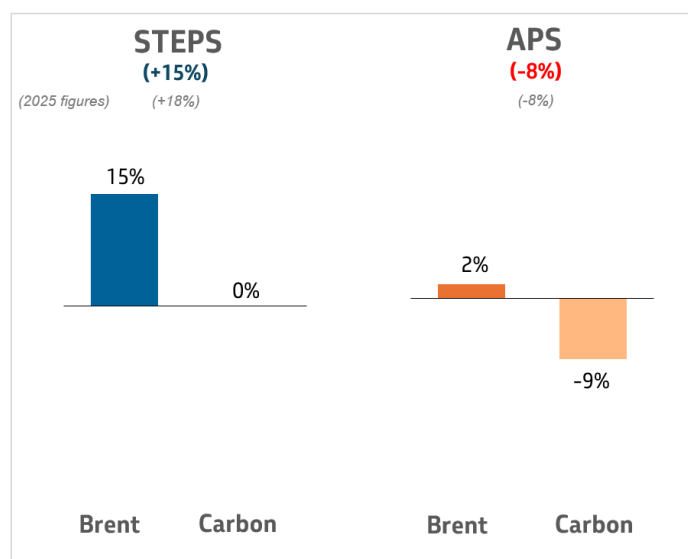
Resilience to IEA Scenarios

We conducted simulations of the net present value (NPV) of our portfolio, considering sensitivities to Brent crude prices and carbon pricing based on external reference scenarios.

The total impact in each scenario results from the combination of these two effects, as illustrated in the following charts. Sensitivity to oil prices considers only the impact of Brent prices on the E&P segment, while maintaining the economic margins of other segments. Sensitivity to carbon pricing assumes a monetary cost per ton of CO₂-equivalent emissions starting in 2029 or 2030, depending on the scenario, in addition to the allocation of free emission allowances. This reflects uncertainties following the enactment of Law 15.042/2024, which establishes the SBCE—a system that has not yet been regulated.

Using the price assumptions of the STEPS scenario, the portfolio value would increase by 15% compared with the Negotiation scenario, due to higher oil prices assumed in the IEA scenario. It is important to note that the STEPS scenario does not include carbon pricing for Brazil.

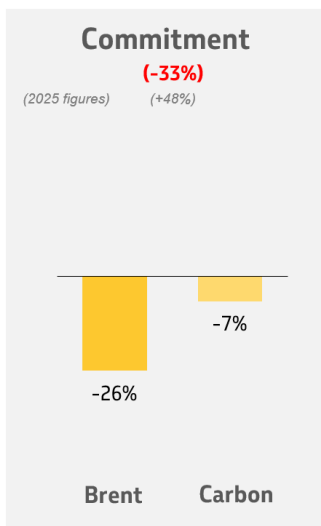
Compared with the APS scenario, there is no significant change in portfolio value when exposed to Brent prices from the external scenario, as they are broadly aligned with the Negotiation scenario. However, carbon pricing reduces portfolio value, particularly because this cost is not considered in the Negotiation scenario, resulting in an 8% loss.



We also conducted a comparison with the normative NZE scenario, which, while serving as an important analytical benchmark, is highly ambitious and significantly distant from current reality. It relies heavily on technologies still in development, demands substantial investments, and requires a disruptive transformation of the global energy system. Moreover, the International Energy Agency does not explicitly address how this scenario tackles inequalities among countries or the principle of common but differentiated responsibilities, which underpins international climate governance. Nevertheless, considering the NZE price assumptions and comparing them with the Negotiation scenario, the potential negative impact on NPV would be 53%, with 39% driven by lower Brent prices and 14% by carbon pricing. This indicates that roughly half of the value of the Company’s portfolio remains intact even under an extreme scenario, underscoring the resilience of our projects and operations.

Resilience to Our Accelerated Transition Corporate Scenario (Commitment)

A resilience analysis based on the price assumptions of our Commitment Scenario indicates a potential 33% decline in portfolio value, with 26% driven by lower Brent prices and 7% by carbon pricing. This outcome provides a positive perspective, showing that roughly 70% of our portfolio’s value is preserved even under the most accelerated transition scenario.



E&P Financial Resilience Analysis

Our investment project approval governance requires that E&P projects aimed at expanding capacity or developing new assets be resilient also under the Commitment scenario, which assumes a long-term Brent price of US\$50/bbl. This creates an incentive for only projects compatible with accelerated energy transition scenarios to be included in our portfolio.

As a result, the prospective break-even Brent price of the E&P project portfolio is US\$25/bbl, with an extraction cost of US\$6/bbl (first quartile of the industry cost curve). The E&P project portfolio demonstrates high resilience to low oil prices, with 60% of the Capex planned for the 2026–2030 period resilient to a Brent price of US\$22/bbl, and 92% resilient to a Brent price of US\$50/bbl.

Resilience tests indicate that virtually all (99%) of our E&P investment projects generate value, i.e., present a positive NPV under the price assumptions of the International Energy Agency APS 2024 scenario, aligned with a 50% probability of limiting the global temperature increase to 1.7°C. The exception consists of small projects contributing less than 0.01% of the portfolio’s production.

Our Strategy



Our Strategy

In the BP 2026–30, Petrobras upholds the strategies established in the 2050 Strategic Plan (SP 2050) and reinforces its vision of being the leading diversified and integrated energy company in value creation. The Company is committed to building a more sustainable world by balancing its core focus on oil and gas with a strategic expansion into low-carbon businesses, including petrochemicals, fertilizers, and biofuels, while maintaining an unwavering emphasis on sustainability, safety, environmental stewardship, and the well-being of its people.

Our vision, purpose, and values remain fully preserved in this new planning cycle:



Total attention to people means taking caring of individuals, promoting and implementing actions that promote diversity, equity, and inclusion, prioritizing the health, well-being, and physical and psychological safety of our employees. In short, it means dedicating ourselves to meeting the needs of our employees.

Source: Business Plan 2026-30 (Petrobras, 2025).

Our Business Strategies

Our strategies are designed to deliver meaningful contributions to a prosperous and sustainable future.



Exploration and production

Maximize the portfolio value focusing on profitable assets, replace oil & gas reserves, including the exploration of new frontiers, increase natural gas supply and promote the decarbonization of operations.



Refining, Transport and Marketing

Act competitively and safely, maximize the capture of value by the adequacy and improvement of our industrial park and logistics, seek self-sufficiency in oil products, with vertical integration, more efficient processes, improvement of existing products and development of new products towards a low-carbon market.



Gas and Low Carbon Energies

Act in a competitive and integrated manner in the operation and commercialization of gas and energy, optimizing the portfolio and acting in the insertion of renewable sources.

Act in low carbon businesses, diversifying the portfolio in a profitable way and promoting the perpetuation of Petrobras.



Sustainability

Act in our businesses with integrity and sustainability with safety, seeking decreasing emissions, promoting diversity and social development, contributing to a fair energy transition.

Innovate to generate value for the business, supporting operational excellence and enabling solutions in new energies and decarbonization.

Source: Business Plan 2026–30 (Petrobras, 2025).

The BP 2026–30 reaffirms our commitment to Environmental, Social, and Governance (ESG) principles, integrating these dimensions into a unified strategic vision. Four key commitments guide our approach:

- Reducing our carbon footprint
- Protecting the environment
- Caring for people
- Acting with integrity

Our ESG Positioning



REDUCE CARBON FOOTPRINT

*Ambition Net Zero 2050
Ambition Near Zero Methane 2030
Ambition to keep Emissions below 55 MM tCO2e by 2030*



PROTECT THE ENVIRONMENT

Zero Leak Ambition



TAKE CARE OF PEOPLE

Zero Fatality Ambition



ACT WITH INTEGRITY

Ambition to be a reference in ethics, integrity and transparency

Source: Business Plan 2026-30 (Petrobras, 2025).








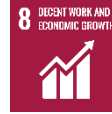




ESG Drivers – SP 2050 and BP 2026-30

For each area of focus, we maintain a set of relevant guidelines that support and guide our related actions, projects, programs, and commitments.

<h4>REDUCE CARBON FOOTPRINT</h4> <ul style="list-style-type: none"> » Promote intrinsic decarbonization, seeking operational emissions neutrality by 2050, considering the origination and acquisition of competitive, high-quality carbon credits as a complementary strategy. » Expanding the supply of and access to low carbon energy and products in a cost-effective transition, contributing to reducing energy poverty and reducing the portfolio's exposure to GHG emissions. » Leverage knowledge and innovation ecosystems in low carbon solutions. » Collaborate with stakeholders to accelerate opportunities that broaden inclusion and sustainable development. 	<h4>PROTECT THE ENVIRONMENT</h4> <ul style="list-style-type: none"> » To be "Water Positive" in the water-critical areas where we operate, by reducing freshwater extraction and improving local water availability, contributing to water security. » Minimizing the generation and maximizing the reuse, recycling and recovery of waste, promoting circular economy practices and seeking zero landfill disposal. » Promote conservation, restoration and gains in Biodiversity, seeking a net positive impact in the regions where we operate. » Improve process safety, preparedness and response to contingencies by preventing and mitigating accidents, leaks and environmental impacts. 	<h4>TAKE CARE OF PEOPLE</h4> <ul style="list-style-type: none"> » To be a vector for socio-environmental development. » To be a benchmark for human rights and the promotion of diversity, equity and inclusion. » To promote the well-being and comprehensive health care of male and female workers. » To promote people's safety through practices that incorporate human factors, with a focus on organizational learning. 	<h4>ACT WITH INTEGRITY</h4> <ul style="list-style-type: none"> » Strengthen our governance model by promoting diversity, equity and inclusion. » To act with excellence in ethics, integrity and transparency. » Encouraging the adoption of ESG practices among our stakeholders.
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Source: Strategic Plan 2050 e Business Plan 2026-30 (Petrobras, 2025).

Regarding the “Reducing Our Carbon Footprint” positioning, each driver is associated with specific targets of the Sustainable Development Goals (SDGs):

DRIVERS	SDG TARGETS MOST CLOSELY RELATED ¹⁵
Promote intrinsic decarbonization , seeking operational emissions neutrality by 2050 , considering the origination and acquisition of competitive, high-quality carbon credits as a complementary strategy .	 7 AFFORDABLE AND CLEAN ENERGY 7.3, 7.a  8 DECENT WORK AND ECONOMIC GROWTH 8.2  9 INDÚSTRIA, INOVAÇÃO E INFRAESTRUTURA 9.1, 9.4, 9.5, 9.b  13 CLIMATE ACTION 13.2
Expanding the supply of and access to low carbon energy and products in a cost-effective transition , contributing to reducing energy poverty and reducing the portfolio's exposure to GHG emissions.	 7 AFFORDABLE AND CLEAN ENERGY 7.1, 7.2, 7.3  13 CLIMATE ACTION 13.2
Leverage knowledge and innovation ecosystems in low carbon solutions.	 7 AFFORDABLE AND CLEAN ENERGY 7.a  8 DECENT WORK AND ECONOMIC GROWTH 8.3  9 INDÚSTRIA, INOVAÇÃO E INFRAESTRUTURA 9.5
Collaborate with stakeholders to accelerate opportunities that broaden inclusion and sustainable development	 10 REDUCED INEQUALITIES 10.2  12 RESPONSIBLE CONSUMPTION AND PRODUCTION 12.7  13 CLIMATE ACTION 13.b

Source: Business Plan 2026-30 (Petrobras, 2025).

Our Position on Climate Change and Energy Transition

Our initiatives related to climate change and energy transition are structured around three pillars:

- **Transparency and Carbon Management** – encompassing governance related to climate change and the energy transition across multiple levels of the Company, integrating climate-related risks and opportunities into analysis and decision-making processes.
- **O&G Competitiveness** – focused on strengthening the resilience of the oil and gas portfolio, with initiatives aimed at maintaining cost-competitive operations with lower carbon intensity relative to industry peers, ensuring competitiveness even in scenarios of declining demand.
- **Low-Carbon Businesses, Scope 3 Emissions, and a Just Transition** – balancing our focus on oil and gas with the profitable diversification of our portfolio into low-carbon businesses as the most effective path toward a just energy transition

¹⁵ Brazilian SDG Indicators (IBGE, 2024).

TRANSPARENCY AND CARBON MANAGEMENT

Governance in information, processes and decisions

- Governance up to BoD, carbon in the risk matrix and reward system with Greenhouse Gas Emission Intensity Index Indicator
- Disclosure aligned with TCFD*, including financial risk of the portfolio (stress testing against public scenarios)
- Emission inventory verified by a third party since 2003



* Task Force on Climate Related Financial Disclosures

COMPETITIVENESS OF O&G

Robustness and Value of the Fossil Portfolio amid the Transition

- Asset cost profile aligned with the transition
- NetZero 2050 ambition and decarbonization commitments
- Superior performance: lower intensity than competitors



LOW CARBON BUSINESS, SCOPE 3 AND JUST TRANSITION

Portfolio Exposure to Carbon

- Corporate scenarios expressing transition trends
- Profitable portfolio in the context of a low carbon economy and sustainable development
- Drivers for capital allocation focused on reducing exposure



Source: Business Plan 2026-30 (Petrobras, 2025).

Ambitions and Commitments to Reduce our Carbon Footprint

We reaffirm our commitments related to climate change:

			TARGET 2030
	Absolute Operational Emissions ¹	mililon tCO ₂ e	-30% ²
	Routine flaring ³	mililon m ³	ZERO
	GHG Intensity in E&P Segment	kgCO ₂ e/boe ⁴	15
	GHG Intensity in Refining Segment	kgCO ₂ e/CWT ⁵	30
	Upstream methane emission intensity	tCH ₄ /thousand tHC	0,20

1) This commitment only considers the business segments in which we are already involved and the company's willingness to use carbon credits

2) Reference 2015.

3) The routine flaring commitment applies only to E&P.

4) The kgCO₂e/boe indicator considers, in its denominator, the gross oil and gas production (wellhead).

5) The kgCO₂e/CWT indicator uses the activity unit referred to as CWT (Complexity Weighted Tonne), which considers both the effect of the processed throughput and the complexity of each refinery, allowing comparison of the GHG emissions potential among refineries with different profiles and scales.

Our absolute and emissions intensity reduction indicators encompass all inventoried greenhouse gases (see [Our Emissions Inventory](#)).

For further details on the metrics applied, see the [Metrics Table](#).

Regarding the commitment to reinject CO₂ in CCUS projects (associated with EOR), the cumulative reinjection target of 80 million tCO₂ was achieved in 2025.

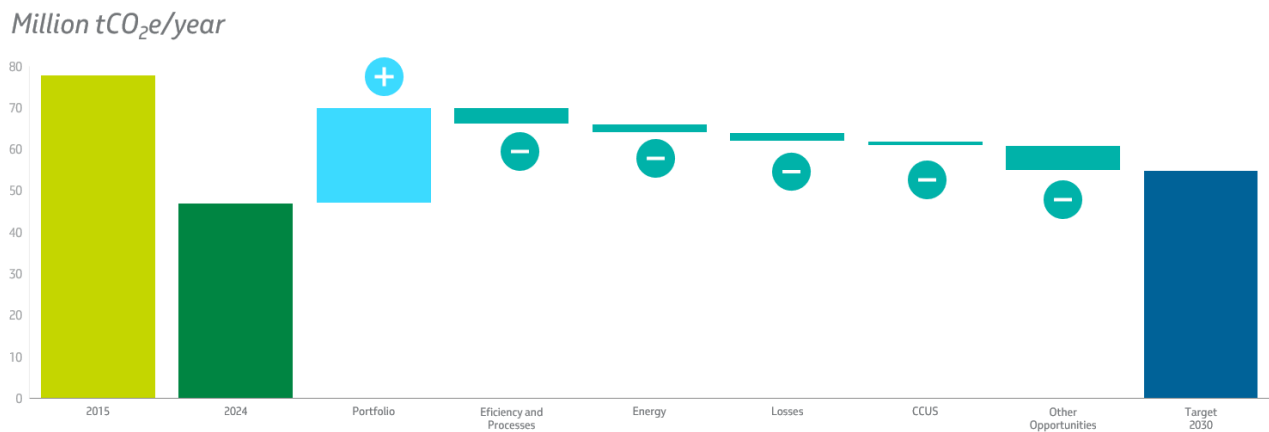
In addition to these commitments, we have ambitions related to mitigating our operational emissions:

- Net Zero by 2050¹⁶
- Keep annual emissions below 55 million tCO_{2e} by 2030¹⁷
- Near Zero Methane by 2030

To achieve our 2030 commitment, we have defined a pathway based on:

- Efficiency gains (energy optimization and integration, as well as the replacement of machinery and equipment);
- Energy substitution, electrification of assets, and integration with renewable sources;
- Loss reduction (reduction of flaring, fugitive emissions, and venting);
- Improvements in industrial processes;
- CCUS (geological carbon storage).
- Other opportunities able to offset the expected growth of our portfolio (intrinsic projects under development and offsetting solutions)

Opportunities to achieve the 2030 commitment



¹⁶ Our ambition considers the company's willingness to use carbon credits. This ambition refers to emissions within Brazilian territory, where more than 99% of our operational emissions occur. For other emissions, we aim for carbon neutrality within a timeframe compatible with the Paris Agreement, in line with local commitments.

¹⁷ Ambition considers the company's position regarding the use of carbon credits. Ambition updated in relation to the 2025–29 Strategic Plan. It considers only the business segments in which we already operate.

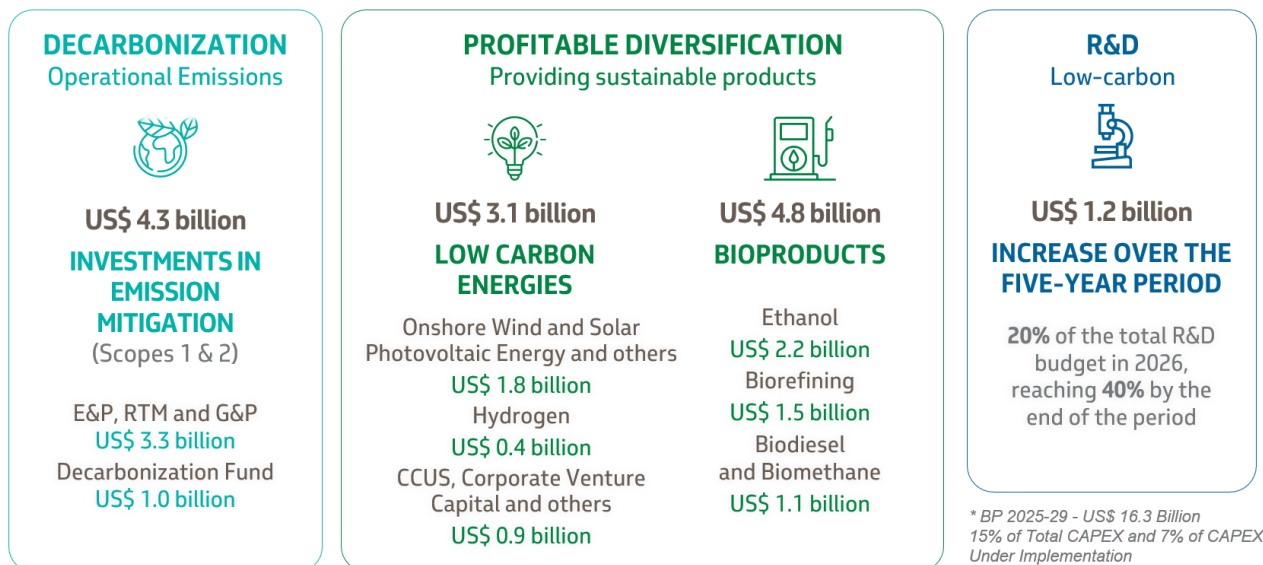
Investments in Energy Transition



Investments in Energy Transition

Our 2050 Strategic Plan outlines the path we are pursuing as a Brazilian integrated energy company and a leader in the just energy transition, focused on mitigating our emissions and increasing the share of renewable energy in our portfolio.

Considering all low-carbon initiatives (Scopes 1, 2, and 3), total investment in the energy transition amounts to US\$13 billion, encompassing projects in low-carbon energy, bioproducts, operational decarbonization, and Research, Development, and Innovation (R&D&I) across all business segments.



Source: Business Plan 2026-30 (Petrobras, 2025)

- The adoption of efficient technologies is essential to maintain competitiveness in the sector. Accordingly, low-carbon investments are expected to represent a significant share of the overall R&D&I portfolio. For the 2026–2030 period, the R&D&I plan allocates US\$1.2 billion to low-carbon initiatives, corresponding to 20% of the total budget in 2026 and increasing to 40% by the end of the cycle. The research portfolio encompasses opportunities across both the oil and gas value chain and renewable energy sources. =>See [R&D&I](#)
- We are developing and evaluating technologies that support the achievement of the decarbonization targets established for our operations (Scope 1 and 2), reducing emissions from internal processes and enhancing the sustainability of our activities. We plan to invest US\$4.3 billion over the five-year period in initiatives aimed at decarbonizing our operations, including the Decarbonization Fund, with an allocated budget of US\$1 billion. =>See [Decarbonization Initiatives](#).
- Our energy transition will be driven by the development of new energy sources. We are advancing solutions applicable across multiple sectors, expanding the supply of bioproducts, investing in renewable power generation capacity, carbon capture, and nature-based decarbonization solutions. We expect to invest US\$7.9 billion in profitable diversification over the 2026–2030 period. =>See [Climate Change and Energy Transition Opportunities](#).

Carbon Neutral Program: Leveraging Solutions for the Net-zero Pathway

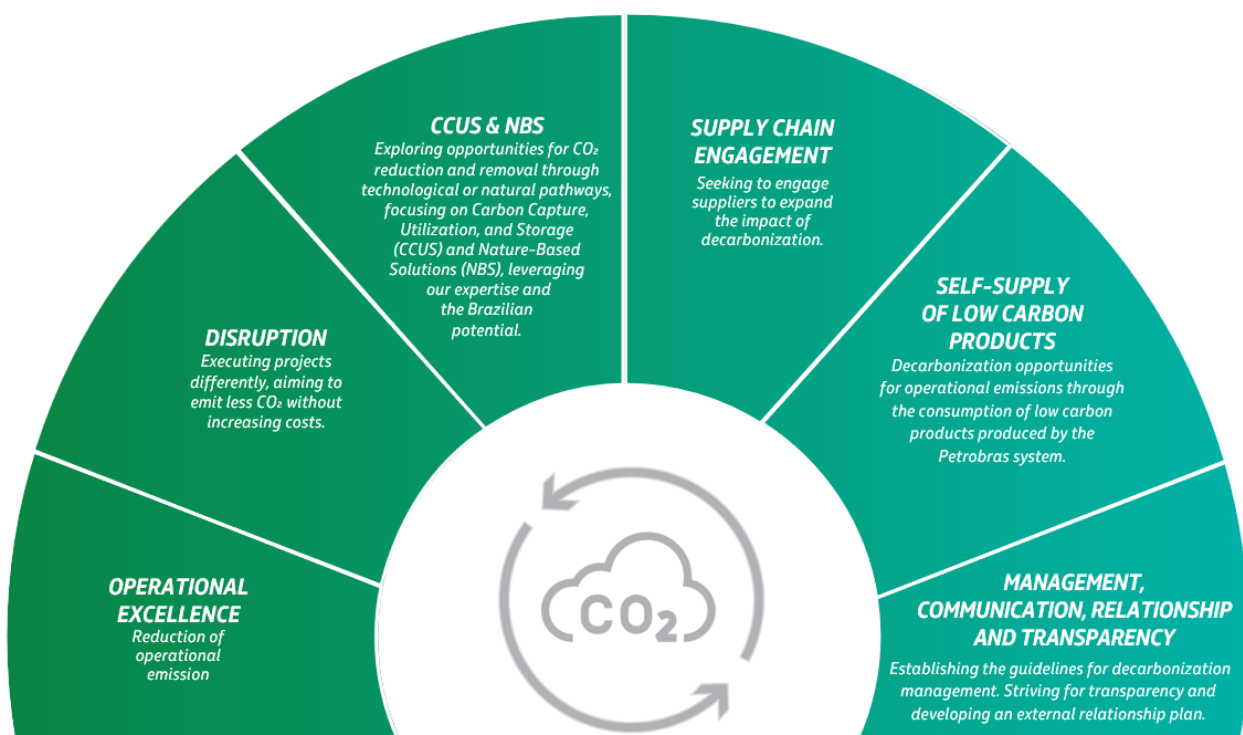


Carbon Neutral Program: Leveraging Solutions for the Net-zero Pathway

The challenge of achieving operational emissions neutrality requires ensuring the technical and economic feasibility of the necessary technologies.

To support this process, we have developed the Carbon Neutral Program, designed to strengthen our low-carbon strategy, accelerate progress, and reduce the costs of decarbonization solutions.

The Carbon Neutral Program (PCN) is a cross-cutting instrument aimed at managing the mitigation of operational emissions through an integrated approach to initiatives developed across the company's different business areas.

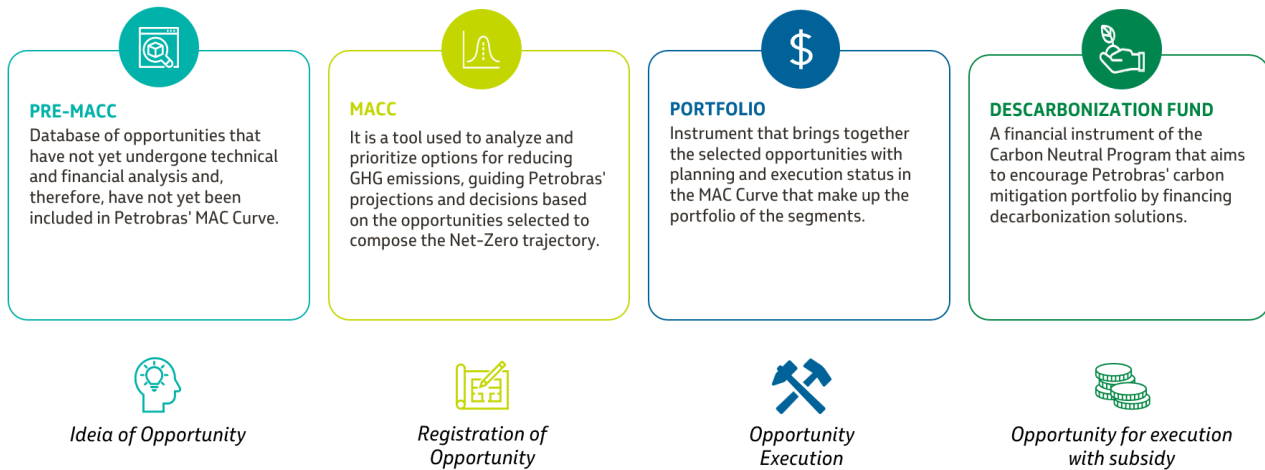


The PCN includes specific components for each business segment, aimed at structuring an integrated portfolio of mitigation opportunities that supports the decarbonization pathway in the short, medium, and long term.

The Program also supports the definition of minimum climate-related requirements to be considered at each stage of investment projects across operational segments (See [Descarbonization Incentives](#)), aligning initiatives with legal and regulatory requirements as well as corporate commitments.

In addition, PCN contributes to the standardization of assessment processes and the identification of new GHG reduction opportunities, promoting robust and integrated decision-making across different business areas.

To support its implementation, PCN relies on a set of tools detailed below:



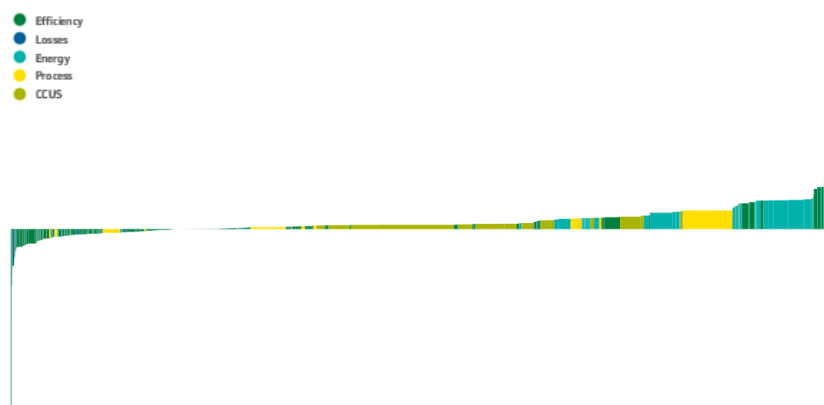
Key highlights include the **Integrated MAC Curve**, the primary management tool for mitigation opportunities, and the **Decarbonization Fund**, the main financial instrument to support decarbonization (See [Decarbonization Initiatives](#)).

Integrated MAC Curve

We systematically map GHG mitigation opportunities and organize the portfolio of opportunities across all business segments in which we operate, using the **Marginal Abatement Cost Curve (MACC)** methodology.

The Integrated MACC is a decision-support tool that facilitates the comparison of different mitigation opportunities and guides resource allocation to maximize a cost-effective decarbonization pathway. In addition, it enables the modeling of decarbonization scenarios, identifying gaps in achieving established commitments and supporting the prioritization of technological advancements. The Integrated MACC currently includes more than 1,000 mitigation opportunities, with diverse levels of technological maturity.

MACC categories represent the main focus areas for emissions mitigation, grouping initiatives according to the nature of the opportunities identified: resource use optimization (efficiency), waste reduction (losses), energy management and transition (energy), process improvements (processes), and the application of carbon capture and storage technologies (CCUS). This classification enables a structured and comparative assessment of alternatives, facilitating the prioritization of the most cost-effective actions.



Each category includes the mapping of technological pathways for decarbonization.

- In Efficiency, the focus is on reducing gas and diesel consumption in our operations;
- In Losses, priority is given to mitigating flaring, fugitive, and vented emissions, as well as improving measurement and monitoring;
- In Energy, we seek to transition to a lower-carbon energy mix through electrification and the use of biofuels;
- In Processes, the emphasis is on low-carbon hydrogen production, especially in downstream operations;
- CCUS includes specific initiatives for carbon capture, utilization, and storage.

Decarbonization Fund

The Carbon Neutral Program includes a Decarbonization Fund aimed at accelerating the decarbonization of operations (Scopes 1 and 2), mitigating risks associated with carbon emissions and supporting climate commitments and the Net Zero ambition. The fund has a dedicated budget of US\$ 1.0 billion for the five-year period (2026–2030).

The governance framework for accessing the fund involves the assessment and prioritization of decarbonization alternatives, using criteria such as marginal abatement cost (MAC), minimum attractive rate of return (MARR) specific to intrinsic decarbonization, total GHG abatement potential, technological maturity, and project stage (window of opportunity), among others.

In 2025, the project portfolio included 35 decarbonization opportunities, totaling approximately US\$ 540 million in committed investments, and a mitigation potential of 1.5 million tCO₂e per year after implementation.

Examples of projects:

- Installation of solar photovoltaic plants at refineries;
- Energy recovery from seawater discharge streams;
- Acquisition of optical gas imaging (OGI) cameras for detecting methane emissions in E&P production units;
- Large-scale electrification projects in refineries.

Decarbonization Incentives in Investment Projects



Decarbonization Incentives in Investment Projects

We strengthen the implementation of cost-effective projects to support climate-related commitments and ambitions, ensuring the resilience of our portfolio in a just energy transition. To this end, we have established requirements within the internal governance framework for investment project approval, including technical and business assessments conducted by Review Groups (RGs) and the presentation, at each gate, of the minimum set of information defined in the Corporate Investment Project Systematics and consolidated in the Technical and Economic Feasibility Study (TEFS).

Financial Requirements

Decision-making related to investment projects is based on successive technical and business assessments conducted by Review Groups, conducted by our specialists, generating recommendations that support deliberations at the appropriate decision-making levels. At the end of each project phase, a minimum set of information is presented, as required by Corporate Investment Project Systematics and other internal standards related to the process, ensuring an adequate level of project maturity and compliance with mandatory requirements for decision-making by Petrobras.

Under our internal governance framework, only projects that are economically attractive across all corporate scenarios are sanctioned. In 2025, we adopted an internal carbon price for operational emissions in the economic valuation of all E&P projects, across the three corporate scenarios.

The use of an internal carbon price, combined with sensitivity analyses, aims to accelerate the implementation of GHG mitigation opportunities aligned with our commitments and ambitions, while preserving project-level decision autonomy. In the economic and financial evaluation of investment projects, sensitivity analyses are performed to assess the potential impacts of carbon pricing associated with Scope 1 and Scope 2 emissions.

Technical requirements

Performance Requirements

In alignment with our GHG emissions reduction commitments, new projects must demonstrate efficiency and/or emissions intensity within the thresholds established for the relevant segment or project type, as mandatory requirements for project progression and phase advancement, in accordance with the Corporate Investment Project Systematics.

In addition to operational performance requirements, each stage of project planning must include the assessment of additional technologies and solutions to reduce GHG emissions, including the quantification of financial and emissions impacts.

Technological Requirements

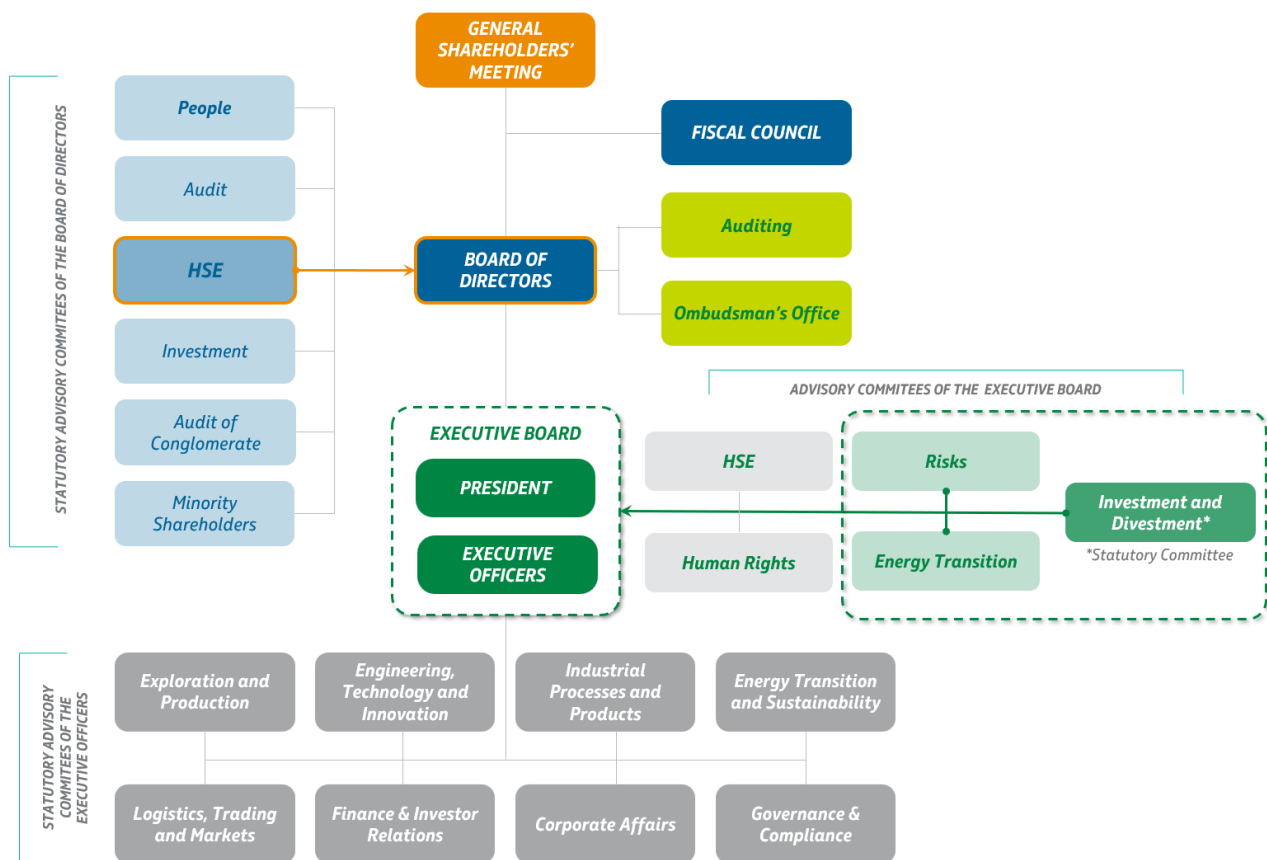
The incorporation of minimum sets of low-carbon technologies in the development of new projects is assessed, considering economic feasibility and potential benefits. Additional technologies may be recommended for implementation based on technical and economic evaluation, according to the specific characteristics of each project.

Governance Related to Climate Change and Energy Transition



Governance Related to Climate Change and Energy Transition

Petrobras has structured its climate change and decarbonization governance based on a multilevel approach, ensuring the cross-cutting integration of this topic across all business segments. This governance encompasses multiple hierarchical levels — including the Board of Directors, Executive Board, Executive Management, General Management, and Management — organized into advisory committees and strategic and technical commissions that meet periodically.



Senior Management

Board of Directors

The Board of Directors (BoD) is Petrobras' highest governance body, responsible for defining the company's overall strategic direction, including its mission and strategic objectives, encompassing those related to sustainability. The BoD is responsible for approving the Strategic Plan and establishing the company's global policies, including those related to environmental and social responsibility.

As provided in the Company's Bylaws, the Board of Directors meets ordinarily at least once a month and extraordinarily whenever necessary.

Executive Board

Composed of the Chief Executive Officer and the Executive Directors, the Executive Board is responsible for managing the company's business in accordance with the mission, objectives, strategies, and guidelines established by the Board of Directors.

The Executive Vice Presidency for Energy Transition and Sustainability is responsible for managing and overseeing matters related to climate change and the transition to a low-carbon economy.

The Executive Board meets weekly, with the presence of the majority of its members, and extraordinarily when convened by the Chief Executive Officer or by two-thirds of the Executive Directors. Agenda items related to climate change and energy transition are scheduled at least quarterly, although this frequency may be increased as needed.

Advisory Committee to the Board of Directors on Climate Change and Energy Transition:

Safety, Environment and Health Committee (CSMS)

The Committee is composed of members of the Board of Directors and/or recognized market professionals with proven experience and technical expertise, serving as external members. Its main function is to advise the Board of Directors on the analysis and recommendation of matters related to sustainability, including health, safety and environment (HSE); climate change; the transition to a low-carbon economy; and social responsibility.

Among its responsibilities is the oversight of the management and mitigation of the most severe sustainability-related risks, with a focus on environmental impacts, protection of life, and reputational considerations. The CSMS proposes preventive and corrective measures, when necessary, and reports its analyses and recommendations to the Board of Directors.

The CSMS meets ordinarily at least once a month and extraordinarily whenever necessary. Specific agenda items related to climate change and energy transition are discussed at least quarterly.

Advisory Committees to the Executive Board on Climate Change and Energy Transition:

The advisory committees to the Executive Board are responsible for evaluating, discussing, and recommending the approval of proposals submitted by technical areas, particularly multidisciplinary topics requiring the integration of perspectives from different areas of the company. Regarding the cross-cutting integration of climate change and energy transition topics, the activities of the following Committees are highlighted:

Executive Risk Committee

The Committee monitors risk treatment actions, analyzing and issuing recommendations on risk management policies and processes, as well as mitigation actions related to key risks, monitoring metrics, and risk exposure limits, escalating relevant matters to senior management.

The Executive Risk Committee meets monthly, with climate change and energy transition risks assessed annually.

Executive Energy Transition Committee

On November 19, 2025, the Executive Board approved the creation of the Executive Energy Transition Committee. This Committee, linked to the Executive Board, aims to support the analysis of matters related to energy transition, low-carbon businesses, climate change, and decarbonization, as well as to strengthen integration and discussion of these topics within Petrobras' senior management.

Statutory Technical Committee on Investment and Divestment

This committee plays a relevant role in climate change and energy transition matters, particularly in the preparation of the Business Plan — including the company’s ESG positioning and commitments — and in the prior assessment of relevant investment projects, acquisitions, and divestments.

Targets Linked to Variable Compensation for Employees and Senior Management

Top-level metrics translate and quantify the attributes of our vision and explicitly guide the company’s main strategic objectives, ensuring that activities remain aligned with the commitments established in the Strategic Plan and Business Plan.

Of the five top metrics defined in the 2026–2030 Business Plan (PN 2026–30), four are linked to the variable compensation of all employees: two environmental and two financial.

Environmental:

IAGEE - Greenhouse Gas Emissions Intensity Target Achievement Index: consolidates the achievement of greenhouse gas (GHG) emissions intensity targets.

ICMA - Environmental Commitment Indicator: considers the volume of spilled oil and derivatives (VAZO).

Financial:

Free Cash Flow (FCL) Indicator

Net Present Value (NPV) Indicator

Calculation of Variable Compensation:

Variable compensation for employees and executives is calculated based on the percentage of achievement of the top-level metrics and the specific metrics for each area, which reflect the direct contribution to the company’s results.

Low-carbon Research, Development, and Innovation



Low-carbon Research, Development, and Innovation

We are advancing research that accelerates the energy transition, generating value and strengthening our position as a leader in innovation and sustainability.

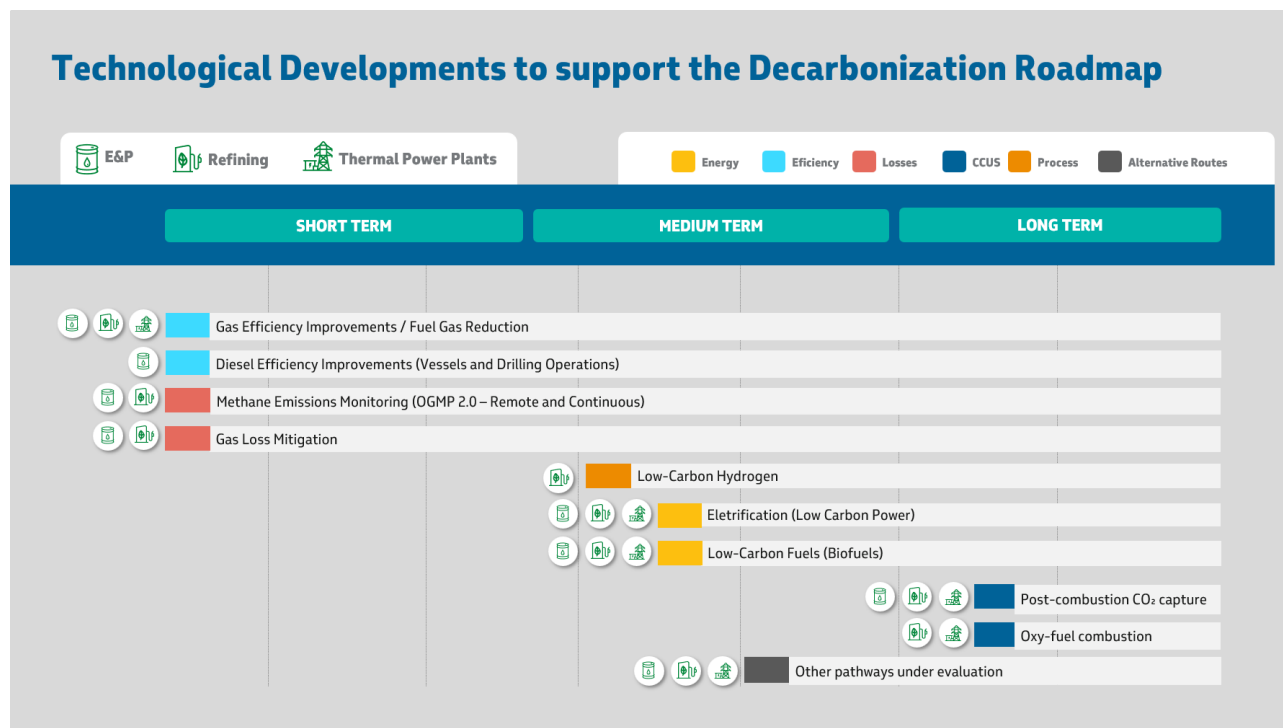
We invest in validating different technological solutions, whether incremental or disruptive, through agile and efficient pilot projects, exploring multiple complementary areas of operation to enable a promising future and support a just energy transition.

Optimizing Current Assets and the Oil and Gas of the Future

The decarbonization of operations is a strategic priority to ensure the sustainability of current activities, the fulfillment of Scope 1 and 2 emissions reduction targets, as well as our ambitions of *Near Zero Methane* by 2030 and the neutrality of our operational emissions by 2050.

Throughout 2025, we developed technology roadmaps aimed at defining emission reduction trajectories for our E&P, Refining and Thermal Power Generation¹⁸ operations, in line with our public commitments.

These roadmaps present the main technological development pathways identified for the decarbonization of operations, including expected availability dates in the short, medium, and long term.



Short term: 2026–2028; Medium term: 2029–2033; Long term: 2033+

In the short term, actions focus on **Operational Efficiency** and **Loss Reduction**.

¹⁸ Roadmap development is planned for all segments in which we operate.

The pathways for electrification, carbon capture (CCS), the use of biofuels, and the production of low-carbon hydrogen and synthetic fuels (*e-fuels*) are medium- and long-term initiatives with greater mitigation potential.

Technology for Reducing Gas Consumption

This category includes actions and technological developments aimed at increasing energy efficiency through energy optimization, to reduce natural gas and diesel consumption in our operations and, consequently, lower GHG emissions. Increased efficiency is achieved through process optimization, energy integration, equipment modernization, reduction of secondary energy losses (steam, condensate, electricity), and new, more efficient heat exchange technologies.

Energy efficiency technologies aim to reduce the amount of energy required to extract, process, and refine oil and gas, making operations more efficient and less polluting. This includes improvements to equipment and processes to achieve the same result with lower fuel consumption. Many efficiency measures pay for themselves quickly, with energy savings offsetting the initial investment. By optimizing energy use, we can significantly reduce greenhouse gas emissions, advancing the decarbonization of the oil and gas sector in a cost-effective manner.

Continuous Monitoring and Mitigation of Gas Losses (Flaring, Venting, and Fugitive Emissions), Contributing to the Ambition of Eliminating Methane Emissions by 2030

Technologies related to the MACC “losses” category consist of tools and practices to monitor and mitigate leaks and unintentional hydrocarbon emissions, such as methane leak detection and repair systems, replacement of emitting equipment, and capture of gas that would otherwise be flared or vented. These technologies make it possible to drastically reduce fugitive methane emissions and other losses, bringing business benefits through reduced product waste, feedback for plant optimization, and increased safety.

Process Electrification

Process electrification enables significant decarbonization of Scope 1 and 2 operations, potentially reducing an asset’s emissions by up to 70%. The concept encompasses the electrification of large machinery, electrothermal systems, and integration with the National Interconnected System (SIN). The main challenges are associated with business factors and the high initial investment required. The focus is on overcoming technological obstacles related to large machinery, electrothermal systems, and the development of subsea cables to connect offshore units to the coast.

Carbon Capture, Utilization, and Storage (CCUS)

Carbon Capture, Utilization, and Storage bring together technologies designed to capture carbon dioxide (CO₂) associated with industrial and power generation activities, preventing its release into the atmosphere. Once captured, CO₂ can be transported and stored in underground geological reservoirs or used as a raw material for new products, effectively contributing to reducing greenhouse gas emissions.

We evaluate these CCUS initiatives with the aim of reducing the carbon footprint of operations in the upstream and downstream sectors. This strategy can result in a significant reduction in emissions, of up to 70%, considering different capture technologies—such as pre-combustion, oxy-combustion, and post-combustion—and the use of various solvents, adsorbents, and membranes, particularly aimed at mitigating large, concentrated emission sources.

Production and Use of Biofuels and Chemicals with Renewable Content

We develop technologies capable of transforming biomass into high-value-added products, such as biofuels (SAF – sustainable aviation fuel, renewable diesel, biogas, biomethane, etc.), asphalt, and raw materials for the chemical industry with renewable content, through the adaptation of existing industrial units or the construction of new ones.

For power plants, we have initiated research into the use of biofuels to reduce emissions. In the upstream sector, research is being conducted to replace diesel in support vessels and drilling rigs.

Low-carbon Hydrogen Production

Hydrogen is widely used in refining processes, and its production currently accounts for approximately 14% of emissions from Petrobras refineries. Its consumption is expected to grow, as it serves as a feedstock to produce synthetic fuels and the processing of vegetable oils, as well as for obtaining derivatives with low sulfur content; the production of low-carbon hydrogen (LCH) is particularly relevant for reducing Scope 1, 2, and 3 emissions.

We are studying various production routes: electrolysis, pyrolysis, dry reforming, the use of feedstocks from renewable sources (including biomethane and ethanol), and the use of LCH, including carbon conversion and natural hydrogen. We have two pilot plants for LCH production via electrolysis under development and other R&D approaches for the remaining technologies.

Technological neutrality regarding production routes aligns with Brazil's legal framework for Low-Carbon Hydrogen, enabling us to pursue the best technological alternatives for decarbonizing this feedstock at the lowest possible costs.

Alternative Routes in Energy Generation and Storage

There is no consensus in the industry on a single route to decarbonize the sector. We invest in studies of alternative and disruptive solutions complementary to current strategies, focusing on:

- Low-carbon energy generation technologies and new energy sources: Examples of research at an early stage of maturity (technological and/or regulatory): wave and underwater current energy generation, nuclear, geothermal, ocean thermal energy conversion, offshore wind, small modular reactors (SMR), and micro nuclear reactors (MNR). Examples with high maturity and already implemented: solar photovoltaic plants at the refinery complex;
- Energy storage: Energy storage systems have proven important for the electrification of processes using renewable sources, due to their ability to stabilize naturally intermittent energy sources. We conduct research on the integration of different storage technologies into our assets, aiming to maximize the decarbonization of operations through photovoltaic, wind, or low-emission energy from the National Interconnected System (SIN), while maintaining the reliability and safety of our operations.

Further details on the technologies, their respective maturity stages, and applications can be found in [Decarbonization Initiatives](#).

New Business

The growing demand for energy, coupled with the need for a just energy transition, opens opportunities for contributing to renewable fuels. Our low-carbon products are already a reality, and we aim to introduce more alternatives that combine sustainability and cost-effectiveness through innovation.

SAF Produced Through the Co-processing of Vegetable oils

Co-processing technologies applied to refining have reached a high degree of technological maturity, with prototype or industrial-scale tests already conducted, confirming technical feasibility and paving the way for commercial implementation.

Co-processing enables the rapid introduction of products with renewable content while minimizing the need for investment.

For SAF produced by co-processing vegetable oils in hydrotreatment units, successful industrial tests were conducted at the Repar, Replan, Revap, Regap, and Reduc refineries.

Renewable Diesel Obtained Through Co-processing of Vegetable Oils

Regarding renewable diesel produced by co-processing vegetable oils in hydrotreating units (HDT), we continue to support the development of the voluntary market, given that co-processed diesel with renewable content was not included in the Fuel of the Future Law.

Production of Sustainable Aviation Fuel from Vegetable Oils via the HEFA Route

Among the technologies approved by American Society for Testing and Materials (ASTM), the HEFA (*Hydroprocessed Esters and Fatty Acids*) route has the highest commercial maturity, with numerous plants worldwide producing SAF as the main product and/or HVO (*Hydrotreated Vegetable Oil*, or green diesel). Our project portfolio includes the implementation of two HEFA plants (RPBC and Boaventura). We have conducted various studies to support the development of dedicated plants and the future operation of industrial units; gathering information for conceptual design and technical-economic evaluation of retrofitting existing HDT units, as well as to enable the integration of new, lower-cost, and more sustainable feedstocks in future industrial plants.

Production of Sustainable Aviation Fuel from ATJ Ethanol

ATJ (Alcohol-to-Jet) technology is a route certified by ASTM to produce SAF from alcohols. The alcohol used as feedstock in the process can be obtained from renewable sources, such as biomass, which is abundant in the country. This is one of the promising alternatives for reducing the carbon footprint in aviation, contributing to global decarbonization goals for air transport. The current challenges of technology involve scaling up and deploying the first industrial units. In 2025, the first industrial unit using this technology began operations, and several ATJ plant projects have been announced through 2030 by the technology's leading licensors. Additionally, research and development initiatives are exploring ways to increase process efficiency and reduce production costs. Within our project portfolio, the implementation of an ATJ plant at Replan is currently under evaluation.

Fuel with Cellulosic Content via Co-processing of Pyrolysis Bio-oil

The Riograndense Refinery (RPR), located in Rio Grande (RS) and owned by Petrobras, Ultra, and Braskem, became the first in the country to produce fuels with cellulosic content by conducting a co-processing test of 5% non-food biomass bio-oil with a mineral feedstock. Using technology developed by Petrobras, the initiative was conducted at the fluid catalytic cracking (FCC) unit, employing the ReNewFCC catalyst, produced by Fábrica Carioca de Catalisadores (FCC S.A.), a joint venture between Petrobras and Ketjen. The process yielded various fractions, including fuel gas, LPG, and components for formulating gasoline and marine fuel with renewable content. The bio-oil, supplied by Vallourec, is ISCC-certified, and its production process helps prevent greenhouse gas emissions.

RPR's technological advancement represents a milestone for global biorefining, demonstrating the potential to transform agroforestry residues into derivatives typically produced in petroleum refining. The initiative, developed by the Leopoldo Miguez de Melo Research and Development Center (Cenpes), combines innovation and sustainability by reducing the need for new infrastructure investments and expanding the use of existing assets, opening new perspectives for the energy transition and for value creation in Brazilian industry.

HLR with Renewable Content

We have developed technology to produce Light Refinery Hydrocarbons (LRH) stream with renewable content. This stream is rich in ethylene, an essential raw material for the chemical industry and the production of plastic resins. The innovation lies in the use of ethanol derived from sugarcane as a

feedstock, which is co-processed in an FCC unit. During the process, ethanol is converted primarily into ethylene, maintaining product quality without contamination or additional pollutant emissions.

Commercial-scale testing of the technology was successfully completed in the first half of 2024, with Braskem's participation. The HLR with renewable content was produced at Recap's residual catalytic cracking (RFCC) unit and shipped to and processed at Braskem's industrial polyethylene production unit in Santo André (SP).

Conversion of CO₂ to Methanol and e-SAF (Synthetic Sustainable Aviation Fuel)

We seek to utilize CO₂ captured from our sources or from biogenic sources to produce fuel molecules, particularly methanol and SAF. With this investment, we aim to develop technologies that enable the production of decarbonized fuels, primarily for the maritime and air transport sectors, contributing significantly to the decarbonization of these sectors.

Research lines in this area include the development of catalytic, biological, and electrochemical pathways, as well as the combination of these pathways to produce methanol and SAF from CO₂ and low-carbon hydrogen.

Nature-based Solutions

In line with our efforts to support R&D&I projects that increase reliability and reduce the costs of implementing and monitoring nature-based solutions projects, we launched in 2025, in partnership with Shell, the Carbon Countdown project, one of the world's largest carbon stock baseline projects, generating scientific knowledge across all six Brazilian biomes to improve the accuracy of carbon estimates in soil and vegetation.

We develop projects that seek to better understand the mechanisms involved in carbon cycling in coastal and oceanic ecosystems (*blue carbon*) and their potential for carbon capture and storage, as well as increasing our resilience to extreme events resulting from climate change.

Other technologies to increase the efficiency of the forest restoration process, utilizing resources that allow for gains in scale, scope, quality, and speed (drones for seeding, robots for planting seedlings and collecting samples, studies of seeds and additives, use of artificial intelligence, etc.), are being developed, with promising results for atmospheric carbon removal, soil conservation, and biodiversity gains.

Wind and Solar Power

The production of renewable electricity, especially from wind and solar sources, is one of the main focuses of our research line in New Energies. In a technological partnership with WEG, Cenpes is directing efforts toward creating a new generation of wind turbines, seeking to reduce both costs and the physical space required for onshore wind power generation. In 2025, the prototype of this onshore wind turbine began operations, becoming the largest in the Americas, with a capacity of 7 MW. For offshore wind energy, research aims to deepen knowledge about winds in regions of greatest potential along the Brazilian coast, including the local development of measurement equipment and the use of innovative atmospheric modeling techniques based on satellite imagery.

Seeking disruptive solutions in photovoltaic technology, we are conducting research on perovskite photovoltaic devices, a material with the potential to further reduce generation costs and energy demand for the manufacture of photovoltaic modules, in addition to providing greater scalability, since it allows for application on flexible surfaces. The initiative addresses critical challenges in technology, such as intrinsic and extrinsic degradation, extending service life, and performance under different irradiance conditions. The development also aims to transition the manufacturing process to scalable methods, such as roll-to-roll printing, reducing costs and enabling large-scale production.

Brazil does not have its own silicon cell manufacturing, and perovskite technology presents a strategic opportunity to strengthen the national solar energy production chain. The project includes the

formulation of new materials, the development of functional layers, process optimization, and the fabrication of devices ranging from small-area units to large-scale modules. It also encompasses studies on encapsulation, stability under real-world conditions, and accelerated testing for light, temperature, and humidity.

Long-duration energy storage, batteries, and critical minerals

Research on batteries and critical minerals represents a key area of the global energy transition. Renewable sources such as wind and solar energy, as well as nuclear energy and battery storage systems, require various critical minerals—essential elements often associated with cutting-edge technologies—to enable their operations. The significant dependence on materials such as rare earths, lithium, nickel, and other strategic metals directly impacts the availability and costs of these alternative energy sources. Thus, the production of turbines, solar panels, and advanced batteries depends on an adequate supply of these natural resources, for which global demand is growing as the search for more sustainable energy solutions intensifies.

Carbon Capture, Utilization, and Storage (CCUS)

We emphasize the strategic role of carbon capture, utilization, and storage technologies in this trajectory. With extensive experience in CO₂ injection projects, including one of the world's largest reinjection programs in pre-salt reservoirs, we believe these initiatives have high potential to drive the energy transition.

We also conduct research on Bioenergy with Carbon Capture and Storage (BECCS), particularly focused on the sugar and ethanol industry, such as in ethanol production. BECCS projects at ethanol plants combine the robustness of Brazil's bioenergy sector with technological innovation in carbon capture, yielding environmental, technological, and economic benefits. From an environmental perspective, this integration enables a significant reduction in CO₂ emissions and can even generate negative emissions, promoting the decarbonization of the energy matrix and the achievement of global climate goals. From an economic standpoint, investing in CCUS and BECCS allows for the creation of new sustainable products and services, adds value to the entire ethanol production chain, and fosters sustainable development in Brazil.

Further details on the development of technologies in our businesses can be found in [Climate Change and Energy Transition Opportunities](#).

Decarbonization Initiatives



Decarbonization Initiatives

We present a detailed overview of the pathways for reducing GHG emissions in our operations, comprising cost-effective initiatives focused on carbon management and climate change mitigation for Scope 1 and 2 emissions.

These actions are aligned with the commitments and ambitions established for the years 2026 to 2030, guided primarily by the action areas of the Carbon Neutral Program.

Decarbonization of Exploration and Production

Reducing emissions in the upstream segment is strategic given long-term scenarios of declining global oil demand and international restrictions related to the carbon intensity of products, while also serving as a driver of technological innovation and competitiveness.

The implementation of the Carbon Neutral Program (PCN) in the upstream segment guides mitigation actions that contribute to our net zero trajectory, focusing on the main sources of greenhouse gas emissions, notably:

- The consumption of fuel gas for power generation at production units, responsible for approximately 60% of GHG emissions;
- Gas losses, including flaring, venting, and fugitive emissions, which account for about 20% of GHG emissions;
- Diesel consumption in drilling rigs and vessels, responsible for approximately 20% of GHG emissions.

With the implementation of actions associated with the PCN, a reduction potential of approximately 970,000 tCO₂e/year is estimated in the short term, resulting mainly from initiatives focused on energy efficiency and the reduction of gas losses.

In the long term, with a focus on deep decarbonization of the Exploration and Production (E&P) segment, initiatives are being developed related to energy supply for operational units, as well as new applications related to carbon capture, utilization, and storage (CCUS).

Among the actions implemented in 2025, the following stand out: campaigns for the detection and repair of process components with fugitive emissions (LDAR), the inspection and adjustment of gas-leaking valves, and the optimization of turbogenerator usage.

Decarbonization actions are evaluated for their potential contribution to achieving our public emission mitigation commitments (incremental, moderate, and high) and are reported according to their stage of development. These actions can be applied to both operating assets and new projects.

The following table provides a broad overview of the opportunities and challenges of decarbonizing the sector, contributing to various efficient short-, medium- and long-term strategies.

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Energy Efficiency	Reduction in gas consumption	Optimization of Turbogenerator Use	Turbogenerators supply electrical and thermal energy to offshore platforms by burning fuel gas. Their efficiency is highest when operating near rated load. Operational optimization involves using the fewest possible turbogenerators to meet electrical demand while keeping them at high loads, which increases efficiency, reduces fuel consumption, and lowers emissions.	Under implementation	Moderate
Energy Efficiency	Reduction in gas consumption	Use of digital energy optimization tools	Digital process optimization tools use digital plant models (digital twins) and artificial intelligence, combining historical and real-time data to recommend energy consumption reductions. Lower energy demand reduces gas consumption in the turbogenerators and, consequently, greenhouse gas emissions, with no need for physical interventions in the units. Tool example: Optimal Burn — a long-term operational policy optimizer for maintaining generation systems to optimize gas consumption with low initial investment.	Under implementation	Moderate
Energy Efficiency	Reduction in gas consumption	Compressor retuning	Recirculation occurs when part of the compressed gas returns to the compressor suction, increasing energy consumption. Adjustments to recirculation valves and control techniques minimize the recirculated volume, increasing process efficiency and thereby reducing energy consumption, fossil fuel combustion, and emissions, while increasing the potential for gas exports.	Under implementation	Moderate

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Energy Efficiency	Reduction in gas consumption	Hydraulic turbine in the water discharge system	Applicable only to new projects. The seawater flow used for cooling on offshore platforms is discharged through valves that control the temperature of the fresh water supply to the cooling system. The available hydraulic energy associated with this flow, which would otherwise be wasted due to the throttling of these valves, can be harnessed by installing a hydraulic turbine to generate electricity. The electricity generated by this hydraulic turbine reduces the consumption of fuel gas for power generation in the gas turbines of the main power generation system. The efficiency of this solution is evaluated on a case-by-case basis, depending on the characteristics of the project and the field in question.	Under implementation	Incremental
Energy Efficiency	Reduction in gas consumption	Variable Speed in Pumps and Compressors	<p>Hydraulic variable speed drives (HVSD) and electronic variable frequency drives (VFD) enable the operation of pumps and compressors at variable speeds. Their use is evaluated on a case-by-case basis for energy control and optimization purposes, allowing operation close to the point of maximum efficiency, with reduced electrical demand, fuel gas consumption, and associated emissions. The efficiency of this solution is evaluated based on the characteristics of the project and the field.</p> <p>Research is currently underway to expand alternatives such as electromechanical drives, which are lighter, lower-cost, and easier to operate, thereby achieving greater energy efficiency.</p>	Under implementation	Incremental

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Energy Efficiency	Reduction in gas consumption	Deep Water Intake	<p>This cooling water intake system for FPSOs is a technological innovation capable of drawing seawater from great depths, reducing the cooling water demand of the Fixed Production Unit (FPU) and, consequently, lowering the FPU's electricity demand, with a corresponding reduction in emissions, in addition to financial benefits associated with increased operational efficiency. This technology is already being used in new projects for intake depths of up to 100 meters.</p> <p>Research is underway to increase the technology's efficiency with intake at greater depths (above 400 meters).</p>	Under implementation / Under development	Under evaluation
Energy Efficiency	Reduction in gas consumption	Technologies for utilizing process energy on FPSOs	<p>Energy mapping, potential assessment, and qualification of equipment for energy recovery and generation through the utilization of existing processes. Example: qualification of pressure-based energy recovery in valves.</p>	Under implementation	Under evaluation
Energy Efficiency	Reduction in gas consumption	Process optimization technologies	<p>Technological solutions whose primary purpose is to optimize the process, reduce weight or footprint, and increase energy efficiency, contributing to productivity, process simplification, and emissions reduction.</p> <p>Examples currently being implemented: Compaction technologies and energy efficiency improvements, such as the Hermetic Compressor.</p> <p>Examples under development: Ceramic Membrane Technology for CO₂ Separation from Natural Gas, through increased gas yield for export and higher CO₂ concentration for reinjection, with reduced emissions.</p>	Under implementation / Under development	Under evaluation

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Energy Efficiency	Reduction in diesel consumption	Vessel Hybridization	Vessel hybridization involves integrating conventional propulsion systems with electric motors and batteries, enabling hybrid operation. This technology reduces fuel consumption, greenhouse gas emissions, and local pollutants, while improving operational efficiency, particularly during maneuvers, at low speeds, and during idle periods.	Under implementation	Moderate
Energy Efficiency	Reduction in diesel consumption	Technologies for probe optimization	Research related to engine condition monitoring using various sensors. Through machine learning models, the goal is to predict exhaust emissions and diagnose faults, enabling the use of a condition-based maintenance strategy. There is also research on chemical improvements to combustion in diesel engines and the development of an injection control system for diesel engine cylinders in drilling and intervention rigs to reduce consumption and emissions, increasing combustion efficiency and reducing specific fuel consumption per unit of power generated.	Under development	Under evaluation
Reduction of gas losses	Reduction of gas flaring	Operation of Flare Gas Recovery Units (FGRU)	The FGRU (Flare Gas Recovery Unit) aims to recover, for the process, any gas streams that would otherwise be sent for flaring. This system minimizes unnecessary gas flaring, contributing to the reduction of flare emissions. Technology is available for new projects, and research is underway for units currently in operation.	Under implementation / Under development	Moderate
Reduction of gas losses	Reduction of gas flaring	Elimination of gas leakage in valves	The action involves identifying valves that are leaking gas when in the closed position and directing them to the appropriate repair. Valve leakage monitoring can be performed using equipment that employs ultrasound and other monitoring technologies still under development.	Under implementation / Under development	Incremental

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Reduction of gas losses	Ventilation reduction	HC Blanketing	Applicable to new projects. The cargo tanks of an offshore unit can be blanketed with inert gas or hydrocarbons. With inert gas blanketing (obtained from the exhaust gases of fuel gas or diesel combustion in an inert gas generator), as the cargo tanks are filled with treated oil, inert gas and volatile hydrocarbons are emitted through the cargo tank venting system (vent post). With hydrocarbon blanketing (HC blanketing), there is a closed-loop system with gas recovery to the plant, eliminating the continuous emission of inert gas and volatile hydrocarbons through the vent post during normal FPSO operation.	Under implementation	Incremental
Reduction of gas losses	Ventilation reduction	Recovery of stripping gas from TEG regeneration	Dehydration of the gas produced by TEG occurs through water absorption in a contact tower. The rich TEG is regenerated in a closed loop, a process in which solubilized hydrocarbons are released during pressure reduction to the flash vessel. Additionally, a stripping stream, typically fuel gas, can be used to reduce the water content of the TEG, with this stream being released into the regeneration tower. The adoption of a unit for the recovery and reuse of gases from the flash vessel and the regeneration tower reduces greenhouse gas emissions compared to venting these streams to the atmosphere or to a flare.	Under implementation	Moderate
Reduction of gas losses	Ventilation reduction	Operational optimizations to reduce venting	This action aims to ensure that the unit performs oil treatment within the ideal temperature and pressure parameters, thereby ensuring greater fluid stability when sent to the loading tanks.	Under implementation	Incremental

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Reduction of gas losses	Reduction of fugitive emissions	Leak Detection and Repair (LDAR)	The LDAR process involves detecting leaks (fugitive emissions) of gaseous hydrocarbons in process components, such as valves and flanges, using methane monitoring technologies, such as Optical Gas Imaging (OGI) cameras. Based on the detection and quantification of a fugitive emission, it is possible to plan its repair by considering factors such as materiality, complexity, and the need for supplies, among others, which will determine the level of prioritization. After the repair, a second monitoring is conducted to verify the effectiveness of the fix.	Under implementation	Moderate
Reduction of gas losses	Reduction of fugitive emissions	Specification of low-emission equipment	Testing and implementation of valves with low fugitive emission technology in the natural gas chain, such as expanding disc valves.	Under implementation / Under development	Incremental
Power Supply	Electrification	Power-from-shore	The power-from-shore concept involves supplying electricity to offshore facilities from the onshore power grid via subsea power cables. This solution replaces or reduces the use of local fossil fuel-based generation (such as gas turbines or diesel engines), contributing to the reduction of greenhouse gas emissions.	Under development	High
Power Supply	Nuclear	Nuclear Generation	Technological assessment of modularized nuclear power generation systems, with differentiated approaches: located in a submarine environment (aiming to provide power to submarine equipment), in generation hubs, or onboard the Unit to provide power to the UEP.	Under technological evaluation	Under evaluation
Power Supply	Other technology exploration routes	Other technology exploration routes	Technology scouting and development of other energy supply routes such as underwater power generation, wave and tidal power generation, ocean thermal energy conversion (OTEC), deep-water offshore wind power, autonomous and underwater power generation, and marine-grade battery energy storage systems (BESS).	Under technological evaluation	Under evaluation

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
CCUS	CCUS-EOR	CCUS-EOR in offshore assets	The technology involves capturing CO ₂ present in associated gas produced alongside oil, followed by its compression and conditioning. The captured CO ₂ is reinjected into the reservoir for enhanced oil recovery (EOR), reducing atmospheric emissions and contributing to the decarbonization of offshore operations.	Under implementation	High
CCUS	CCUS of exhaust gases	Exhaust gas CCUS at offshore assets	The technology involves the capture of CO ₂ present in the combustion gases of gas turbines or other onboard generation systems (exhaust gases) via chemical absorption using an amine solution, followed by its compression and conditioning/storage.	Under development	High
CCUS	CCUS of exhaust gases (alternative routes to amine)	Alternatives to amine	Carbon capture from flue gas via chemical absorption, despite achieving efficiencies exceeding 90% and demonstrating greater technological and commercial maturity, is capital- and energy-intensive. In the case of offshore applications, it presents challenges related to the space and weight required.	Under development	Under evaluation
CCUS	Oxycombustion	Offshore oxy-combustion	Oxy-combustion is a technology that allows fuel to be burned in the presence of pure oxygen rather than air. This enables higher CO ₂ capture efficiency, with simplified operation since it does not require amine replacement. In the offshore context, technology faces challenges in increasing the technological maturity of equipment, as well as challenges related to space, weight, and safety associated with the use of oxygen in the process.	Under development	Under evaluation

Note 1: Mitigation Potential (tCO₂e/year): **Incremental** 0–100,000, **Moderate** 100,000–1,000,000, and **High** >1,000,000.

Note 2: **Under implementation**: The technology has completed its development and is ready for operational application. It may be in the deployment phase, already deployed, or awaiting the start of implementation in a real-world environment; **Under development**: The technology is in the process of maturing, with research, development, and testing activities underway. It has not yet reached the level of technological readiness required for operational application. **Under exploration**: The technology is in the conceptual stage, limited to the preliminary studies and feasibility assessment phase. No pilot projects have been developed or practical validation conducted to date.

- Actions must be aligned with the specific characteristics of each production system, considering criteria such as the marginal abatement cost and technological barriers to implementation. It is also worth noting that the measures with the greatest potential to contribute to GHG mitigation in the future require technological development, underscoring the importance of investments in R&D&I.
- To implement the action, compliance with the regulatory environment must be ensured, in addition to accounting for various operational specifics, such as reservoir type, location, field maturity, and productivity, highlighting the need for a structured and integrated approach to prioritizing decarbonization actions.

OGMP 2.0


In January 2023, we joined the OGMP 2.0 – Oil and Gas Methane Partnership, reinforcing our commitment to reducing methane emissions in our operations. OGMP 2.0 is a global initiative, coordinated by the United Nations (UN), dedicated to the quantification, reporting, and management of methane emissions, with a focus on mitigating climate change impacts in the O&G sector. Recognized as the leading industry reference in terms of transparency and credibility in the provision of methane emissions data, OGMP 2.0 brings together more than 150 companies from the oil and gas industry.


In 2025, we received the Gold Standard Pathway seal from OGMP for the third consecutive year, in recognition of our implementation plan for methane emissions management in the gas upstream, midstream, and downstream sectors, which is aligned with industry's best practices. Maintaining this seal is the result of an integrated effort across multiple departments that, since 2023, have been conducting systematic monitoring and reporting activities in accordance with the established implementation plan.

Methane emissions monitoring activities are carried out in accordance with the OGMP 2.0 implementation plan, which is reviewed annually, and involve:

- Annual report on methane emissions;
- Monitoring of fugitive emissions at assets, primarily using OGI (Optical Gas Imaging) camera technology;
- Monitoring flare emissions through simulation using process data and VISR (Video Imaging Spectro-Radiometry) cameras to assess methane destruction efficiency (DRE) in the flare;
- Monitoring of vent emissions through simulation using process data;
- Site-level monitoring via sampling, using drones and aircraft.

By 2026, we aim to achieve OGMP Level 5 methane reporting (site-level) across one-third of our upstream, midstream, and downstream gas portfolio, in accordance with the implementation plan agreed with the OGMP. To achieve this goal, additional monitoring campaigns, emissions simulations, and reconciliation of monitored data at Levels 4 and 5 will be required.

 *Petrobras' membership in the OGMP reflects the value we place on transparency and the importance we assign to measuring emissions, in line with the OGCI's Aiming for Zero Methane Emissions initiative, of which we are signatories.*

 *Our actions also contribute to Brazil's positioning in relation to the Global Methane Pledge, an initiative launched at COP26 by more than 100 countries, which aims to reduce methane emissions by 30% by 2030 compared to 2020 levels.*

Downstream Decarbonization

Refining

Reducing emissions in Refining has become strategic in light of long-term scenarios involving declining demand for fossil-derived products, the search for diversification toward low-carbon products co-processed in refineries, and international constraints related to product carbon intensity.

The main emission mitigation actions in Refining focus on the most significant GHG sources in this segment, highlighting:

- The consumption of fuel gas for the generation of thermal and electrical energy for process units, utilities, and off-sites, accounting for approximately 55% of GHG emissions in refineries;
- The Fluid Catalytic Cracking (FCC) process, in which catalyst regeneration in the regenerator vessel accounts for approximately 28% of GHG emissions;
- Hydrogen production via steam reforming, aimed at meeting hydrotreating demand to ensure fuel quality, contributing approximately 15% of GHG emissions;
- Gas losses to flaring, which account for about 2% of GHG emissions.

Considering the significant share of emissions associated with thermal and electrical energy generation, decarbonization actions in refining operations include continuous monitoring of energy performance through a robust operational management framework and initiatives within the scope of the RefTOP Program and the Decarbonization Fund.

Energy performance management is supported by the cascading of indicators at the operational level, focusing on the rationalization of energy consumption in fuels production processes, reduction of condensate and steam losses, increased furnace efficiency, reduction of flaring, and optimization of power generation.

The RefTOP Program aims to position our refining park among the best in the world in terms of operational efficiency, energy performance, and sustainability. To this end, it includes investments and structured initiatives aligned with four pillars and objectives, with a focus on performance improvement:

AMBITION 2030



Reliability

Operational availability: $OA^* \geq 97\%$



Energy performance

Energy sustainability: $ESI^* \leq 86$



Sustainability

Emissions intensity:
 $IGEE \leq 30\text{kg CO}_2\text{eq/CWT}$



Value**

Pre-salt processing capacity = 100%

*Benchmark Solomon: OA – Operational availability;

ESI – Energy Sustainability Index™


**Does not consider lubricant plants

To represent the decarbonization pathway of Refining operations, starting in 2025 we began disclosing the Energy Sustainability Index™ (ESI) as the monitoring metric for the RefTOP Program's Energy Performance pillar, replacing the Energy Intensity Index™ (EII). The SEI indicates the quality of energy consumption in refineries by considering the carbon footprint of purchased energy (electricity and steam), recognizing the impact of these lower-carbon energy sources while maintaining a focus on efficiency in energy use throughout the process. With this new indicator, it is possible to measure both energy intensity and energy sustainability, highlighting actions that benefit from the efficiency of Brazil's electricity mix and encouraging electrification and photovoltaic generation projects.

Through the initiatives planned under the program's Energy Performance and Sustainability pillars, a potential reduction of 1.6 million tCO₂/year is expected in the coming years, through the implementation of the following key initiatives:

- Energy integration and process optimization through the review of heat exchanger networks and the use of specialized exchangers, aimed at increasing the heating level of process streams or demineralized water;
- Increased combustion efficiency in furnaces and boilers by improving heat recovery strategies (such as air preheaters, internal coils for steam generation, among others);
- Reduction of energy losses through increased condensate recovery;
- Optimization of natural gas, electricity, and steam consumption in operations through improved on-site power generation management at refineries;
- Continuous monitoring and optimization of energy performance parameters in Refining processes, both at the management level and through the use of commercial software and advanced process control;
- Reduction of routine gas routing to flaring systems;
- Modernization of large equipment and replacement of condensing turbines with electric motors.

Among the initiatives supported by the Decarbonization Fund are large-scale equipment electrification projects, such as the air blower of the fluid catalytic cracking unit at Refap, with an emissions reduction potential of approximately 220,000 tCO₂/year. Also noteworthy is the installation of photovoltaic plants at the Gabriel Passos Refinery (Regap), in Minas Gerais; the Abreu e Lima Refinery (Rnest), in Pernambuco; and the Paulínia Refinery (Replan), in São Paulo. The total estimated capacity of the three plants is approximately 42 MW, with an emissions reduction potential of around 37 thousand tCO₂e/year.

 *With the implementation of the RefTOP Program, by 2025 we will have already reduced Sustainable Energy Index (ISE) by 10% (from 109.6 to 98.5) and greenhouse gas emissions intensity (IGEE) by 9% (from 40.2 to 36.7 kg CO₂e/CWT) compared to 2020.*

In addition to the efforts under the RefTOP Program, the Carbon Neutral Refining initiative mapped, in 2025, new medium-term decarbonization opportunities with an emissions reduction potential of 6 million tCO₂/year. Disruptive technological solutions required to support the Net Zero emissions trajectory of refining operations were also identified and are being advanced under the Refining Sustainability Master Plan.

Among the main initiatives under evaluation, with a long-term focus, are the increased electrification of equipment; the use of heat pumps for steam generation to meet process thermal demands; the use of biomethane; CCUS (Carbon Capture, Utilization and Storage); energy storage; green hydrogen; hydrogen recovery from refinery gas streams; biomass co-processing; research and development in Small Modular Reactors (SMR) and Micro Modular Reactors (MMR); among other potential solutions.

The table below consolidates the main mitigation options that serve as the basis for the development of the refining decarbonization roadmap, including actions that require technological development along the pathways indicated in the figure presented in the R&D chapter.

Decarbonization measures can be grouped according to their main focus areas, following the logic of the MACC category framework. For Refining, these are:

- Energy Efficiency
- Gas Loss Reduction
- Energy (transition to a lower-carbon energy mix)
- Refining Processes (emissions not necessarily related to energy generation)
- CCUS

Decarbonization initiatives are assessed based on their potential to contribute to the achievement of our public emission mitigation commitments (high, moderate, and incremental) and are categorized according to their stage of development.

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Efficiency	Reduction in gas consumption	Process optimization	Use of optimizers to adjust and control operational variables to maximize efficiency and reduce costs.	Under implementation	Incremental
		Increased furnace efficiency	Increased thermal energy recovery from process furnaces through heat utilization strategies (such as air preheaters, internal coils for steam generation, or others) that capture the residual heat in the flue gases at the outlet of these equipment's chimneys.	Under implementation	Incremental
		Heat recovery for demineralized water heating	Utilization of waste heat from process streams to heat demineralized water streams. This waste heat replaces the use of steam for heating demineralized water, reducing gas consumption in the boilers.	Under implementation	Moderate
		Energy integration	Maximizing thermal efficiency between units and equipment by expanding heat exchange areas and implementing heat exchange strategies between hot and cold streams to achieve minimal energy consumption.	Under implementation	Incremental
		Modernization of large machinery	Use of asset management assessments to provide guidance on the replacement of large machinery (such as compressors) with modern, more efficient, and reliable equipment, thereby reducing costs and emissions.	Under implementation	Incremental
		Steam and condensate recovery	Replacement of steam traps with more technologically advanced models to reduce energy losses due to inefficiency in steam distribution and condensate collection systems.	Under implementation	Incremental
		Advanced digital tools	Use of commercial software and innovative AI and IoT solutions to monitor systems, reduce losses, and optimize operational decisions.	Under development	Incremental
		New heat exchange technologies	Innovative equipment to improve heat transfer and reduce gas combustion for heat generation.	Under development	Incremental

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Losses	Flare loss mitigation	Process optimization	Use of optimizers to adjust and control operational variables to detect and minimize gas losses to flaring.	Under implementation	Incremental
		Actions to reduce flow through valves	Improved identification of flow and leaks in flare systems through field monitoring and the use of IoT technologies.	Under implementation	Incremental
		Flare gas recovery systems	Use of commercial flare gas recovery systems (FGRS) to minimize gas flaring.	Under development	Incremental
		Advanced digital tools	Use of commercial software and innovative AI and IoT solutions to monitor systems, reduce losses, and optimize operational decisions.	Under development	Incremental
		Technologies for reducing flow in valves	Replacement of valves with ultra-high-seal models to minimize gas losses to the flare system.	Under development	Incremental
		Technologies for recovering flue gas sent to the flare	Development of alternative FGRS technologies for flaring gas recovery.	Under development	Incremental
	Monitoring and measurement	Torch system monitoring	Development of measurement instruments, use of commercial software, and innovative AI and IoT solutions to identify and monitor losses, streamlining operational and maintenance decisions.	Under development	Incremental
	Disposal of surplus refinery gas	Pyrolysis	Thermal decomposition of natural gas or fuel without reaction with oxygen to generate chemicals.	Under development	Moderate
		Gas to Liquid (GTL)	Conversion of fuel gas produced internally during the cracking of oil in the various stages of refining into liquid fuels, such as diesel and naphtha.	Under development	Incremental
	Energy	Electrification of machinery	Electrification of large machinery	Replacement of turbines that use steam until condensation for their mechanical drive, with a new motorized system featuring more efficient electric motors and zero emissions through the purchase of I-RECs (renewable energy certificates).	Under implementation

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Energy	Electrification of machinery	Heat pumps	Installation of equipment that recovers waste heat from a process, which is generally lost through the cooling of water or atmospheric air.	Under development	High
	Electrothermic	Electrical heating	Use of electric heating for tanks and piping for the transfer and storage of products at high temperatures.	Under development	Incremental
		Electric process furnaces	Heating of process streams using furnaces that rely on electricity rather than fossil fuels.	Under development	Moderate
	Biomethane	Use of biomethane	Use of gas from renewable sources (biomethane) as fuel and feedstock in refining processes.	Under development	High
	Low-carbon thermoelectric power generation and storage	Solar photovoltaic plants	Expansion of photovoltaic energy use at refineries, enabling a reduction in energy generation through natural gas combustion.	Under implementation	Incremental
		Battery energy storage systems (BESS)	Energy storage for use in the event of a failure in the external electricity supply. This allows for greater grid integration, which has a zero emissions factor through the purchase of I-RECs (renewable energy certificates).	Under implementation	Incremental
		Small Modular Reactor (SMR) and Micro-Nuclear Reactor (MNR)	Small nuclear reactors for the safe and decarbonized generation of electricity or thermal energy.	Under development	Moderate
Process	Low-carbon hydrogen production	Renewable feedstock in the hydrogen generation unit (UGH)	Use of renewable sources to power hydrogen production.	Under development	Moderate
		Electrolysis	Hydrogen production through the separation of water using electricity.	Under development	Moderate
		Pyrolysis	Thermal decomposition of natural gas in the absence of oxygen to generate chemicals.	Under development	Moderate
		Improvement of UGH catalyst	Development of more efficient structured catalysts for hydrogen production.	Under development	Incremental

MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Process	Low-carbon hydrogen production	New technologies for hydrogen recovery units	Reducing the carbon intensity of hydrogen generation at refineries through hydrogen recovery from off-gas streams.	Under development	Incremental
	Synergy with biorefinery	Co-processing of biomass in FCC	Co-processing of biomass and petroleum-derived feedstocks in catalytic cracking units to produce biofuels and feedstocks for the chemical industry	Under development	Moderate
		Reuse of biorefinery by-products	Use of byproducts from biorefineries employing HEFA or ATJ technologies as feedstocks or energy.	Under development	Incremental
	Use of CO ₂	E-fuels	Synthetic fuels produced from renewable power, and CO ₂ .	Under development	Incremental
		Biotechnological capture and conversion of CO ₂	Use of microorganisms to capture and convert CO ₂ into useful products.	Under development	Incremental
	CCUS	CCUS	Capture using solvents and amines (post-combustion)	Removal of CO ₂ from flue gas using chemical solvents.	Under development
Alternative Routes to Amine			Removal of CO ₂ from flue gas using other methods (adsorbents and others)	Under development	High
Oxycombustion			Burning fuels with pure oxygen to facilitate CO ₂ capture in furnaces, boilers, turbines, and FCC regenerators	Under development	High
BECCS			CO ₂ capture from biogenic sources (associated with the combustion of renewable fuels)	Under development	High

Note 1: Mitigation Potential (tCO₂e/year): **Incremental** 0–100,000, **Moderate** 100,000–1,000,000, and **High** >1,000,000.

Note 2: **Under implementation**: The technology has completed its development and is ready for operational application. It may be in the deployment phase, already deployed, or awaiting the start of implementation in a real-world environment; **Under development**: The technology is in the process of maturing, with research, development, and testing activities underway. It has not yet reached the level of technological readiness required for operational application. **Under exploration**: The technology is in the conceptual stage, limited to the preliminary studies and feasibility assessment phase. No pilot projects have been developed or practical validation conducted to date.

Gas and Power

In power generation, we continue to combine reliability, energy efficiency, and decarbonization initiatives. This approach has enabled increased operational availability, aligned with our corporate sustainability strategy.

The flexibility and availability of our thermal power generation contribute to the reliability of the national electricity system, which exhibits high daily volatility, mainly due to the increase in wind and solar power generation. During the day, there is a large supply of solar energy, reducing the need to activate other sources. After nightfall, thermal generation remains available for dispatch, ensuring the energy security of the National Interconnected System (SIN).

Among the initiatives aimed at reducing GHG emissions in fossil-fuel thermal power plants, in addition to the modernization of internal components and control system upgrades carried out in 2025, the Cubatão Thermal Power Plant (UTE Cubatão) upgrade stands out. Using resources from the Decarbonization Fund, this project will reduce natural gas consumption during inflexible generation of electricity and steam for the RPBC refinery. With start-up expected in 2026, it has an estimated GHG emissions abatement potential of 72 thousand tCO₂e/year.

In parallel with operational improvements and project implementation, in 2025 we held the Electric Power Generation Decarbonization Technology Roadmap Workshop. The event brought together professionals from various areas to collaboratively develop a roadmap identifying the most promising technological solutions for decarbonizing Petrobras' fossil-fuel thermal power plants, with a forward-looking perspective toward 2050. Estimates of technological and commercial maturity were assessed for each solution, considering their availability in the medium and long term, resulting in an initial proposal for this Technology Roadmap for Decarbonization.

As a result, the main decarbonization actions in power generation were identified, including those requiring technological development along the indicated pathways, in alignment with our low-carbon R&D lines, such as energy efficiency projects (operational optimization, advanced digital tools, software applications, AI, and sensors), electrification of steam generation (electric boilers and heat pumps), and the use of biofuels (biomethane, ethanol, and biodiesel/HVO). Studies are also underway on the use of new oxy-combustion technologies (in Rankine, Brayton, and Allam cycles), which integrate CO₂ capture and storage.

This represents a forward-looking view, subject to continuous updates, reflecting the company's commitment to adjusting and improving its strategies as new technologies and information become available. Mitigation actions may be applied both to assets currently in operation and to new projects.

The table below presents an overview of opportunities and challenges related to the decarbonization of power generation operations, grouped according to MACC categories: gas loss reduction; energy efficiency; energy (transition to a lower-carbon energy mix); CCUS; portfolio of new low-carbon thermal power plants.


MACC CATEGORY	TYPE OF ACTION	ACTION	DESCRIPTION	STATUS	IMPACT POTENTIAL
Losses	Fugitive Emission Mitigation	Leak reduction measures	Adjustments to minimize methane leakage and leaks from valves, flanges, etc., through the Leak Detection and Repair (LDAR) program.	Under implementation	Incremental
Efficiency	Fuel Consumption Reduction	Operational optimization	Adjustment of operational variables to maximize efficiency and/or reduce costs and losses. Advanced digital tools, use of software, AI, and sensors to monitor and optimize operations.	Under implementation / Under development	Incremental
		Modernization of large machinery	Upgrading equipment for greater efficiency and reliability.	Under implementation	Incremental
Energy	Electrothermal	Electric boiler	Boilers that use electricity to produce steam, applied to the auxiliary boilers at the CBT Thermal Power Plant	Under development	Moderado
	Machine Electrification	Heat Pumps	Equipment that transfers heat from a cold source to a hot one, saving energy.	Under development	Moderate
	Biofuels	Use of biomethane	Use of renewable gas (biomethane) as fuel in gas-fired power plants	Under development	High
		Use of ethanol	Use of ethanol as fuel in power plants with flexible turbines capable of using this fuel	Under development	High
		Use of biodiesel or renewable diesel	Use of renewable oil (biodiesel) as fuel in oil-fired power plants.	Under development	High
CCUS	CCUS	BECCS	CO ₂ capture from biogenic sources (renewable fuel combustion)	Under development	High
Process/ Portfólio	New Decarbonized Thermal Power Plants	Oxy-combustion Rankine Cycle	Fuel combustion with pure oxygen in a Rankine-cycle (boiler), facilitating CO ₂ capture.	Under development	High
		Oxy-Combustion Brayton Cycle	Fuel combustion with pure oxygen in a Brayton cycle (gas turbine), optimizing efficiency and CO ₂ capture.	Under development	High
		Allan Cycle Oxy-Combustion	Fuel combustion with pure oxygen in the Allan cycle, aiming for efficiency and CO ₂ capture.	Under development	High

Note 1: Mitigation Potential (tCO₂e/year): **Incremental** 0–100,000, **Moderate** 100,000–1,000,000, and **High** >1,000,000.

Note 2: **Under implementation**: The technology has completed its development and is ready for operational application. It may be in the deployment phase, already deployed, or awaiting the start of implementation in a real-world environment; **Under development**: The technology is in the process of maturing, with research, development, and testing activities underway. It has not yet reached the level of technological readiness required for operational application. **Under exploration**: The technology is in the conceptual stage, limited to the preliminary studies and feasibility assessment phase. No pilot projects have been developed or practical validation conducted to date.

Regarding initiatives to reduce GHG emissions at *Transportadora Brasileira Gasoduto Bolívia-Brasil* (TBG), and in the operations of LNG regasification terminals and vessels, the following projects stand out:

- Electrification of internal equipment and reduction of gas sent to vents at compressor stations (ECOMPs). These projects have already started and are expected to be completed by 2033. An estimated GHG emissions abatement of approximately 142 thousand tCO₂e/year is expected;
- Reliquefaction of boil-off gas on regasification vessels, aimed at reducing combustion in the unit that burns natural gas resulting from evaporation in LNG cargo tanks. The project is expected to start in 2027, with an estimated GHG emissions abatement of approximately 77 thousand tCO₂e/year.

 *TBG's assets are included in the UN initiative OGMP 2.0, which aims to improve methane emissions reporting. Since 2024, methane emission assessments at level 4 have been carried out at all Compression Stations, and in 2025, an experimental drone flight at level 5 was conducted, with methane sensors attached, aiming to evolve to level 5 for TBG's assets in the coming years.*

Oil and Products Logistics

Continuing the work carried out in 2024, we advanced several initiatives to increase the energy efficiency of our vessel fleet, reduce fuel consumption and associated emissions, and modernize our fleet and terminals. We also invested in the development of innovative solutions in maritime and port logistics, including the contracting of more efficient vessels, the use of fuels with renewable content, the adoption of low-carbon energy sources at terminals, and research into technologies to supply electricity to support vessel operations.

Operationally, we seek greater fleet efficiency, aiming to optimize fuel consumption through:

- Reduction of exclusive calls for bunkering;
- Installation of hull and propeller appendages on Transpetro vessels, as well as testing ultrasonic anti-fouling hull technology and variable frequency drives to reduce vessel fuel consumption during anchorage;
- Optimization of vessel trim¹⁹ using numerical simulation software, reducing hydrodynamic resistance and resulting in lower fuel consumption;
- Fleet routing using software based on metocean data.

We contracted the construction of nine Suezmax DP2 vessels to operate in platform offloading, eight vessels for LPG transportation, four Handy-class vessels, and launched a tender for four Medium Range 1 (MR1) class vessels. These vessels will be equipped with state-of-the-art technologies to increase energy efficiency and reduce atmospheric emissions, such as recovery of exhaust gases from combustion engines, compatibility with dual-fuel engines, and optimized electrical systems, as well as the ability to connect to shore power when berthed at electrified ports, resulting in reduced fuel consumption and emissions compared to the current fleet.

¹⁹ Trim is the difference between the draft at the bow and the draft at the stern of a vessel. Trim control reduces hydrodynamic resistance, resulting in lower fuel consumption

We conducted, for the first time in Brazil, a hull cleaning test using a Remotely Operated Vehicle (ROV), a milestone that opens new possibilities and discussions for technological advances, particularly in the context of NORMAM 401²⁰.

We highlight the potential for further GHG emissions reductions using bunker fuel with renewable content. In this context, we carried out B24²¹ bunkering both to comply with European regulations, with greater economic efficiency, and on a voluntary basis.

The Belém Terminal has become a sustainability benchmark by inaugurating Transpetro's second photovoltaic solar plant and implementing a rainwater capture and reuse system. The photovoltaic plant will reduce greenhouse gas emissions by 30 tons per year.

Within R&D, we are developing research for the installation of Onshore Power Supply (OPS) at the São Sebastião terminal. Research into the application of OPS in oil tankers represents a pioneering initiative, given the technical, operational, and safety complexities involved. OPS enables the supply of shore-based electrical power to berthed vessels, reducing atmospheric emissions, noise, and environmental impacts in ports. Although the technology is already used in other types of vessels, such as container ships and cruise ships, its adoption in oil tankers presents specific challenges, particularly related to hazardous areas, safety requirements for explosive atmospheres, high energy demand, and electrical system reliability. In this context, the development of this research anticipates technical solutions and references, contributing to the safe expansion of OPS in oil tankers in line with the newly contracted vessels.

Logistics to Support Exploration and Production Operations

We seek greater emissions efficiency across our maritime, air, and land logistics fleet supporting exploration and production operations, through process improvements, implementation of new technologies, and integration with stakeholders.

In maritime transport operations, Petrobras is investing in the construction of 22 new offshore support vessels, including 12 Platform Supply Vessels (PSVs), specialized in transporting supplies and equipment to offshore platforms, and 10 Oil Spill Response Vessels (OSRVs), specialized in offshore spill response activities.

These vessels will be equipped with hybrid propulsion systems, combining electric motors and batteries with generators powered by diesel/biodiesel, as well as the possibility of future conversion to ethanol/methanol.

²⁰ NORMAM 401, issued by the Ports and Coasts Directorate of the Brazilian Navy, establishes guidelines for the management of biofouling on vessels, aiming to prevent environmental pollution and the transfer of invasive aquatic species.

²¹ Marine fuel with 24% renewable content.



PSV 5,500, with delivery expected in June 2026, currently under construction at the Detroit shipyard in Itajaí, Santa Catarina

In addition to fleet expansion, other measures focused on efficiency and technology have contributed to reducing the carbon footprint, such as the OMAR (Maritime Route Optimizer) system, artificial intelligence applied to improve operational predictability based on metocean condition forecasts, the use of anti-fouling coatings on vessel hulls to enable more efficient navigation, and contractual incentives through the Operational Excellence Program for Air and Maritime Transport (PEOTRAM).

In air transport operations, 2025 was marked by in-depth technical assessments of the impacts associated with the use of alternative fuels in offshore aviation operations, carried out in coordination with external entities and involving several company areas.

In the road transport segment, we concluded the contracting of cargo planning and optimization software, based on operations research and artificial intelligence, aimed at reducing diesel consumption in heavy-duty vehicle fleets.

On the contractual front, we have encouraged the road transport market to adopt emissions efficiency practices through the Operational Excellence Program for Land Transport (PEOTER).

Natural Gas Processing


Improvements in GHG emissions at gas processing plants are based on actions related to the reduction of flaring, energy efficiency of combustion sources, and fugitive emissions and process vents control.

In 2025, the decarbonization opportunities identified under the Gas Processing Excellence Program (PROGÁS), launched in 2024, underwent a prioritization process, resulting in the establishment of the Natural Gas Processing (PGN) low-carbon project portfolio.

Among the Area's decarbonization projects, the following stand out:

- Flare gas recovery at the following assets: Monteiro Lobato Gas Treatment Unit (UTGCA), Cacimbas Gas Treatment Unit (UTGC), and Cabiúnas Gas Treatment Unit (UTGCAB), with a total emissions reduction potential of approximately 42 thousand tons of CO_{2e} per year;
- Program to reduce fugitive emissions from piping components and equipment across all assets, enabling an 80% to 85% reduction in methane emissions from these sources;
- Valve pass-through measurement program (monitoring the tightness of isolation and control valves);
- Studies on photovoltaic power generation for internal use at the plants;
- Optimization of compressor drives using electric motors or gas turbines;
- Studies on electrification of furnaces and turbo-compressors.

As part of efforts to enhance greenhouse gas emissions management, the GHG emissions intensity indicator, IGEE-PGN, was established, forming part of the Area's performance assessment with a specific focus on gas processing units.

 *Gas processing assets are included in the United Nations OGMP 2.0 initiative, which aims to improve methane emissions reporting. In 2025, Level 4 measurements of fugitive emissions were carried out across all assets, as well as flare emissions measurements using Video Imaging Spectro-Radiometry (VISR) technology at the Cabiúnas Gas Treatment Unit (UTGCAB) and the Itaboraí Natural Gas Treatment Unit (UTGITB). Methane emissions from the entire Monteiro Lobato Gas Treatment Unit (UTGCA) were also monitored at Level 5, using a drone equipped with methane sensors.*

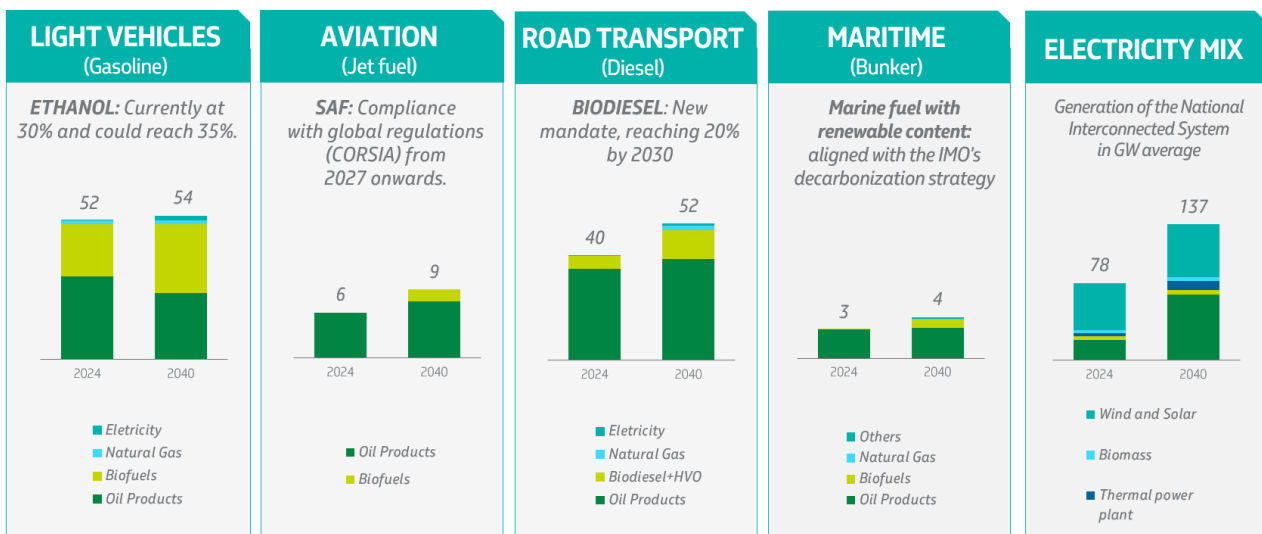
Climate Change and Energy Transition Opportunities



Climate Change and Energy Transition Opportunities

Climate change and the energy transition are drivers for the development of opportunities involving new segments and businesses. We have a unique portfolio, which we manage efficiently to deliver robust growth combined with value creation, expanding the country’s energy supply while generating benefits for society and our shareholders. Our activities in low-carbon businesses aim to diversify our portfolio in a profitable manner.

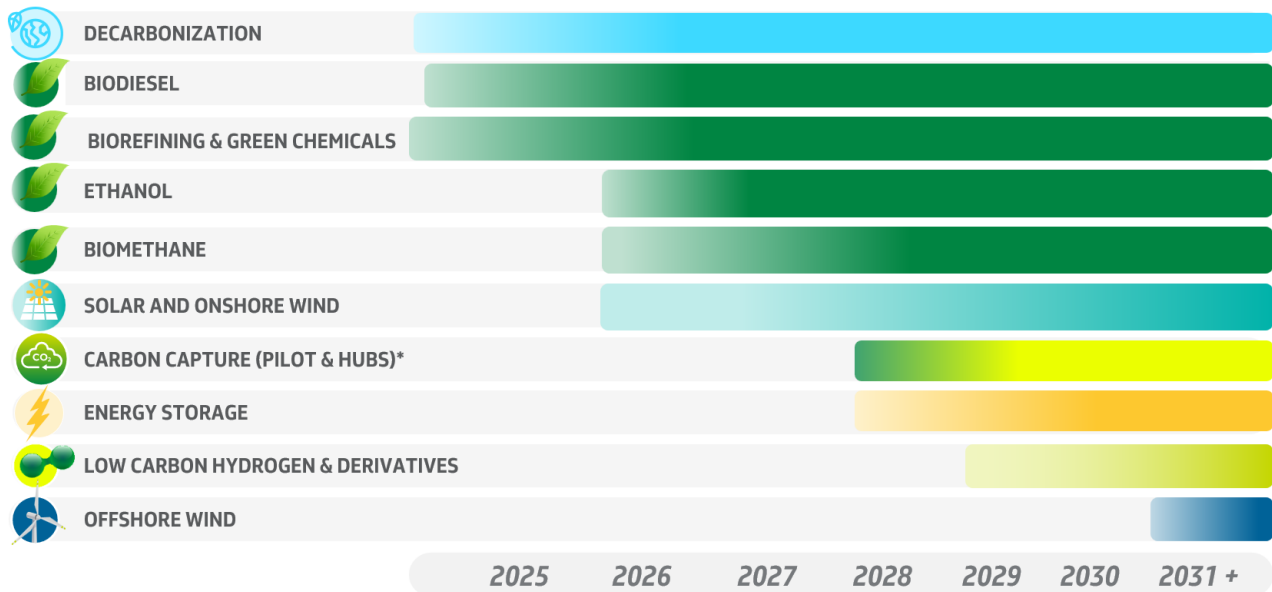
The 2026–30 Strategic Plan projects increasing demand for bioproducts in the transport sector and further expansion of renewables in Brazil’s electricity mix, as illustrated in the figure below:



Fuel figures in MM TOE and SIN generation values in GW average

Source: Brazilian Energy Balance and Petrobras BP 2026-30

Diversification alternatives are complementary over time, and our entry into business segments takes place in line with regulatory and market developments, as illustrated in the figure below:



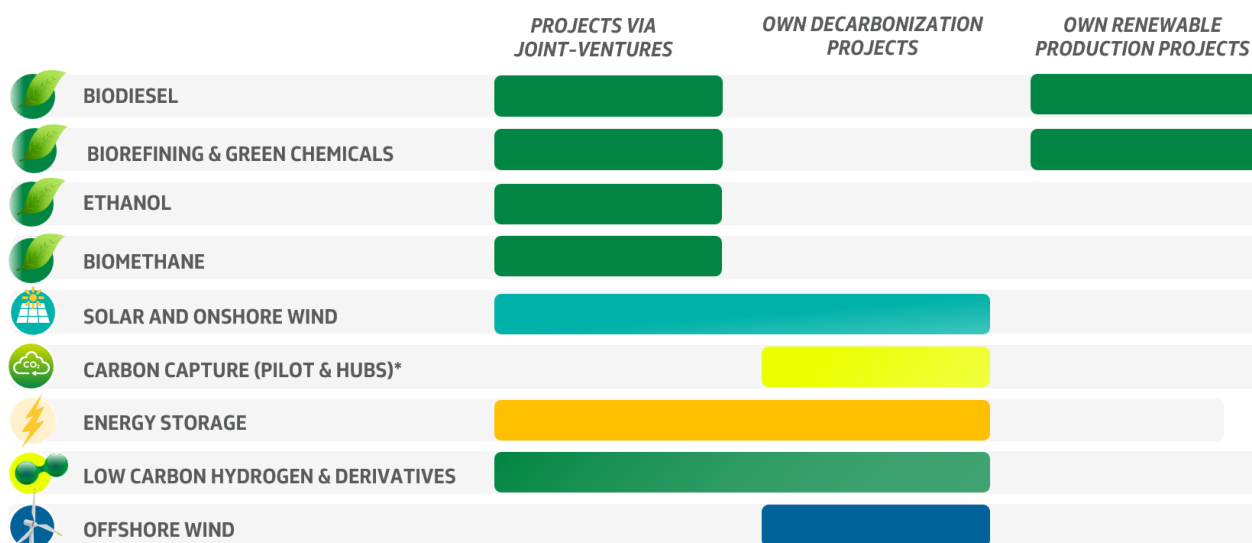
*CCUS-EOR operating since 2008

Note: The chart represents the timeline for entry into each business and does not indicate the level of investment intensity
 Source: Business Plan 2026-30 (Petrobras, 2025)

In this five-year period, investments in the energy transition will place greater emphasis on bioproducts, natural alternatives for decarbonizing the transport sector, especially ethanol, biodiesel, and biomethane, as well as renewable-content diesel (such as Diesel R5 and Petrobras Podium diesel), renewable-content Jet A, SAF, and renewable-content marine fuels (such as bunker fuel and Petrobras Verana diesel).

Bioproducts are an important pillar of a just energy transition and present strong synergies with our operations, whether through the co-processing of renewable feedstocks in industrial units or through the integration of dedicated units into the logistics and distribution system. Co-processing technologies have a high level of technological maturity, confirming their technical, economic, and commercial feasibility.

Opportunities are being evaluated under different business models, as illustrated in the figure below.



*CCUS-EOR operando desde 2008

Note: The graph is a temporal representation of entry into each business, not indicating the intensity of the investment.

Source: Business Plan 2026–30 (Petrobras, 2025)

In addition to the fuels mentioned above, we also continue to sell Petrobras Podium Carbon Neutral gasoline, whose greenhouse gas emissions are offset by high-quality carbon credits.

We also produce premium gasoline with a lower sulfur content (30 mg/kg) compared to the regulatory limit (50 mg/kg) and a higher-octane rating (100) compared to the specified limit (97), contributing to the reduction of SO₂ emissions into the atmosphere, as well as improving vehicle fuel efficiency.

In addition to developing fuels with lower carbon intensity, we also market products with sustainable attributes, such as the CAP Pro line of asphalt products, representing a significant step forward in the transition to a low-carbon and more sustainable future by reducing the environmental impact of their applications.

The planned investments in bioproducts and low-carbon energy projects over this five-year period represent the potential to expand renewable fuel production capacity by approximately 8 to 11 times (74–95 thousand boe) and to achieve 20% of installed electricity generation capacity from renewable sources by 2030.^{22,23} These planned investments could reduce the GHG intensity of our portfolio by approximately 3% by 2030.²³

The opportunities identified within the 2026–30 Strategic Plan horizon are described below.

²² Considering the portfolio under implementation and the total portfolio (under implementation and under evaluation), respectively and in comparison to renewable electricity generation capacity and thermal power plants (TPPs), considering the total portfolio.

²³ Estimates made in comparison to the base year 2022.

Bioproducts

Biorefining

The 2026–30 Strategic Plan foresees USD 1.5 billion in investments in biorefining, covering fuels for road, air, and maritime transport, as well as products with lower carbon emissions..

Road Transport: Diesel with Renewable Content

Diesel R is already produced and marketed at the Presidente Getúlio Vargas Refinery (Repar) and the Presidente Bernardes Refinery (RPBC). Diesel R production is carried out through the co-processing of refined vegetable oil and mineral diesel/mineral diesel along with renewable content in a hydrotreatment (HDT) unit, resulting in commercial blends such as Diesel R5 (5% renewable content) and Diesel R10 (10% renewable content).

Diesel R is a drop-in fuel, meaning it can be used in systems designed for mineral diesel without any modifications to engines or logistics infrastructure.

We conducted a Life Cycle Assessment (LCA) of Diesel R, which supported the international certification process of the renewable content of Diesel R produced at Repar.

In February 2023, ISCC Plus and ISCC EU RED certifications from the International Sustainability & Carbon Certification (ISCC) were obtained for Diesel R from Repar, with recertifications in 2024 and 2025. In October 2025, Petrobras also obtained ISCC Plus certification for the renewable fraction of Diesel R from RPBC.

The Paulínia (Replan), Duque de Caxias (Reduc), and Gabriel Passos (Regap) refineries have already conducted tests and demonstrated production capacity for Diesel R. Studies are underway for Diesel R production in other refineries, depending on market conditions and, particularly, on regulatory progress regarding the recognition of the renewable share of Diesel R to comply with diesel biofuel mandates.

During the 30th United Nations Climate Change Conference (COP 30), held in Belém (PA) from November 10 to 21, 2025, 2,128 m³ of Diesel R10 were supplied for use in the dedicated bus fleet and in the power generators used at the event, according to operational needs. The initiative underscores Petrobras' commitment to participating in discussions on energy and socio-environmental issues, as well as its dedication to sustainable development, social inclusion, and the promotion of a just energy transition, essential for Brazil's development.

Em janeiro de 2026, o diesel Petrobras Podium foi relançado e agora conta com conteúdo renovável. In January 2026, Petrobras Podium diesel was relaunched and now contains renewable content. With the new formulation, Petrobras Podium diesel, which was already recognized for providing high performance and greater engine protection, now also contributes to the reduction of greenhouse gas emissions, as it is produced by coprocessing mineral diesel with vegetable oils, containing 5% renewable content.

We are developing dedicated plants to produce fuels from renewable feedstocks. The HEFA RPBC and HEFA Boaventura projects (both following the HEFA – Hydroprocessed Esters and Fatty Acids route) are expected to produce green diesel (HVO – hydrotreated vegetable oil) and contribute to the availability of sustainable aviation fuels to the market.

Aviation Transport: Sustainable Aviation Fuel (SAF)

Technologies to produce sustainable aviation fuel (SAF) have been assessed and developed as new solutions for the sector.

The production of sustainable aviation fuel aligns with the objectives of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), a program of the International Civil Aviation Organization (ICAO) aimed at reducing and offsetting CO₂ emissions from international flights, as well as with the Brazilian Future Fuel Law, which established the National Sustainable Aviation Fuel Program (ProBioQAV) and set emission reduction targets for domestic airline operations.

We plan to build dedicated biorefining plants to produce Synthetic Blending Component (SBC) via the HEFA (Hydroprocessed Esters and Fatty Acids) and Alcohol-to-Jet (ATJ) routes, using renewable feedstocks. SBC is the sustainable component of aviation fuel when blended with mineral kerosene after the separate processing of each component.

The implementation of the dedicated units planned in our projects to produce sustainable components (SBC) will contribute to the decarbonization of both the aviation and road transport sectors, as it enables the production of green diesel (HVO) while diversifying our portfolio with lower-carbon-intensity products.

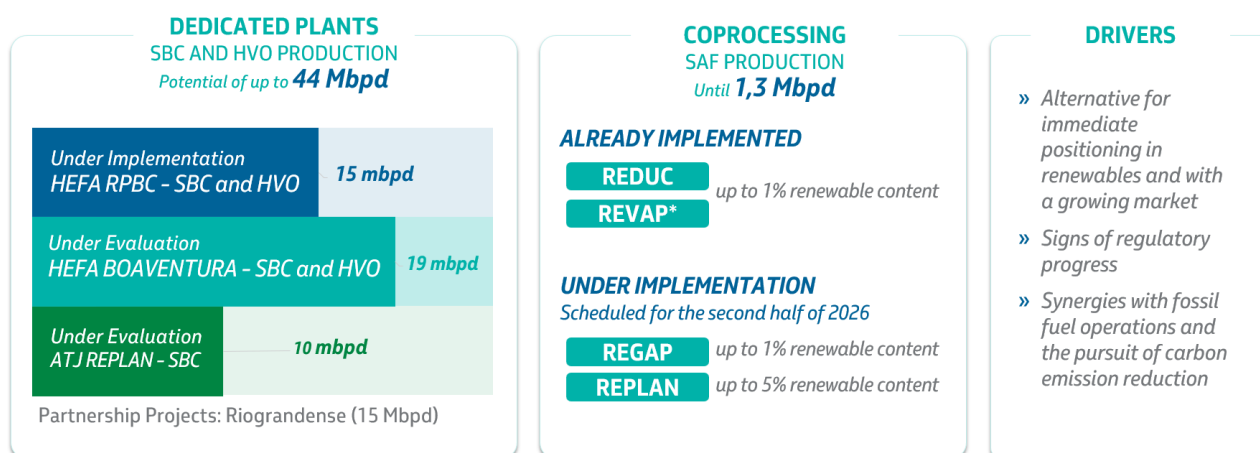
The production of SAF through the coprocessing of mineral kerosene with renewable feedstock in hydroprocessing units is also an option for producing this biofuel, complementing the dedicated units. Its use accelerates market availability, as it involves adaptations in existing industrial units, allowing the product to be launched earlier to meet voluntary market demand ahead of the mandatory use established by Brazilian legislation (from 2027). In coprocessing, the sustainable component is produced together with mineral kerosene in the hydroprocessing units of the refineries.

Reduc became the first refinery in Latin America certified for SAF production via this route, obtaining the ISCC CORSIA certification in October 2025.

The first SAF deliveries took place in December 2025, anticipating the product's availability compared to the dates established by the Future Fuel Law for the domestic market and the CORSIA Program for the international market. Three thousand cubic meters of Jet A with renewable content were sold to aviation fuel distributors operating at Rio de Janeiro–Galeão International Airport. This volume corresponds to approximately one day of consumption across airports in the state of Rio de Janeiro.

Henrique Lage Refinery (Revap) successfully conducted co-processing tests for SAF production in September 2025 and is in the process of obtaining CORSIA certification.

Other refineries, such as Paulínia Refinery (Replan) and Gabriel Passos Refinery (Regap), are preparing to conduct coprocessing tests for SAF production, with up to 5% and 1% renewable content, respectively. SAF with CORSIA certification is expected to be available at these sites throughout 2026.



* Revap in CORSIA certification process

Source: Business Plan 2026-30 (Petrobras, 2025)

Maritime Transport: Renewable Content Bunker

Our initiatives in marketing maritime fuels with renewable content are aligned with the International Maritime Organization's (IMO) objectives to reduce greenhouse gas emissions in international shipping.

We completed the first sale of VLS B24 (bunker with 24% biodiesel), using ISCC-certified biodiesel, in 2023.

We were the first company in Brazil to obtain authorization from the National Agency of Petroleum, Natural Gas and Biofuels (ANP) for the continuous marketing of maritime fuel with renewable content, in July 2024.

In January 2025, we obtained the international ISCC EU RED certification for marketing renewable-content bunker at the Rio Grande Terminal – Terig (RS), demonstrating our strategy to offer economically viable solutions that meet societal sustainability demands, in line with best international practices.

In January 2026, we signed an agreement to supply renewable-content bunker to the Norwegian company Odfjell, one of the largest global operators in chemical and bulk liquid transportation. Supply will be carried out via dedicated barges from the Rio Grande Terminal (Terig). The contract foresees deliveries of up to 12,000 tons throughout 2026.

In 2025, we also sold VLSFO B24 (Very Low Sulfur Fuel Oil with 24% renewable content) in the Asian bunker market, in Singapore, in line with our strategy to develop new products targeting low-carbon markets. Continuing the strategic partnership between Petrobras and Vale, a vessel chartered by the mining company was supplied with VLS B24 in April 2025. Petrobras Singapore (PSPL) and Petrobras Global Trading (PGT) also hold ISCC EU RED certification.

▶ In November 2025, three Transpetro vessels were supplied with approximately 2,000 t of VLS B24 at the São Sebastião Terminal – Tebar (SP). This amount of VLS B24 was equivalent to the fuel consumption of the vessels used as floating hotels during the 30th United Nations Climate Change Conference (COP30), held in Belém (PA).

In January 2026, the new Petrobras Verana diesel was launched, the only premium diesel aimed at the leisure marine market, which now also incorporates 5% renewable content. Tested by Cenpes under sea operating conditions, its exclusive formulation ensures greater comfort and safety, providing everything from faster refueling without foaming and reduced odor typical of marine diesel, to superior performance, ensuring power and reliability. Its high stability also guarantees greater protection of engine parts in contact with the fuel, including during long periods of vessel inactivity.

Green Chemicals

In 2024, an industrial-scale test was completed to produce sustainable chemicals through the co-processing of ethanol in the residual fluid catalytic cracking unit at the Capuava Refinery (Recap). The test, conducted in partnership with Braskem, was crucial to demonstrate the operational feasibility of producing Renewable Refinery Light Hydrocarbons (HLR) without negatively impacting other products or refinery operations. The partnership seeks to identify technological solutions to enhance the sustainability of company portfolios, focusing on emissions reduction and the use of renewable feedstocks.

The test product was sent to Braskem, and the renewable-content hydrocarbon was successfully processed at the industrial unit in Santo André (SP). In February 2025, we obtained the ISCC Plus certification, which includes traceability for all process stages—from ethanol receipt and storage to processing and sale of renewable-content HLR—adding value to the business.

Biodiesel, Ethanol, and Biomethane

PN 2026-30 foresees investments of US\$ 1.1 billion in the biomethane and biodiesel segments and US\$ 2.2 billion in the ethanol segment.

Biodiesel

Our biodiesel operations are carried out through Petrobras Biocombustíveis. We plan to increase our market share through partnerships with players having access to feedstock, thereby boosting margins and capturing projected demand growth.

In addition to the opportunities offered by the Fuel of the Future Law, the biodiesel market presents synergies with biorefining through the possibility of vertical integration of the supply chain, with the option to provide refined feedstock for SAF production via the HEFA route. Another synergy is the potential use of biodiesel in the formulation of renewable-content bunker fuels, aiming to decarbonize industrial and maritime customers (B24 and B100 markets).

Biomethane

We pursue an integrated approach along the biogas value chain to generate revenues from multiple uses of the energy source, including biomethane production, CO₂ capture, and fertilizer production.

In October 2024, the legal framework for the Fuel of the Future (Law 14,993/2024) was enacted, establishing the mandatory purchase of biomethane and/or Guarantees of Origin Certificates (GOB Certificates) by natural gas producers and importers.

In this context, in 2025 we launched our first call for proposals for the acquisition of biomethane and/or GOB Certificates. The process, which is non-binding, aims to receive proposals for firm contracts with deliveries scheduled from 2026 onward, in line with the objectives of decarbonizing our operations and the strategy of managing a robust and competitive portfolio of lower-carbon products.

In addition to acquiring biomethane and GOB Certificates, we also plan to evaluate partnerships with established companies in the sector for potential minority ownership or joint control.

The promotion and development of the biomethane market, as a renewable input complementary to natural gas, has the potential to consolidate gas as a fuel for the energy transition.

In light of the new regulations established by the Fuel of the Future Legal Framework, we foresee a strategic position by acting as an off-taker in the biomethane market, contributing to the structuring and consolidation of this segment in the country, while ensuring predictable demand for producers. The development of this market has the potential to reduce the Company's dependence on imported LNG, strengthening energy security and the competitiveness of the gas portfolio. Additionally, biomethane presents a viable pathway for decarbonizing operations, with the added advantage of strong compatibility with existing logistics infrastructure, enabling economies of scale and efficiency in the use of current assets.

The regulatory advancement of biomethane fosters market potential. We also plan to engage through partnerships with established sector players, either as a minority shareholder or under joint control, seeking the capability to leverage demand growth with a robust project pipeline.

Ethanol

The PN 2026–30 highlights strategic initiatives in ethanol. We are evaluating the development of minority partnerships in leading sector companies, providing faster market entry with lower initial investment, reduced risk, and enhanced capability to capture demand growth.

In Brazil, ethanol stands out as a solution for light transportation, representing an immediate positioning opportunity due to a large consumer market, favorable natural resource conditions for biomass production, and a supportive regulatory framework for biofuel production. As the country's leading fuel producer, Petrobras views the ethanol market as a key lever to maintain its long-term position, given that Brazil is the world's second-largest ethanol producer, with mature technology, favorable climatic conditions for sugarcane and corn cultivation, and a significant fleet of flex-fuel vehicles. Furthermore, there are major opportunities arising from regulatory changes in the sector, as well as synergies with other businesses in which we operate, such as SAF, BECC, among others.

Other Products

CAP Pro Asphalt Product Line

Beyond fuels, our product portfolio includes the CAP Pro line, which offers asphalt products with lower GHG emissions and higher reuse of pavement residues, enabling more sustainable applications. The CAP Pro AP 70/85 is a high-penetration asphalt with rejuvenating capability, ideal for hot recycling of damaged asphalt pavements (Reclaimed Asphalt Pavement – RAP), incorporating circular economy concepts and reducing paving costs. The CAP Pro W 30/45 is an asphalt cement specially formulated for lower-temperature applications (Warm Mix Asphalt – WMA), which can be processed and applied at temperatures up to 40 °C lower than standard, generating energy savings, lower GHG emissions and vapors, benefiting both the environment and workers.

In October 2025, the Henrique Lage Refinery (Revap) produced another member of the CAP Pro asphalt product line: the CAP Pro R. This is an asphalt cement with renewable content, combining traditional mineral streams with a plant-based oil with specific characteristics that provide adequate properties for paving and industrial use. A CAP Pro R with penetration in the 50/70 range was produced, maintaining the performance of conventional asphalt while reducing environmental impact in paving. The CAP Pro 50/70 R began regular supply at Revap in January 2026, and it is planned that in 2026 the CAP Pro AP and CAP Pro W products will also incorporate renewable content.

CAP Pro Products

PRODUCT	FEATURES	ENVIRONMENTAL BENEFITS	PARTNERSHIPS AND INITIATIVES	APPLICATIONS
<u>CAP Pro AP 70/85</u>	High-penetration asphalt, ideal for hot recycling of damaged pavements; allows for greater use of recycled content (RAP) without rejuvenating agents.	Lower GHG emissions; greater reuse of paving waste; more sustainable application.	Hot recycling services for asphalt pavements.	Sustainable applications in pavement recycling.
<u>CAP Pro W 30/45</u>	Asphalt cement mixed/applied up to 40 °C below the usual temperature; energy savings; lower vapor emissions.	Lower GHG and vapor emissions; benefits for the environment and workers.	Partnership with COPPE/UFRJ for technical support, life cycle assessment, and performance monitoring.	First use on an urban stretch: construction in Copacabana, RJ (2024).
<u>CAP Pro 50/70 R</u>	Brazil’s first asphalt with renewable content	Lower carbon intensity with the same quality and performance as conventional asphalt	Renewable content incorporated using 100% Petrobras technology	Same applications as conventional CAPs (paving and industrialization)

Petrobras Podium Carbono Neutro Gasoline

Launched in 2023, Petrobras Podium Carbon Neutral Gasoline is the first fuel on the Brazilian market to have its GHG emissions fully offset across its entire life cycle. Offsets are achieved through carbon credits generated by forest conservation actions in national biomes.

In addition to its life-cycle GHG emissions being offset—from cradle to wheel—including emissions associated with the ethanol in the mandatory blend, Petrobras Podium Gasoline offers quality differentials such as higher octane rating (102) and the lowest sulfur content on the market (20 mg/kg). These characteristics improve vehicle performance, thereby enhancing energy efficiency and contributing to the reduction of local emissions.

Life Cycle Assessment (LCA) and the Carbon Intensity of our products

To further assess the carbon intensity of our products, we conduct LCAs – Life Cycle Assessments – of the crude oils we produce and of our refining products, focusing on their environmental impact in terms of global warming and GHG emissions.

These assessments are used internally to improve processes and for benchmarking studies of our product portfolio, aiming to meet the requirements of both voluntary and regulated markets, which demand information on product carbon intensity and the provision of low-carbon solutions.

We carry out LCAs for crude oil and gas from Petrobras-operated offshore production, as well as for products from most of our refineries, using a digital system that follows the guidelines of ABNT NBR ISO 14040 and ABNT NBR ISO 14044 standards. External consultancy is engaged to perform critical reviews of our LCAs in accordance with ISO 14071.

We continue to advance our LCA models to increase process efficiency and data integrity. In 2025, we joined the Brazilian LCA Business Network – RedeACV – a collaborative environment for the use of LCAs in Brazil, aiming to develop and apply this tool to assess product sustainability.

Refining Digital LCA

We developed the Digital LCA system for Refining in our refineries, which enables the determination of the carbon intensity of our products with agility and traceability. The model uses real-time information from refinery management systems, such as the Digital Twin (a digital replica of refinery processes used for production optimization) and the energy dashboard (energy performance data), as well as information from SIGEA® (Atmospheric Emissions Management System) and other complementary systems. Currently, nine refineries have the system implemented, which continues to be refined and already supports internal studies on product development, benchmarking assessments, and certifications.

Digital LCA for Oil and Gas

We have extended the deployment of the Digital LCA system for oil and gas to cover offshore production operated by Petrobras, aiming to meet customer demands and regulatory requirements. This development builds on the 2024 pilot study conducted for the Búzios units and considers GHG emissions from production and logistics operations to determine the carbon intensity of oil and gas. The system continues to be refined and validated, with integration with the Refining Digital LCA system scheduled for 2026 and external critical review of LCAs.

Certification of sustainable products

The certification of sustainable products is a global trend, aligned with ESG practices. These practices ensure that a product adheres to international standards related to transparency, sound management, quantification of carbon emissions throughout its life cycle, and environmentally responsible production, with safe working conditions in compliance with human, labor, and land rights, among others.

Certification is a rigorous process, which includes third-party auditing, with control and traceability requirements for numerous internal documents and records, covering everything from raw material procurement to receipt, storage, processing, and sale of the sustainable product produced.

Currently, we hold ISCC – International Sustainability and Carbon Certification – for the sustainable fractions of Diesel R at REPAR, RPBC, and the Guarulhos Land Terminal, VLS B24 at Rio Grande (RS), and SAF at Reduc. We continue to evaluate certification opportunities for other lower-carbon-intensity products, aligned with our biorefining projects, commercial strategy, and market demand.

Low-Carbon Energy

The 2026-30 Business Plan foresees USD 3.1 billion in investments in low-carbon energy, including electricity generation, hydrogen, and CCUS (Carbon Capture, Utilization, and Storage).


Renewable Electricity

The projected growth in demand from traditional sectors, along with new electrification needs, drives the expansion of renewable generation, particularly after 2030.

The expansion of energy commercialization to free-market consumers, new demand from data centers, industries, buildings, transportation, and the electrification of our operations keeps renewable generation as a robust option for profitable diversification.

Furthermore, in the medium and long term, we have identified opportunities to expand the electrification of our operations, promoting the decarbonization of our products and supporting integration with low-carbon hydrogen production systems.

As part of our strategy in this segment, in December 2025 we signed an agreement with Lightsource bp to establish a strategic partnership in the onshore renewable energy sector. Under the agreement, we will acquire 49.99% of Lightsource bp's subsidiaries in Brazil. The completion of the transaction is subject to regulatory approvals. The partnership, which represents a significant and strategic step for Petrobras in the renewable energy segment, will be structured as a joint venture with shared management between the companies.

 *Considering the variability of wind and solar sources, as well as the seasonality of hydroelectric power, dispatchable thermal electricity is necessary. In this context, our thermal power plants play an important role in the increasing integration of renewables into Brazil's energy matrix.*

Energy Storage

The energy storage segment has been growing in markets in line with the advancement of renewable generation. We have identified potential opportunities in this segment and are considering investments in either proprietary or partnership projects, exploring both internal and external opportunities. Among the applications under evaluation, we highlight both large-scale projects aimed at capacity supply and provision of services to the National Interconnected System, as well as projects focused on supplying electricity to our own facilities, enhancing reliability, optimizing consumption profiles, and contributing to the reduction of associated emissions

The investment forecasted in the 2026-30 Business Plan for onshore wind, solar photovoltaic, and other energy sources is USD 1.8 billion.

Low-Carbon Hydrogen

Low-carbon hydrogen (LCH) will play a relevant role in decarbonizing hard-to-abate sectors in the coming decades, including the maritime, aviation, and steel industries.

Brazil, with its abundant renewable resources, is an important player in the low-carbon hydrogen segment, in which we plan to invest USD 0.4 billion over the next five years. We intend to engage in the production of LCH and its derivatives, focusing on the development of businesses and products to meet domestic and international market demands, evolving in line with sector regulations.

The establishment of regulations, mandates, and specific auctions for hydrogen and its derivatives constitutes the main levers for driving LCH demand and promoting decarbonization. In the maritime sector, the technology is already commercially available, with global mandates in effect (in the European Union) and others in the implementation phase (under IMO regulation). International auctions for hydrogen and derivative consumption enable long-term contracts, supporting project structuring by suppliers, while mandates and regulations set clear rules for decarbonized products in Brazil and abroad, in addition to providing incentives for operational decarbonization.

In this context of challenges and opportunities, we position ourselves as a key player in the hydrogen market. We aim to enter the LCH segment through pilot projects and strategic partnerships, seeking to develop technical and commercial knowledge to achieve larger-scale operations competitively in the medium and long term.

Our first pilot plant for renewable hydrogen generation is under construction at the Vale do Açu Thermolectric Plant in Alto do Rodrigues, Rio Grande do Norte, with a 2 MW electrolysis capacity and expected start-up in the first half of 2026.

The investment forecasted in the 2026–30 Business Plan for hydrogen is USD 0.4 billion.

CCUS

Petrobras operates the largest CCUS project worldwide, developed in the pre-salt reservoirs of the Santos Basin. This initiative pioneeringly integrates CO₂ capture associated with production and its reinjection into reservoirs for enhanced oil recovery, combining environmental and operational gains. Over more than a decade, this experience has demonstrated our high technical capacity and global leadership in carbon capture, utilization, and storage technologies.

CCUS is recognized as a key technology for achieving emissions mitigation targets, especially in hard-to-abate sectors. In this context, we are evaluating the development of CCUS hubs in Brazil, structured around synergies with our E&P, refining, logistics, and gas processing assets. These hubs could enable the reduction of both our own and third-party emissions, including those from refineries, cement, steel, and aluminum industries, chemical industries, thermolectric plants, and ethanol plants.

In this emerging business model, we could operate as a service provider for CO₂ transport and storage, leveraging our expertise in geological characterization, reservoir engineering, pipeline operations, gas compression, and injection.

As a fundamental step to demonstrate the potential of this strategy, the first CCS pilot project in Brazil is under development in northern Rio de Janeiro state, aiming to inject 100,000 tCO₂ per year into a saline reservoir. The project seeks to validate innovative technologies, processes, and operational arrangements, while generating learnings for large-scale CCUS hubs in the country.

Corporate Venture Capital Fund for Energy Transition

Together with the National Bank for Economic and Social Development (BNDES) and the Studies and Projects Financing Agency (Finep), we launched a public call and are in the final selection phase for a fund manager for an Equity Investment Fund (FIP) in the Corporate Venture Capital (CVC) model. The fund will focus on energy transition and decarbonization businesses, aiming to invest in minority stakes in technology-based startups and small and medium enterprises (SMEs) with innovative solutions in renewable and low-carbon energy, energy storage and electromobility, sustainable fuels, CCUS, and operations decarbonization. This new CVC is expected to mobilize up to BRL 500 million to enable new technologies and drive decarbonization, energy transition, and energy security.

The investment planned in the PN 2026-30 for CCUS, Corporate Venture Capital, and other initiatives is USD 0.9 billion.

Nature-based Solutions and Carbon Credits

We believe emission offsets through carbon credits can complement our decarbonization journey. These credits may be nature-based, leveraging forests, soils, oceans, and seaweed, or derived from technological solutions. While offsets are expected to be used, they are intended as supplementary contributions and do not replace the need for lower-carbon energy supply.

Most of our operational assets are located in Brazil, and we are responsible for supplying a significant portion of the country's energy. Therefore, we prioritize acquiring nature-based credits, whether from reforestation (ARR) or reducing emissions from deforestation and forest degradation (REDD+), contributing to the mitigation of national GHG emissions, 40% of which stem from land-use change and forests (Sirene, 2025, base year 2020). By including offsets in our strategy, we also contribute to the preservation of Brazilian ecosystems. We seek high-quality, high-integrity credits to ensure real climate, socio-economic, and environmental benefits, leveraging Brazil's potential for competitive nature-based credit generation.

We see carbon markets as a crucial instrument in combating climate change and are engaged in discussions on implementing a regulated carbon market in Brazil.

Our carbon market strategy includes:

- Acquiring carbon credits for partial compensation of our operational emissions;
- Investing in carbon credit generation projects;
- Using carbon credits in our commercial strategy, offering carbon-neutral fuels whose emissions are offset, meeting growing market and customer demand;
- Assessing the potential for carbon credit generation through optimizing transport infrastructure as a decarbonization lever via public-private partnerships;
- Supporting structural initiatives that enable the development of voluntary and regulated carbon markets in Brazil;
- Supporting socio-environmental initiatives that qualify communities and traditional peoples to access and benefit from the carbon market, focusing on safeguards and quality;
- Supporting R&D projects that enhance reliability and reduce the costs of implementing and monitoring nature-based solutions.

Beyond the regulated carbon market, since 2023, we have invested in the voluntary market to offset emissions from Petrobras Podium Carbon Neutral gasoline. In 2025, we acquired 1.2 million credits from the Brazilian Amazon APD Grouped²⁴ project, of which 455,000 were retired to offset Podium emissions. The credits, from the 2022 vintage, are certified under the Verified Carbon Standard (VCS) by Verra, the largest voluntary carbon certification body in the world, and certified for Climate, Community & Biodiversity (CCB) criteria, including climate change adaptation, biodiversity, and community benefits.

In addition to nature-based carbon credits, Petrobras invests in the restoration and conservation of Brazilian biomes through socio-environmental projects that incorporate nature-based solutions. These voluntary investments contribute to carbon sequestration, climate change mitigation, and climate adaptation, while promoting social inclusion and income generation for local and traditional communities, strengthening sustainable value chains, and ensuring long-term environmental and socio-economic benefits.

²⁴ For more information, visit <https://brcarbon.com.br/en/brazilian-amazon-grouped-project>

Floresta Viva Initiative

To broaden our investment portfolio in nature-based solutions, we have strengthened our partnership with the National Bank for Economic and Social Development (BNDES) through the Floresta Viva match-funding initiative.

This initiative provides joint financial support of BRL 118 million over seven years for 20 reforestation projects using native species across Brazilian biomes, generating both social and environmental benefits.

Managed by the Brazilian Biodiversity Fund (FUNBIO), the funds are being allocated to projects selected through two public calls—Manguezais do Brasil and Corredores de Biodiversidade—covering the Amazon, Atlantic Forest, Cerrado, and Pantanal biomes.

Altogether, these initiatives aim to restore 4,200 hectares of degraded land, implemented by the supported civil society organizations, contributing to biodiversity conservation, carbon sequestration, and local community development.

Restaura Amazônia in Conservation Units

As a complementary action and with the goal of expanding support for a more diversified portfolio of nature-based projects, Petrobras joined the Ministry of Environment and Climate Change (MMA) and BNDES in the Restaura Amazônia Initiative. This initiative aims to transform the deforested Amazon region, known as the “Deforestation Arc,” into the “Restoration Arc.”

In this phase, Petrobras will invest BRL 50 million, alongside BRL 50 million from the Amazon Fund, to restore flora, fauna, and biodiversity, with approximately 6,000 hectares of native vegetation being recovered in Conservation Units across the states of Amazonas, Acre, Rondônia, Mato Grosso, Tocantins, Pará, and Maranhão.

In 2025, nine projects were selected to operate in priority protected areas within the Amazon biome. A new public call was also launched, with results expected by the first half of 2026. The initiative is implemented in partnership with the following organizations: Brazilian Forum for Sustainable Development (FBDS), Conservation International (CI), and the Brazilian Institute of Municipal Administration (IBAM), which manage the forest restoration projects.

Through the Restaura Amazônia Initiative, Petrobras reinforces its commitment to combating deforestation and conserving biodiversity in the Amazon’s conservation units.

Pro Floresta+

In March 2025, we launched ProFloresta+ with the objective of acquiring carbon credits from ecological forest restoration projects on private lands or public areas under forest concessions within the Amazon biome.

ProFloresta+ is a joint initiative between Petrobras and BNDES, aimed at purchasing carbon credits through the structuring of ecological restoration projects to generate high-quality, integrity-assured carbon credits. The program seeks to meet Petrobras' emission reduction commitments while contributing to increasing native vegetation cover, strengthening the technical and management capacity of the forest restoration value chain, and supporting the carbon credit market in Brazil.

The initiative aims to purchase credits, promoting the restoration of up to 50,000 hectares of degraded areas in the Amazon, generating approximately 15 million carbon credits.

Under the proposed model, ecological restoration projects with native species will be selected. By reforesting degraded areas, these projects will generate carbon credits, with Petrobras guaranteeing the purchase through long-term offtake contracts at prices to be determined via bidding. BNDES participates by providing subsidized financing to project developers through special credit lines, such as the Climate Fund.

In addition to the direct benefits for Petrobras, this initiative also seeks to strengthen the restoration value chain in Brazil by creating a continuous project pipeline that enables the sustainable structuring of seed collector networks and seedling nurseries, the application of diverse restoration techniques, access to subsidized capital, complementarity with public area restoration concessions, and the training of professionals and local communities, among other benefits.

Furthermore, this will be the first restoration carbon transaction to provide transparency on the contracted price, which could serve as a benchmark for future transactions, as well as on the technical parameters considered, with a standard and public contract that can be used as a reference for the market

Petrobras Bioeconomy Fund

Petrobras Bioeconomy Fund is a partnership between Petrobras and Régia Capital, a management company focused on sustainable investments and financial solutions. The fund received an initial contribution of BRL 50 million from Petrobras, complemented by another BRL 50 million of Régia Capital's own resources. This is Petrobras' first impact fund, marking the expansion of the company's voluntary socio-environmental investment strategy focused on nature-based solutions.

The fund develops innovative financing modalities, complementing the non-reimbursable investments historically carried out by Petrobras. The reimbursable modality supports projects in their initial structuring phase, allowing the company to preserve capital and reinvest returns in new socio-environmental ventures, increasing the scale, reach, and sustainability of the financed bioeconomy projects, as well as their economic and socio-environmental results.

The Petrobras Bioeconomy Fund is among the first in Brazil to adopt the Impact-Linked Compensation model, which aligns financial incentives with sustainability objectives. That is, the fund's performance fee varies according to the socio-environmental impact rate of the projects.

In 2025, the Fund consolidated its operations, providing financing totaling BRL 112 million to innovative bioeconomy companies. The investments cover sectors such as sustainable extraction, agroforestry systems, ecological restoration, sustainable land use, and bio-inputs.

Through the financed projects, Petrobras will contribute to forest conservation and the restoration of degraded areas. Additionally, it will benefit hundreds of people from local communities and smallholder farmers, generating significant impacts in social inclusion, job and income creation for women and youth, and valuing local knowledge

Regional Public Selection 2025: Nature-Based Solutions – Climate Adaptation and Resilience in Cities

In September 2025, we launched the public selection “Nature-Based Solutions for Climate Adaptation and Resilience in Cities.” This unprecedented initiative is aimed at addressing climate change in urban areas, with the goal of strengthening the resilience of cities and vulnerable communities. The focus is on supporting green and blue infrastructure and community technologies that help mitigate climate impacts, restore ecosystems, and stimulate the bioeconomy.

Four socio-environmental projects were selected, with investments totaling BRL 21 million, two in municipalities in the state of São Paulo and two in municipalities in the state of Rio Grande do Sul.

This initiative marks an expansion of the company’s socio-environmental investment efforts in response to the climate agenda, prioritizing regions sensitive to extreme events such as floods, droughts, and landslides. These phenomena have intensified due to climate change, as exemplified by the severe floods that have affected Rio Grande do Sul in recent years.

Voluntary Socio-Environmental Projects

The socio-environmental projects within the Forests line of action contribute to the reduction of GHG emissions and generate numerous social and environmental benefits where they operate, supporting nature-based solutions.

Our portfolio of projects focused on Forests within the Petrobras Socio-environmental Program is dynamic and, in 2025, included 33 projects in progress in which approximately R\$ 62 million was invested in that year.

These projects focus on the restoration or conservation of forests and natural areas across all Brazilian biomes, contributing to the mitigation of greenhouse gas emissions and particularly supporting Sustainable Development Goals 13 (Climate Action) and 15 (Life on Land).

Carbon Performance



Carbon Performance

We have achieved significant results in the decarbonization of our operations, which allows us to connect future challenges with the delivery capacity demonstrated in recent years.

We invest in innovative, low-carbon technologies, mitigating our emissions while prioritizing efficiency gains, loss reduction, and process improvements.

In 2025, we invested approximately USD 593 million in low-carbon solutions:

Amount invested (USD MM)

Exploration and production	503
Refining, Transportation, and Marketing	67
Gas and Low-Carbon Energy	23

Our Emissions Inventory

The management of greenhouse gas (GHG) emissions is directly related to climate risk management and the identification of mitigation opportunities. Publishing our inventory allows monitoring of our commitments to reduce our carbon footprint and meeting the demands of various external entities.

Since 2002, we have used the Atmospheric Emissions Management System (SIGEA®), an in-house tool that processes data from approximately seven thousand sources on a monthly basis, consolidating our inventory with traceable and reliable information. SIGEA® calculates emissions of GHGs—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), and hydrofluorocarbons (HFCs)—as well as air pollutants: nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), particulate matter (PM), and non-methane hydrocarbons (NMHC). We are in the process of integrating scope 3 emissions into SIGEA®, promoting continuous improvement in emissions management.

Our operational emissions inventory is prepared following the technical specifications of the Brazilian GHG Protocol Program, in accordance with the guidelines of the Greenhouse Gas Protocol's *A Corporate Accounting and Reporting Standard*, developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), ISO 14064-1, as well as recommendations from IPIECA in the *Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions*.

The scope of our inventory includes all activities under our operational control. Organizational boundaries cover emissions from Petrobras, Transpetro, TBG (Transportadora Brasileira Gasoduto Bolívia-Brasil S.A.), Petrobras Biocombustível, Araucária Nitrogenados S.A., Petrobras Bolivia, and Petrobras Colombia.

We adopt a detailed, source-by-source methodology, known as bottom-up. Thus, the total result is composed of the sum of emissions from each source. Emissions calculations are based on international references such as the American Petroleum Institute Compendium, the *Compilation of Air Pollutant Emission Factors* from the U.S. Environmental Protection Agency (US-EPA AP-42), and calculation tools from the Brazilian GHG Protocol Program.

We also seek to continually improve our scope 3 inventory, which includes indirect emissions occurring across our value chain. Currently, the scope 3 inventory covers GHG emissions related, for example, to the production and transport of petroleum acquired by Petrobras, emissions from employee travel and commuting, operational waste, emissions associated with gas production, losses in electricity transmission, as well as emissions associated with the processing of petroleum and naphtha sold and

the final use of sold products. Recently, emissions associated with the supply of goods and services to Petrobras have also been included in the scope 3 inventory, allowing for improvements in engagement actions with suppliers.

Our inventory has been voluntarily published since 2002 and verified annually by a third party, ensuring reliability and transparency. We are founding members of the Brazilian GHG Protocol Program and publish our inventory in its Public Emissions Registry²⁵

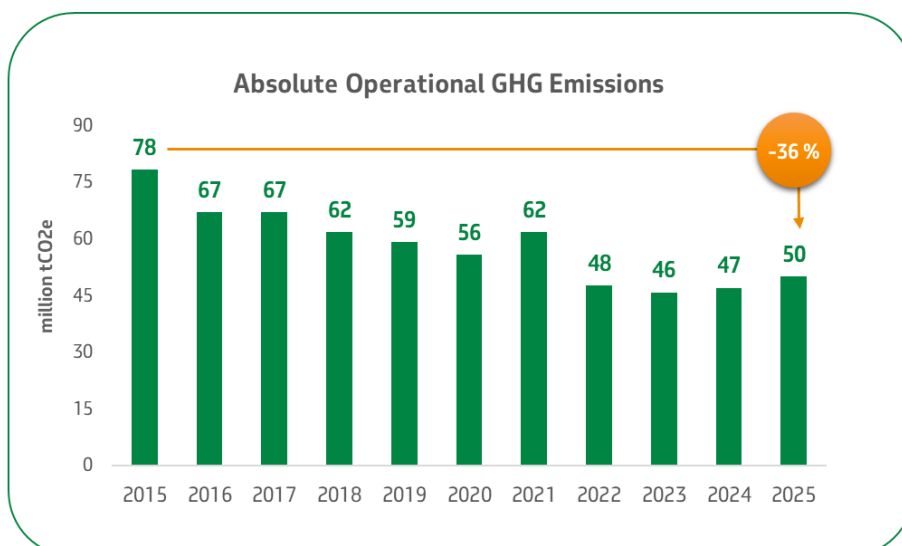
In 2025, our inventory (base year 2024) achieved the Gold Seal for the eighth consecutive year, and a reasonable level of confidence for the second consecutive year, representing a standard of excellence in data quality and availability.

We monitor updates to global warming potential (GWP) factors, periodically provided by the Intergovernmental Panel on Climate Change (IPCC). Our public commitments, since 2019, have been defined considering the GWP values from the IPCC Fourth Assessment Report (AR4). Thus, to maintain consistency with our commitments, all CO₂-equivalent values in this publication are aligned with AR4. In the next publication of this Report, GHG emissions results will be presented in CO₂ equivalent, using GWP factors from the IPCC Fifth Assessment Report (AR5).

Carbon Performance

Absolute Operational GHG Emissions

We reduced absolute emissions from our operational activities by 36% compared to 2015, reaching a total of 50 million tCO₂e in 2025. This significant reduction is the result of initiatives focused on efficiency, loss reduction, portfolio management, and lower dispatch of thermal power plants. Despite an increase in emissions over the last three years—reflecting higher activity to ensure energy supply to society—we remain significantly below 2015 levels. This demonstrates that our commitment to efficiency, responsible management, and decarbonization has yielded tangible results.



The values refer to total operational emissions, without considering the use of carbon credits to offset the GHG emissions of Petrobras Podium Carbon Neutral gasoline, calculated through Life Cycle Assessment (LCA). Of the emissions offset in 2025, approximately 36.3 thousand tCO₂e correspond to operational emissions.

²⁵ For more information, visit <https://registropublicoemissoes.fgv.br/> (only in Portuguese).

Among the actions implemented, in the upstream segment, notable measures include the optimization of turbogenerator operations and the operation of FGRUs (Flare Gas Recovery Units), which recover part of the gas stream that would otherwise be directed to the flare and reintegrate it into the process. In refining, prominent actions focus on energy efficiency and equipment maintenance, both essential for improving operational efficiency.

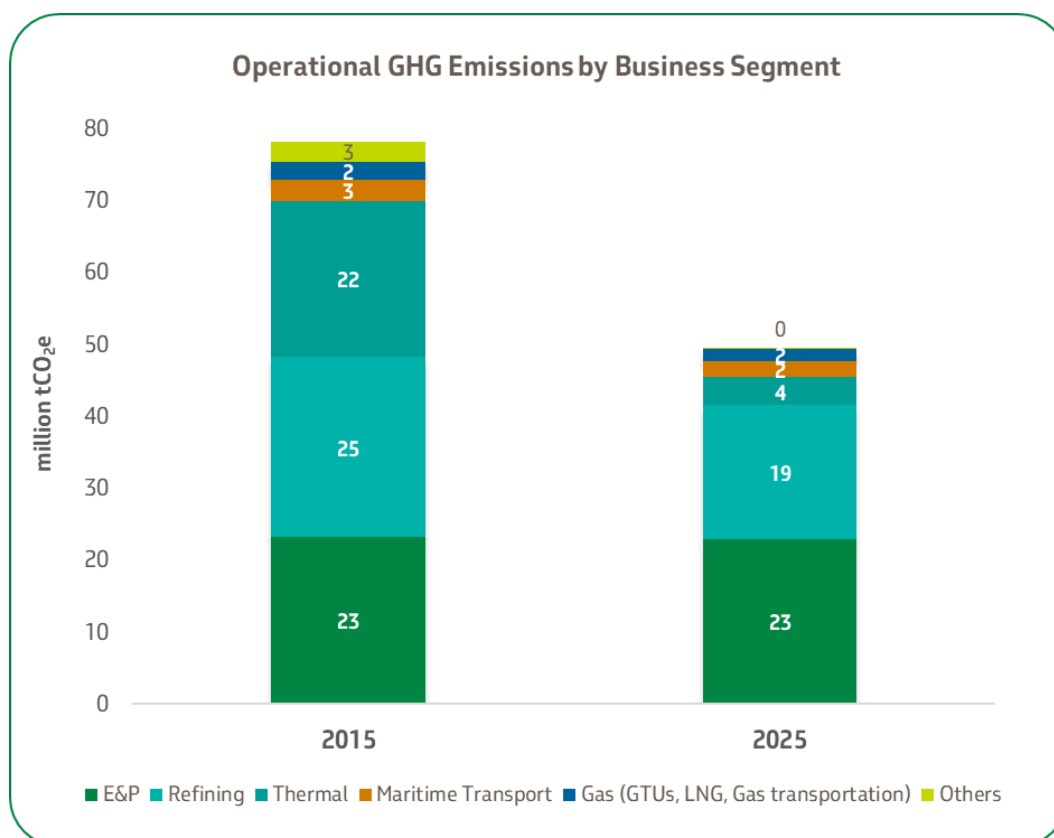
Since 2022, we have offset our Scope 2 emissions in Brazil through the purchase of Renewable Energy Certificates (I-REC). This initiative ensures that 100% of electricity acquired from third parties in Brazil is generated from renewable sources. In 2025, we offset 183 thousand tCO₂, equivalent to 3.94 million MWh of renewable electricity acquired through I-REC certificates. Abroad, our Scope 2 emissions totaled 132 tCO₂, corresponding to only 0.0003% of the absolute operational emissions recorded in 2025.

Operational GHG Emissions by Business Segment

The quantification of our absolute operational emissions considers not only the operations of oil and gas exploration, production, and refining, as well as electricity generation, but also all other operational activities, including maritime transport and logistics support, gas processing and transport, biofuel production, administrative activities, among others.

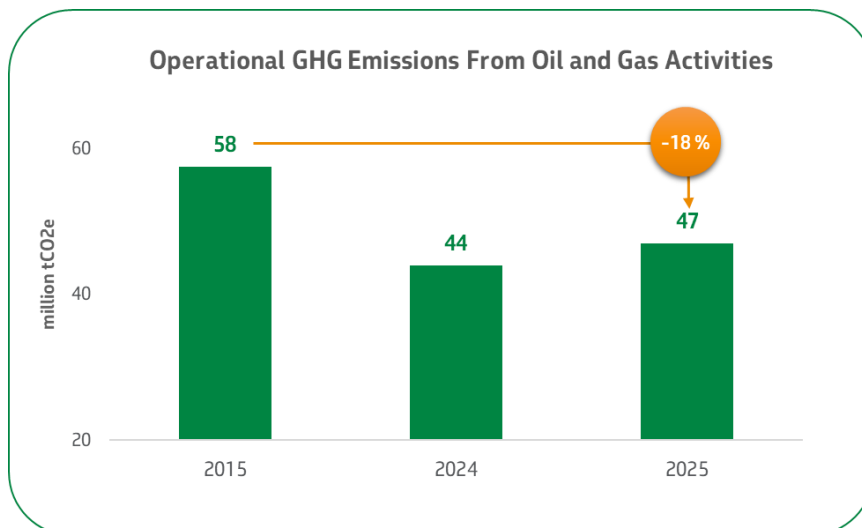
Within our governance process, we monitor emissions through performance indicators (see [Metrics Table](#)), to mitigate risks and identify opportunities associated with a just energy transition toward a low-carbon economy.

The E&P and Refining segments account for the majority of absolute operational emissions recorded. In 2025, our public commitments regarding GHG emission intensity (IGEE-E&P and IGEE-Refining) covered 84% of emissions from activities under our operation.



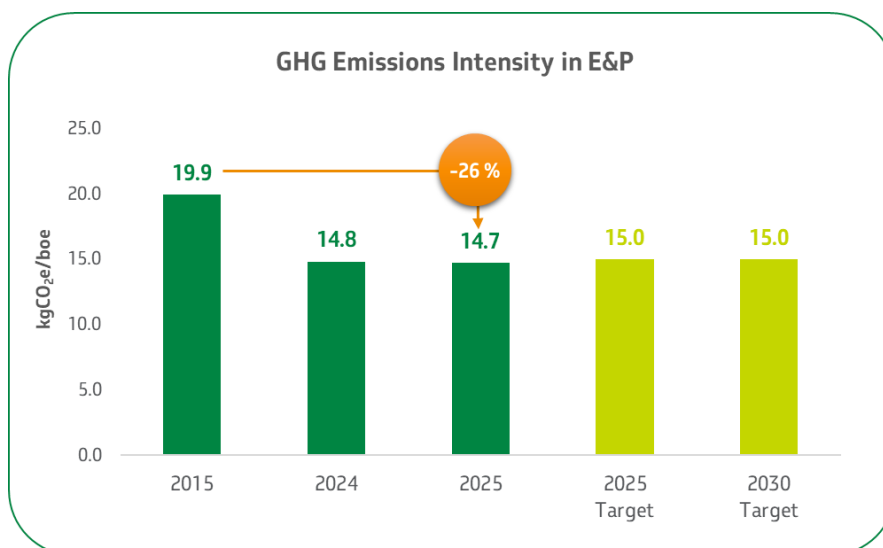
Operational GHG Emissions From Oil and Gas Activities

We also monitor operational emissions originating exclusively from our oil and gas activities, excluding emissions related to participation in the thermoelectricity market.²⁶ This approach allows us to more accurately assess the impact of initiatives aimed at reducing absolute emissions, without results being influenced by the dispatch of thermal power plants requested by the ONS (National Electric System Operator).



In 2025, GHG emissions from oil and gas activities totaled 47 million tCO₂e, representing an increase of 3 million tCO₂e compared to the previous period. Efficiency and loss-reduction initiatives implemented in operational areas helped mitigate the impact of this increase, which resulted from the start-up of new assets.

GHG Emissions Intensity in E&P



In 2025, absolute GHG emissions in the E&P segment increased by 12% compared to the previous year, mainly driven by the commissioning and ramp-up of new FPSOs (Floating Production Storage and

²⁶ Two refineries consume steam generated from nearby cogeneration and thermal power plants. When the Scope 1 emissions from these thermal power plants are excluded, the emissions associated with the steam purchased by the refineries are accounted for as Scope 2.

Offloading units). Energy optimization and gas-loss reduction measures implemented during the period contributed significantly to mitigating this increase.

Despite the rise in absolute emissions, we achieved a GHG intensity of 14.7 kg/boe, 1% lower than in 2024. The improvement in intensity was primarily due to a 13% increase in operated oil and gas production.

It is worth noting that our Pre-Salt fields have emission intensities aligned with the global first quartile, operating on average at 10 kgCO₂e/boe.

The main factors contributing to the reduction in E&P emission intensity include:

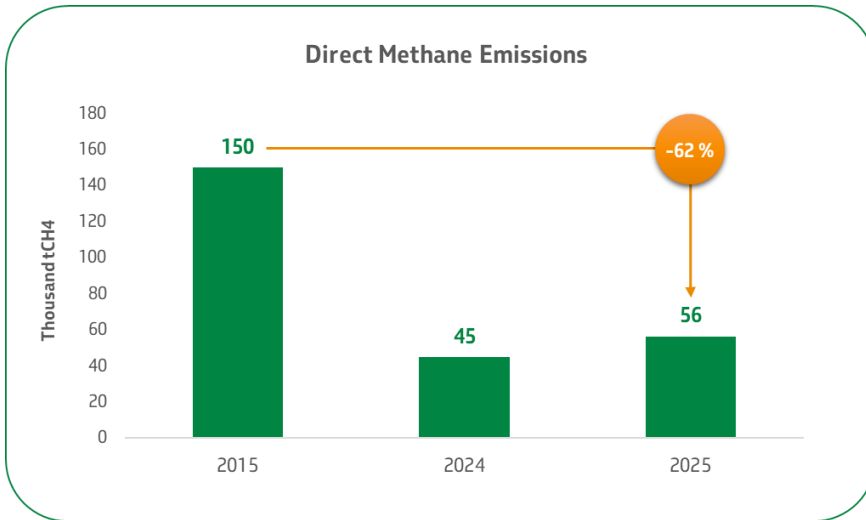
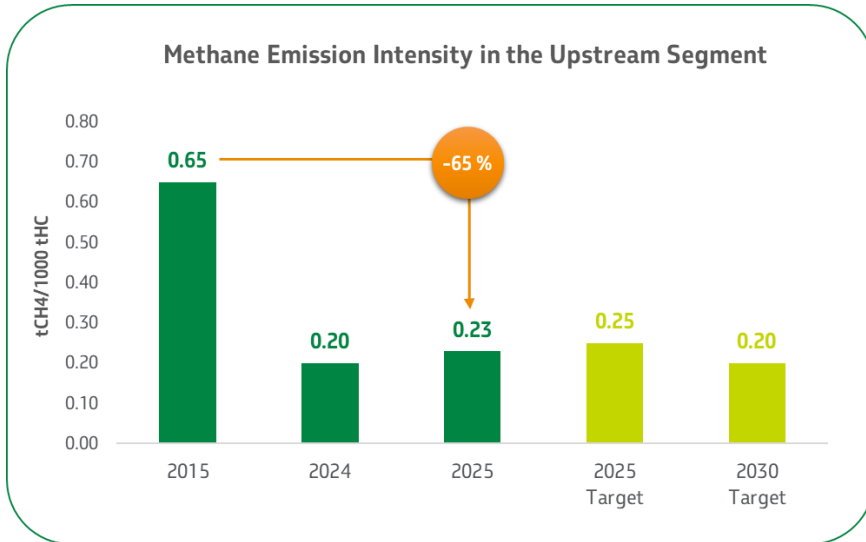
- Efficiency in operating new assets
- Energy optimization
- Gas-loss reduction
- Implementation of CCUS-EOR technology
- Increased production

We are committed to the continuous improvement of efficiency in our E&P operations. In oil and gas projects, the natural maturation of fields over time leads to a progressive increase in water production, higher energy demand, and a decline in oil output, consequently raising the portfolio intensity of the segment. To address this challenge, we adopt an approach that includes:

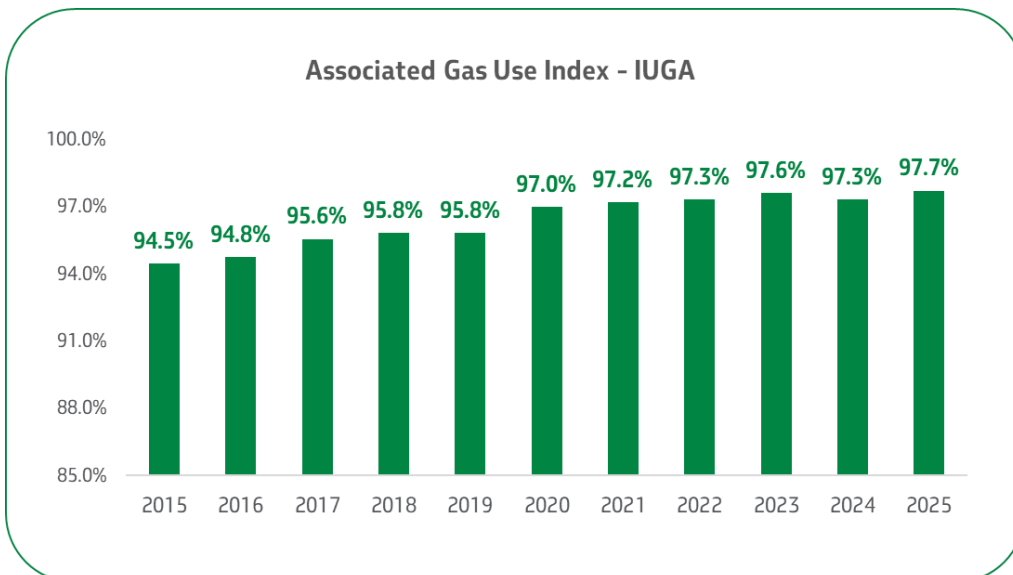
- i) implementing measures to reduce emissions in operating assets, such as energy optimization and loss minimization;
- ii) incorporating low-carbon technologies in new projects;
- iii) developing disruptive solutions for decarbonization;
- iv) reducing the natural production decline of each system through production management actions, interconnection of complementary wells, among others.

Methane Emissions

Our carbon intensity commitments for the segments cover all greenhouse gases, including methane. Due to its specific characteristics — having a significantly higher short-term warming potential — we monitor this gas through dedicated indicators. In 2025, as a result of implementing the direct methane emissions monitoring actions under OGMP 2.0, these indicators showed variations compared to previous years' results, reflecting improvements in the monitoring, quantification, and reporting processes.



Methane intensity in 2025 was 0.23 tCH₄/1,000 tHC, representing a 65% reduction compared to the 2015 baseline and exceeding the established target of 0.25 tCH₄/1,000 tHC. Regarding direct methane emissions, between 2015 and 2025, we achieved a 62% reduction, primarily as a result of strategic portfolio management and the implementation of mitigation measures, such as increased gas utilization (IUGA), which reached a historic record of 97.7% in 2025.

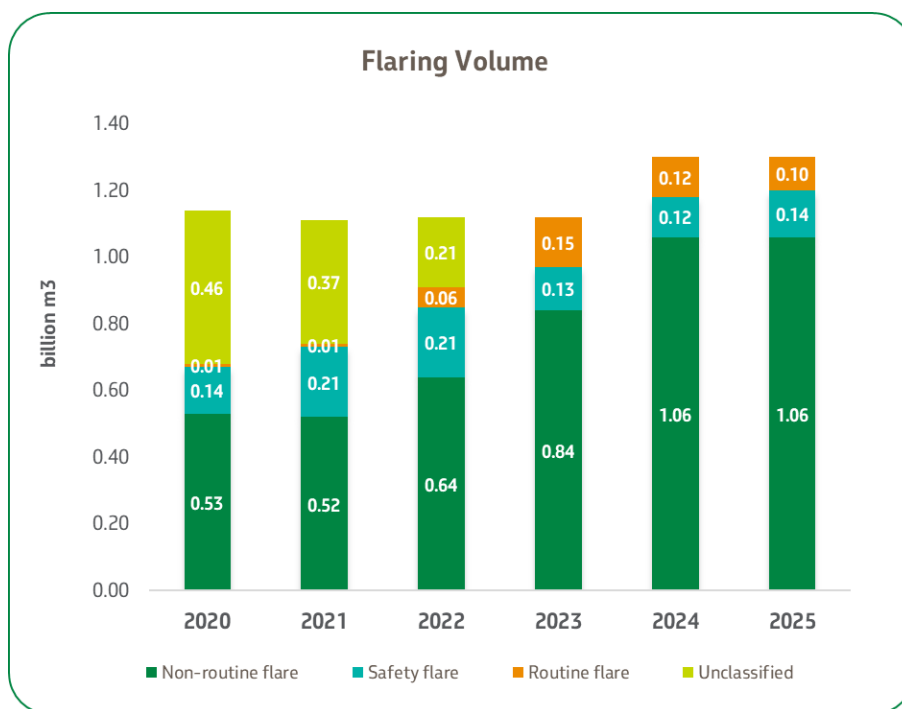


It is worth noting that the implementation of the actions outlined in the OGMP 2.0 initiative led to changes in reported emissions, which varied depending on the source analyzed. While fugitive emissions and incomplete combustion showed no significant deviations from previously reported portfolio-level values, vent emissions were higher, whereas flare emissions show potential for reduction due to improved destruction efficiency, to be confirmed with new measurements. The total variation in the methane emissions intensity indicator resulting from this important improvement in the process was approximately 20% in 2025.

Finally, it should be emphasized that between 2015 and 2025, we recorded a 62% reduction in direct methane emissions, mainly due to strategic portfolio management and the implementation of mitigation measures, such as reduced flaring.

Zero Routine Flaring

In 2018, we announced our support for the World Bank's "Zero Routine Flaring by 2030" initiative, compliance with which is one of our public commitments.



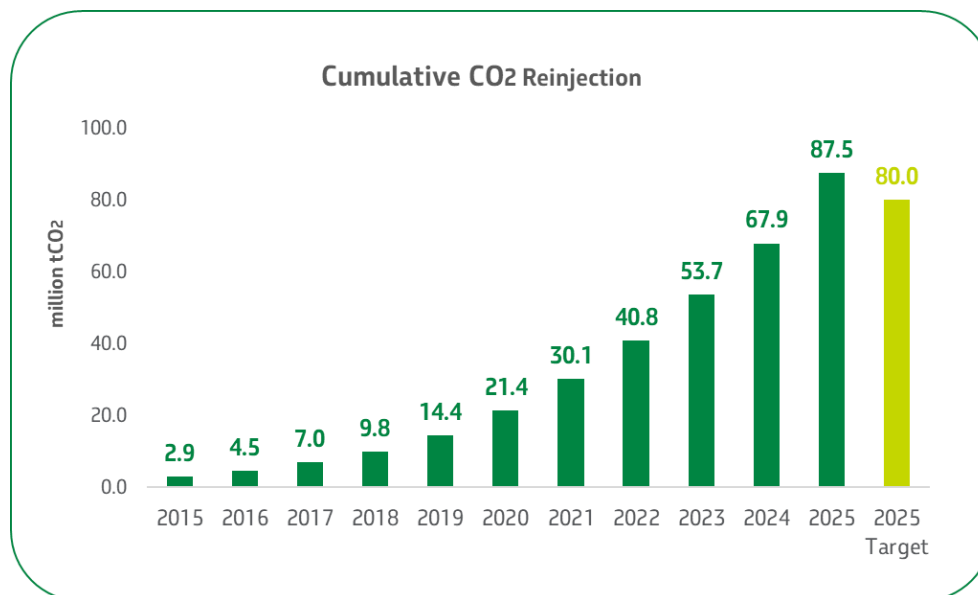
In 2025, routine flaring accounted for 8% of the total gas flared in E&P operations. The total flaring volume remained at the same level as in 2024, but routine flaring decreased by 17%. This low percentage is largely due to the operation of 14 high-capacity Fixed Production Units (FPUs) without routine flaring, a direct result of incorporating Flare Gas Recovery Units (FGRUs) into their projects. Additionally, adopting the "zero routine flaring" concept in all new projects reinforces the trend of continuous reduction of this percentage in the coming years.

Thus, the main factors to achieve zero routine flaring include:

- Improved management and classification of flaring causes;
- Implementation of mitigation actions, such as operating FGRUs;
- Establishment of new project guidelines.

CO₂ Reinjection in CCUS Projects

In 2025, 19.6 million tons of CO₂ were reinjected into the Pre-Salt reservoirs of the Santos Basin, surpassing the 14 million tCO₂ recorded in 2024 and cumulatively exceeding 80 million tons of CO₂ reinjected into our Pre-Salt reservoirs, in line with our public commitment.

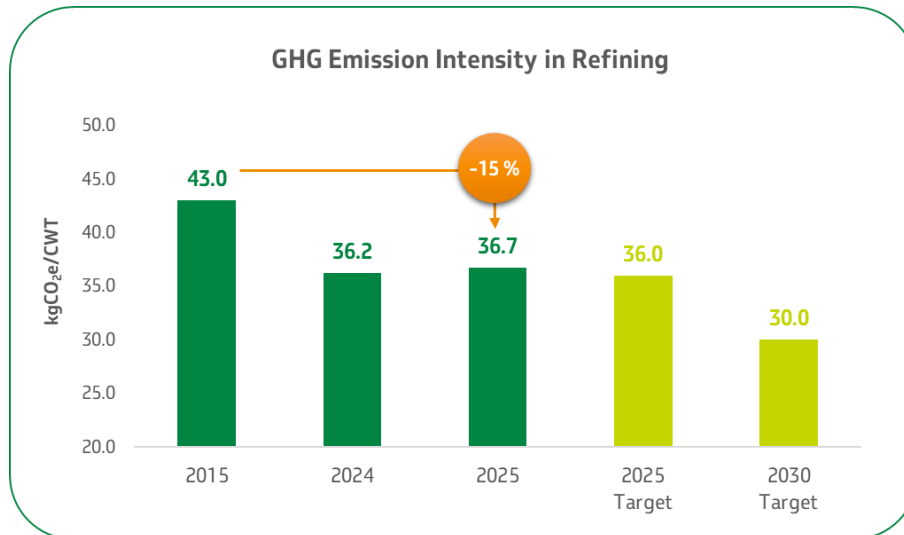


Currently, 24 FPSOs operating in the Pre-Salt of the Santos Basin are equipped with systems for CO₂ capture and reinjection. The adoption of this technology in ultra-deepwater environments represents a pioneering global initiative, simultaneously enabling CO₂ emissions reduction and enhanced oil recovery (CCUS-EOR). CO₂ reinjection in production fields, combined with EOR, will continue to play a significant role in the trajectory of reducing GHG emission intensity in oil and gas production.

GHG Emission Intensity in Refining

In 2025, the GHG emission intensity in the Refining segment was 36.7 kgCO₂e/CWT, confirming a consistent reduction of 14.6% compared to 2015, reflecting steady progress in energy efficiency improvements, operational management, and initiatives implemented over the last decade. The slight increase of 1.4% compared to 2024 was due to specific operational factors, such as scheduled shutdowns for project implementation.

The historical performance demonstrates the resilience of energy efficiency efforts toward decarbonization of the current refining complex, confirming a continuous improvement trajectory and the maintenance of gains achieved through initiatives implemented since 2015.



Among the actions that underpin these results, the main highlights are:

- **Consistent reduction of gas sent to the flare**, supported by improvements in the flare gas emission index;
- **Enhancement of energy performance**, measured by indicators such as the Sustainable Energy Index (IES), reflecting efficiency gains and operational optimization;
- **Greater efficiency in feedstock processing**, resulting in better asset utilization and lower carbon intensity per unit produced;
- **Implementation of initiatives leveraged by the Reftop Program**, such as integration and energy optimization of processes, increased energy generation efficiency, and reduction of losses.

These outcomes reinforce Petrobras' ongoing commitment to emissions reduction, improved energy performance, and alignment with the best practices of efficiency and sustainability that have always guided its Refining operations.

It is important to note that the targets set for 2025 and 2030 regarding GHG emission intensity in Refining were established within the context of divestments planned in the company's previous business plan, which considered the refining complex composed of only five refineries in the Southeast region. With the resumption of investments aimed at improving fuel quality, increasing capacity, and expanding refining operations to meet national energy security needs, the divestments of Refining assets were canceled, resulting in the retention of all ten refineries in the current complex. This change impacted 2025 results, as structural programs such as RefTOP and Neutral Carbon began later in the refineries that were initially planned for divestment.

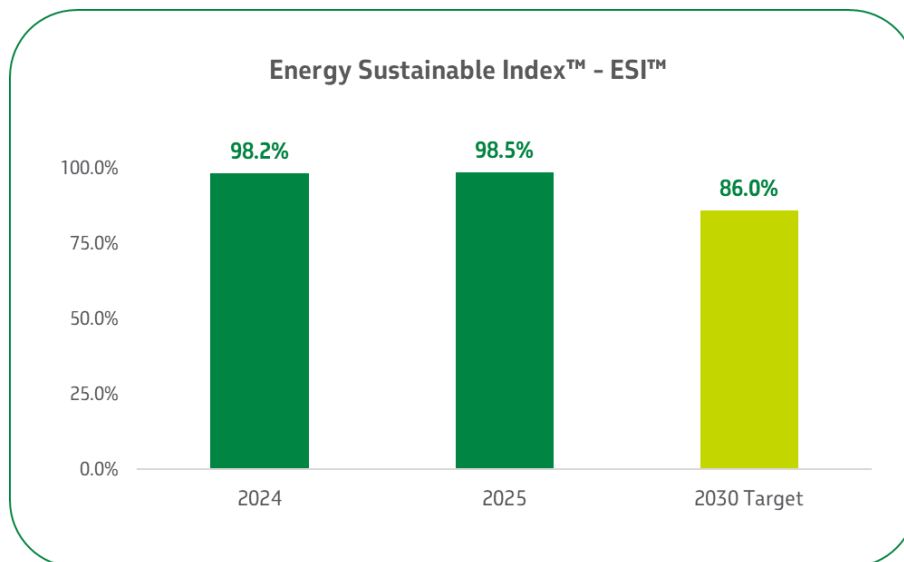
Energy Intensity in Refining

Energy intensity in the Refining segment reflects the ratio between the total primary energy consumption of each refinery and the reference energy consumption, taking into account processed feedstock volume, feedstock quality, and the complexity and severity of process units.

Starting in 2025, Petrobras adopted the Sustainable Energy Index™ (ESI™), which incorporates the impact of initiatives using electricity from renewable sources, such as photovoltaic plants under implementation and the Brazilian power system, characterized by a high share of renewable energy.

The Sustainable Energy Index for the refining complex reached 98.5 in 2025, remaining stable compared to the previous year, considering the impacts of scheduled shutdowns and variations in processed feedstock — situational factors that also influenced other energy indicators.

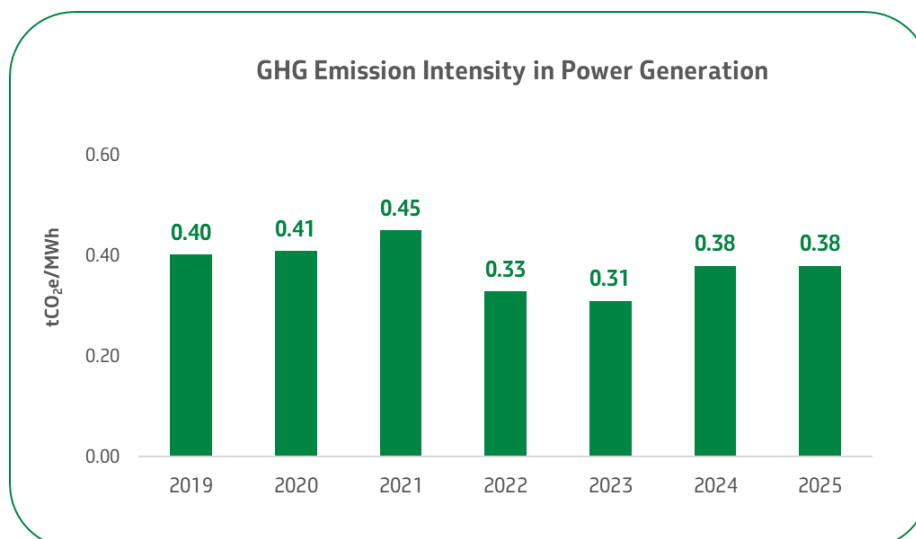
The 2025 ESI™ performance confirms the maintenance of gains achieved in recent years, supported by continuous improvements in energy efficiency and the increasing adoption of structural initiatives such as RefTOP and operational optimization projects. These advancements ensure greater resilience of the indicator even under challenging operational scenarios.



GHG Emission Intensity in Power Generation

The GHG emission intensity from electricity generation in our thermal power plants is intrinsically linked to the dispatch requests issued by the *Operador Nacional do Sistema Elétrico* (ONS). These requests are influenced by various factors, including the availability of other generation sources in the country, climatic conditions, and the seasonal variations inherent to the Brazilian power system.

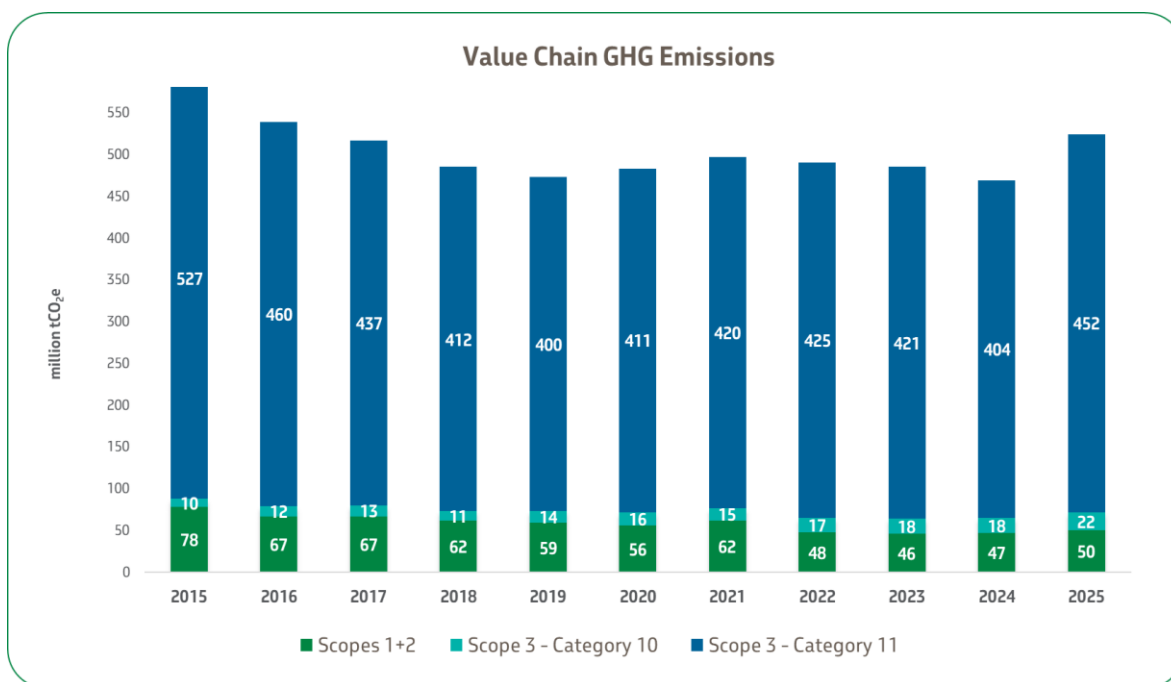
We monitor emission intensity in the operations of our thermal power plants, both open-cycle and combined-cycle units, including those operating under cogeneration. The latter stand out for their high energy efficiency and integration with our assets for steam supply. The calculation methodology used considers exclusively the emissions related to electricity generation.



In 2025, our thermal power fleet operated with an average GHG emission intensity of 0.38 tCO₂e/MWh, the same value as in 2024. This consistency is due to a similar dispatch profile requested by the ONS for our simple-cycle, combined-cycle, and cogeneration plants in both 2024 and 2025.

GHG Emissions Across the Value Chain

As an integrated energy company, we monitor both absolute emissions and carbon intensity throughout the value chain of our global energy portfolio. We consider the carbon performance of each product relevant, given the differences in emission intensity among various types of crude oil, natural gas streams, and electricity generated from fossil sources.



The values presented refer to the main emissions in our value chain and do not consider the use of carbon credits to offset the GHG emissions of Petrobras Podium Carbon Neutral gasoline, calculated based on the LCA, which totaled 297.9 thousand tCO₂e in 2025.

Within the scope of GHG emissions from the value chain, in addition to operational emissions, two relevant categories of Scope 3 emissions are considered: indirect emissions from the processing of sold products (Category 10) and indirect emissions resulting from the use of sold products (Category 11), the latter being the most significant in our value chain²⁷.

²⁷ Although this document presents only Scope 3 categories 10 and 11, categories 1 through 7 are also reported under the Brazilian GHG Protocol Program.

GHG Emissions Intensity of the Portfolio

The GHG emissions intensity of our portfolio is assessed as part of our risk and opportunity analysis, enabling the monitoring of our operations and business activities. This metric measures the amount of GHG emissions associated with each unit of energy sold to our consumers.²⁸

In 2025, the intensity of our value chain was 79.4 gCO₂e/MJ.

²⁸ See the calculation methodology description in Annex 2 – Metrics Table.

Engagement



Engagement

We aim to support and advocate for policies to reduce GHG emissions, working with governments, companies, industry associations, and other stakeholders in the development of these initiatives, with a view to facilitating the transition to a low-carbon economy.

Our commitment extends beyond internal results; we also strive to mobilize various sectors of society toward the necessary changes for a more sustainable future, adopting coordinated actions among multiple agents in pursuit of common climate objectives.

Transparency as a Pillar of Climate Engagement

We value transparency in our actions with our stakeholders, in accordance with our Code of Ethical Conduct, Social Responsibility and Health, Safety, and Environment (HSE) policies, and our Ethical Conduct Guide for Suppliers.

We adhere to world-class climate reporting standards, such as the Global Reporting Initiative (GRI Standards), the Task Force on Climate-related Financial Disclosures (TCFD), and the IPIECA guidelines (Guide to Voluntary Reporting in the Oil and Gas Industry).

External Recognition

In 2025, we achieved significant results in climate management assessments:



Once again, we have been selected for **inclusion in the Dow Jones Best-in-Class World Index** (formerly known as the Dow Jones World Sustainability Index). This index represents the top 10% of the 2,500 largest companies in the S&P Global BMI Index, based on long-term economic, environmental, and social criteria. In the assessment conducted by S&P, we achieved the **highest score in the Oil & Gas sector** for Climate Strategy, demonstrating leadership in climate strategy practices within our area of operation.



We were rated at the highest level (Level 5) of Management Quality by the Transition Pathway Initiative (TPI), placing us among companies that have demonstrated they have begun planning and implementing their climate transition. TPI's Management Quality assesses companies on their governance and management of the risks and opportunities associated with the transition to a low-carbon economy.



We received an A- rating in the "Supplier Engagement" category from CDP, and a B rating in the "Climate" and "Water Security" categories, reflecting the company's level of management in coordinated actions addressing climate and environmental issues. These ratings recognize the continuous, transparent, and effective work we carry out in our climate mitigation and adaptation strategies.

Cooperation, Knowledge Sharing, and Best Practices

Our strategy to address climate change involves a comprehensive assessment of the external landscape, aiming to integrate the perspectives of our stakeholders into critical decision-making processes. To this end, we analyze gaps, identify synergies in positions, and incorporate new insights into our strategy. We value collaboration in the transition to a low-carbon economy and, as part of this commitment, have established partnerships with companies and the scientific community.

In 2025, we participated in forums and initiatives on climate change and energy transition, covering the oil and gas sectors at both international and national levels, as well as other industrial and business segments. We also established partnerships in initiatives and projects that reinforce our commitment to a just energy transition.

COP30

We attended COP30, as well as previous editions of the Conference, as we view it as an opportunity to share perspectives on sustainable models that link energy production with technology, innovation, and solutions that mitigate climate change while protecting the environment and people, ensuring access to energy and energy security, and promoting inclusive development and income generation for the country.

Our participation in COP30 reinforces our commitment to contributing to climate change mitigation through initiatives supported by an investment plan that balances energy security, economic development, and socio-environmental responsibility.

We took part in the Energy Day opening event, organized by the COP30 Presidency, alongside global and national leaders in the sector, reaffirming our strategic role in the decarbonization agenda of the oil and gas industry.

We contributed to technical discussions on regulated carbon markets, bioeconomy, and solutions for transport decarbonization, and coordinated panels addressing topics such as decarbonization of O&G operations, energy transition and transport, bioeconomy, and ocean innovation. Additionally, we participated in third-party panels, sharing experiences in solutions for hard-to-decarbonize abate sectors.

Finally, we supplied Diesel R10, a fuel with renewable content, for the buses and generators used during the Conference.

Cooperation with Industry

Carbon Countdown – Engagement for Climate Science and the Carbon Market in Brazil

In December 2025, Petrobras, Shell Brazil, ESALQ/USP, and other partners launched Carbon Countdown, a pioneering initiative that brings together different sectors of society to carry out the largest carbon stock inventory ever conducted in Brazil, covering all six biomes of the country and various land uses.

The project was made possible through active cooperation, with Petrobras coordinating resources and technical expertise, mobilizing universities, research centers, and companies. It serves as an example of how Petrobras' engagement with a wide range of stakeholders enables impactful projects for a just energy transition, promoting joint and innovative responses to common challenges.

Carbon Countdown directly invests in team development and the strengthening of laboratories distributed across the country, creating an integrated platform for storing, analyzing, and sharing results, under the scientific leadership of USP/ESALQ – a center of excellence in agrarian, environmental, biological, and social sciences. This effort contributes to professional training and the advancement of environmental research in Brazil.

Key benefits of the project include:

- **Generation of unprecedented carbon stock data** above and below the soil, essential for assessing Brazil's potential for nature-based climate solutions at a scale and level of detail unmatched worldwide, especially given Brazil's status as a megadiverse country of continental dimensions.
- **Robust scientific foundation for the carbon market:** Carbon Countdown results enhance the generation of high-quality and high-integrity carbon credits, strengthening the credibility and competitiveness of Brazilian projects.
- **Expansion of scientific capacity:** The project multiplies opportunities for training and specialization of researchers, technicians, and students, consolidating regional centers of excellence and promoting the advancement of environmental research.

Petrobras & Lightsource bp - Engagement for the Expansion of Renewable Energy in Brazil

In December 2025, Petrobras and Lightsource bp, a global leader in the development, construction, and operation of onshore renewable energy solutions and energy storage, announced a groundbreaking strategic partnership to drive the development of renewable energy projects in Brazil, with a focus on solar. This initiative marks a new chapter in our journey toward a just energy transition, expanding our presence in clean energy by combining Lightsource bp's international expertise with Petrobras' strategic, institutional, and operational capabilities.

The partnership directly invests in the expansion of renewable energy, creating a platform capable of incorporating new renewable business lines, such as energy storage, while serving different consumer profiles. The initial pipeline includes between 1 and 1.5 GW of solar projects at advanced stages of development, in addition to the Milagres (Ceará) photovoltaic solar plant, already in operation, with an installed capacity of 212 MWp.

Key benefits of the partnership include:

- **Acceleration of the energy transition:** The agreement boosts our participation in the solar energy market, reinforcing our commitment to decarbonizing operations and producing more sustainable fuels.
- **Strengthening Brazil's renewable market:** By joining forces with Lightsource bp, we expand our presence among key sector players, enhancing the competitiveness and credibility of national projects and positioning Brazil as a priority destination for clean energy investments.
- **Platform for innovation and new business:** The joint venture creates opportunities to develop integrated energy storage solutions and other low-carbon segments, fostering innovation and collaborative responses to the challenges of the national energy matrix.

The closing of the deal is subject to the relevant approvals, including those from the competent regulatory bodies.

Engagement in Climate Adaptation

Petrobras strategically acts to strengthen the climate adaptation agenda in Brazil, promoting science, innovation, and cross-sector collaboration. In 2025, three main engagement fronts stood out:

- **Partnership with FGV:** We contributed to the development of the Guidelines for Corporate Reporting on Climate Adaptation, under the Brazilian Corporate Reporting on Climate Change Adaptation Program (PBRA), led by the Center for Sustainability Studies of Fundação Getulio Vargas (FGVces). The document, resulting from collaboration among 65 institutions across different sectors, was published after public consultation, aiming to standardize methodologies, increase transparency of corporate adaptation information, and strengthen climate governance in the country;
- **Support for the AmazonFACE Project:** We supported the AmazonFACE project, led by Unicamp and INPA, in partnership with the Ministry of Science, Technology and Innovations (MCTI) and international institutions, to study the effects of increased CO₂ in the Amazon Rainforest and its impact on the global climate over ten years, reinforcing our commitment to science and innovation and our target to allocate 40% of the R&D portfolio to low-carbon initiatives by 2030;
- **Institutional Engagement and Policy Dialogue:** Petrobras actively engaged in discussions on climate adaptation within the productive sector, including initiatives with the National Confederation of Industry (CNI)—the main representative body of Brazilian industry—and technical contributions to the Climate Plan for Adaptation (Plano Clima Adaptação), the federal government's strategic framework guiding public policies and actions aimed at strengthening climate resilience in Brazil.

Workshops on Climate Change and Energy Transition

- To review the company's guidelines on sustainable business positioning, Petrobras conducted a series of nine workshops aimed at gathering insights on its markets of operation and profitable diversification opportunities. This initiative involved participation from multiple company areas, employees at various levels, and external specialists. In total, more than 2,000 people took part in these events.
- The workshops were structured to deepen the company's positioning regarding decarbonization trends and new business opportunities. Each workshop focused on a strategic segment, including maritime transport, heavy transport, land mobility, air transport, energy management, power generation, industrial and residential segments, as well as emerging topics such as CCS/CCUS and new technologies (geothermal, tidal, among others). The methodology combined expert panels with internal and external specialists and participatory dynamics, such as the World Café model, which facilitated debates in thematic groups with rotation across topics. This approach enabled diagnostics, recommendations, and business proposals aligned with Petrobras' reality, considering regulatory aspects, infrastructure, market intelligence, and supply chain integration.
- These workshops were fundamental in supporting the development of the long-term Energy Transition Plan, ensuring that the company's positioning guidelines align with regulatory requirements, technological trends, and profitable diversification opportunities. Furthermore,

they reinforced the importance of cross-department collaboration and active listening to internal and external stakeholders, consolidating an integrated vision for the company's future business.

- In 2025, actions were also carried out to promote technical and multidisciplinary discussions aimed at defining strategies that position Petrobras competitively and sustainably amid the global energy transition affecting the aviation sector. Notable partnerships included external entities such as ANAC (National Civil Aviation Agency), IATA (International Air Transport Association), EPE (Energy Research Company), the Brazilian Network of Biojet Fuel and Renewable Aviation Hydrocarbons, EMBRAER, Airbus, Vibra, Embrapa, and IBP (Brazilian Petroleum, Gas and Biofuels Institute). These workshops anticipated regulatory, technological, operational, and commercial risks and opportunities related to SAF, including its adoption in offshore aviation operations.

Public Policy Engagement

Leadership in a just energy transition involves proactive climate advocacy, always with the observance of the objectives of the Paris Agreement and the Sustainable Development Goals of the 2030 Agenda, in all jurisdictions where we operate.

Brazilian government is advancing in the definition of public policies for climate change mitigation and adaptation, aiming at a transition to a low-carbon economy in a fair and sustainable manner. In this context, we seek to strengthen technical discussions and contribute to the consolidation of legal and regulatory frameworks that enable technologies and businesses that, in turn, support the country's climate efforts. In doing so, we play an important role in supporting and implementing public policies, and we can further contribute to the refinement of policies, legislation, and regulations that drive Brazil forward in its journey toward a just and inclusive energy transition.

We participate directly in these processes through ad-hoc meetings with regulatory bodies and policymakers, public forums, technical events, working groups organized by governmental authorities, and public consultations. Indirectly, we can act through industry associations of which we are members, even when advocacy is not the primary objective of these entities.

The quality and integration of these policies with the national industry are essential for Brazil to achieve its national GHG emissions reduction targets. For this reason, transparent, proactive, and collaborative advocacy is a central element of our strategy.

Position on Climate Policy

Throughout 2025, Petrobras contributed to the development and improvement of legal and regulatory frameworks for the energy transition through participation in public consultations and hearings, submission of technical proposals, and dialogue with competent authorities. The main areas of engagement are highlighted below:

- Law No. 14,993/2024 (Fuel of the Future):** This law encourages low-carbon sustainable mobility and consolidates Brazil's position as a global leader in the energy transition. Petrobras participated in public consultations conducted by the National Agency of Petroleum, Natural Gas and Biofuels (ANP) and the Ministry of Mines and Energy (MME), contributing particularly to the regulation of the National Sustainable Aviation Fuel Program (ProBioQAV) and the National Decarbonization Program for Natural Gas Producers and Importers, as well as the Biogas/Biomethane Incentive Program;

- **Public consultation on the CCUS decree (Carbon Capture and Storage)** regulating Articles 26 to 29 of Law No. 14,993/2024: Petrobras advocated that the decree provide complementary guidelines and definitions to the Law, seeking integration with the SBCE – Brazilian Emissions Trading System (Law No. 15,042/2024), recognizing CCS as a CO₂ reduction/removal activity and considering CCS as a permanent carbon sink.
- **Law No. 15,042/2024 (Carbon Market):** Petrobras engaged with stakeholders within the federal government, emphasizing the need for clear legal frameworks regarding governance and principles of the emissions trading system, and highlighting the importance of clarifying the legal nature of carbon credits and their relation to other pricing mechanisms. Following the law's approval and the advances in implementing the SBCE, Petrobras continues to monitor the system's regulation and operation, continuously assessing potential impacts and opportunities.
- **Decree No. 12,705/2025 (Brazilian Sustainable Taxonomy):** The sustainable taxonomy is a key instrument to mobilize and redirect capital flows toward investments necessary to address the climate crisis. Petrobras participated in the Ministry of Finance's public consultation, advocating for the inclusion of Climate Adaptation Resilience KPIs in the CNAEs – National Classification of Economic Activities; Nature-Based Solutions (NBS); use of biomethane in thermoelectric plants; revision of CO₂ transport and storage criteria; alignment of prioritized technologies for aviation in accordance with the Fuel of the Future Law (Law 14,993/2024); and exclusion of maritime transport classification based solely on fuel type, in addition to using efficiency indicators.
- **Law No. 15,097/2025 (Offshore Power Generation):** During the processing of Bill 576/2021, Petrobras monitored and engaged institutionally, liaising with sector associations and maintaining technical dialogue with MME, ANEEL, and EPE to support the establishment of a legal framework providing predictability, legal security, and governmental coordination for offshore power generation in Brazil. The result was Law No. 15,097/2025, which establishes the basic framework for the use of Union maritime areas for offshore power generation, defines "prisms" as spatial allocation units, requires the Prior Interference Declaration (DIP) to map conflicts with other uses, establishes two types of allocation (permanent, via expression of interest, and planned, via bidding), regulates grantee requirements/obligations (studies, licensing, data, decommissioning), and institutes government participation (bonuses, occupancy fees, and proportional shares), leaving detailed regulation to the Executive Power/CNPE. In summary, the law is relevant because it enables structuring and contracting offshore projects with clear minimum rules on area, competition, coexistence with multiple uses, and integration with the National Interconnected System (SIN).
- **Decarbonization of the international maritime sector (IMO Net Zero Framework):** The International Maritime Organization (IMO) has been assessing and establishing measures to reduce greenhouse gas (GHG) emissions from ships, focusing on indicators and measures to achieve net-zero emissions in the sector. In April 2025, the IMO approved amendments to MARPOL Annex VI, creating the so-called Net Zero Framework, which combines a global carbon intensity standard for marine fuels with an economic pricing mechanism to incentivize lower-carbon fuels, applicable to ships over 5,000 gross tons. Entry into force is estimated for March 1, 2028. Petrobras has been part of the Brazilian delegation to the IMO since the 1990s, participating in various committees and subcommittees. Since 2023, with intensified negotiations for the Net Zero Framework, Petrobras has been actively participating in the MEPC intersessional meetings (ISWG GHG and ISWG-APEE) and Correspondence Groups.
- **Decarbonization of the international aviation sector:** Although international aviation contributes only about 2–3% of global GHG emissions, the International Civil Aviation Organization (ICAO) has aspirational targets to achieve Net Zero by 2050. The first phase is the

CORSIA program (Carbon Offsetting and Reduction Scheme for International Aviation). Launched as a pilot phase in 2021, the scheme requires airlines to limit their GHG emissions to 85% of what was emitted in 2019. The program operates in three-year cycles and, as of 2024, covers airlines from 130 volunteer countries. Other countries, including Brazil, with a minimum number of international passengers and cargo, will enter the mandatory phase in 2027. Petrobras participates in the Brazilian delegation to ICAO's permanent fuels group, representing the Brazilian O&G industry. The group discusses eligible fuels (such as SAF and LCAF), acceptable feedstocks, carbon intensity of each feedstock/production route, carbon accounting systems, and other related topics.

- **Public consultation on the National Sustainable Aviation Fuel Program (ProBioQAV)** established under Chapter III of Law No. 14,993, October 8, 2024: Petrobras advocates for a just energy transition, ensuring that airlines are not excessively burdened. One potential measure to reduce GHG emissions is the use of alternative fuels, such as LCAF (Low Carbon Aviation Fuel).
- **Public consultation on methane:** Petrobras actively participated in the public consultation conducted by ANP on methane emissions regulation, providing technical contributions aligned with national targets and international climate commitments.
- **Opening of the Natural Gas market:** Petrobras has played a central role in opening Brazil's natural gas market, promoting sustainable increases in national supply, and reducing dependency on imports. In recent years, the sector has undergone significant transformations driven by regulatory changes, such as the New Gas Law (Law No. 14,134/2021), which facilitated access for new agents to transportation, processing, and distribution infrastructure, and stimulated competition. In this context, notable developments include the diversification of distributors' purchase portfolios and the growth in the number of free consumers who can now trade gas directly through bilateral contracts. Access to the transportation system was also facilitated through the entry-exit model, promoting greater liquidity and diversity of participants. Despite these advances, challenges remain, such as the need for regulatory harmonization between states. By adapting its portfolio to this new competitive environment, Petrobras strengthens its position as a reference in natural gas and energy, contributing to energy security, transition to cleaner sources, and sustainable development in Brazil.

Climate Mitigation Plan and Climate Adaptation Plan: The National Climate Change Plan (Plano CLIMA), launched by the Federal Government, guides and supports a range of public policies aimed at transforming energy supply and demand, such as the National Climate Change Policy and the National Energy Transition Policy. Petrobras participated in the process for drafting the Plano CLIMA guidelines, focusing especially on emission reduction and the development of a cleaner energy matrix, while recognizing the need for inclusive and sustainable economic growth and resilience solutions. Through this participation, and by monitoring scenarios and trends via energy planning and sectoral GHG emission targets aligned with Brazil's NDC, Petrobras can update assumptions regarding risks and opportunities for its Strategic Planning and Business Plan.

In line with our commitment to transparency, we reaffirm that all the activities described aim to contribute to the country's energy transition. We will continue to advocate for our climate positions in a manner consistent with our climate commitments.

Governance Structure for Climate Advocacy

We have a well-defined governance structure for engagement in public policies related to climate change mitigation and adaptation, as well as energy transition. We have established clear limits of authority for decision-making, ensuring that our participation in associations carrying out indirect climate advocacy activities is always subject to the authorization and oversight of the company's senior management.

The integration of climate change topics across different levels is conducted by the Executive Management of Climate Change and Decarbonization, reporting to the Executive Board of Energy Transition and Sustainability.

The Executive Management of Institutional Relations is responsible for liaising with the legislative and executive branches at the federal, state, and municipal levels, as well as with regulatory agencies, external entities, and national and foreign representations, proposing the company's engagement strategy with these stakeholders.

The Executive Management of Integrated Energy Transition, reporting to the Executive Board of Energy Transition and Sustainability, has a dedicated Regulatory Affairs area that plays a key role in building a favorable regulatory environment for the transition. This area monitors public policies, legal and regulatory frameworks, national standards and guidelines, tracking bills and subordinate regulations. It works in partnership with Institutional Relations with the Executive and Legislative branches, ministries, and federal and state regulatory agencies on topics such as biofuels, natural gas, electricity, and low-carbon businesses. Additionally, it maps regulatory risks and proposes improvements to mitigate potential impacts of new legislation, ensuring the protection of the company's interests and the viability of its investments in a transforming energy landscape.

Participation in External Entities

Principles for Participation in Associations

We do not hire consultancies or specialized groups for political representation or advocacy. However, we provide financial contributions to entities and initiatives that may occasionally engage in indirect advocacy activities in addition to their core activities. It is important to note that our participation in these entities is not intended to outsource these activities but to collaborate in initiatives that promote sector development and best practices across different topics. Any political engagement activities undertaken by these associations are monitored and reviewed by our governance structure, ensuring that their climate engagement actions align with the company's principles. We advocate climate positions consistent with our climate strategy within the external entities in which we participate or are members.

We have an internal Standard to manage our participation in external entities, which addresses the procedure for proposing new Petrobras participation. This standard establishes that the purpose and scope of the external entity's activities must be aligned with the social purpose and/or our strategy, with emphasis on the level of adherence of the entity to our public positions and current commitments regarding climate change and the Sustainable Development Goals. This emphasis reinforces climate alignment as a necessary condition for new participation in external entities. The company's continued participation in these entities is subject to an annual reassessment of participation criteria by the responsible organizational unit, preferably aligned with other organizational units that interface with the same external entity, and must consider the alignment of the external entity's climate policy

engagement positions with our own positions. Any misalignment may result in the non-renewal of our participation in the entity in question. This procedure is applied in all jurisdictions where we operate.

Our Main Associations and Initiatives

Brazilian Institute of Oil, Gas, and Biofuels (IBP)



IBP, the sector's institutional representative in Brazil, works with its members and experts to develop policies and action plans for all segments and demands of the energy industry.

IBP reinforces its commitment to the industry's decarbonization trajectory, aligned with Brazil's commitment under the Paris Agreement to achieve carbon neutrality by 2050. As a member company, we endorse this commitment, seeking to generate wealth from our oil and gas reserves while supporting the decarbonization of the national economy.

IBP played a significant role in the regulatory agenda for the energy transition in 2025. The organization coordinated a Working Group to propose regulations on biomethane, analyzing synergies and challenges between RenovaBio and Brazilian Emissions Trading System (SBCE). It participated in consultations with the Ministry of the Environment (MMA) and the Ministry of Mines and Energy (MME) regarding the Climate Plan for the energy sector, conducted an emissions inventory for the oil and gas sector, served on the CCUS Subcommittee within the Permanent Committee on Fuel of the Future, and led the Working Group on Carbon Pricing. In addition, it submitted contributions to the National Agency of Petroleum, Natural Gas, and Biofuels (ANP) in Preliminary Consultation No. 4/2025, regarding the Regulatory Impact Analysis on the proposal to reduce methane emissions in the oil and gas chain. Within the scope of ProBioQAV regulation, the IBP works in conjunction with the ABD (Downstream Association). Additionally, the IBP established a CCS (Carbon Capture and Storage) Working Group, which contributed to the drafting of an Executive Branch Decree, led by the MME, regulating Articles 26 through 29 of Law No. 14,993/2024 (Fuel of the Future Law), which addresses CCS activities in Brazil. Finally, it represented the sector at the Plenary Session of FONTE – National Energy Transition Forum, an advisory body to the Federal Executive Branch.





Oil and Gas Climate Initiative (OGCI)



We have been a member of the OGCI since 2018, an organization that brings together twelve of the world's largest oil and gas companies, responsible for approximately 26% of global O&G production. We contribute by participating in various working groups, such as: Carbon Capture, Utilization, and Storage (CCUS); Low-Emission Opportunities; The Role of Natural Gas; Energy Efficiency; Nature-Based Climate Solutions; Sustainable Procurement; and Low-Carbon Mobility. OGCI supports initiatives such as the Methane Guiding Principles, the Global Methane Alliance, and the World Bank's "Zero Routine Flaring by 2030", of which we are signatories.

OGCI member companies increased low-carbon investments in 2024 to \$30.1 billion—a 4.5% increase from the previous year, totaling more than \$96 billion since 2017. Collectively, OGCI companies have reduced absolute upstream methane emissions by 62% and carbon intensity by 26% compared to 2017.

<p>Oil & Gas Decarbonization Charter (OGDC)</p> 	<p>OGDC was an initiative led by the COP28 Energy Transition team, with the goal of uniting the global oil and gas industry around ambitions that will drive the sector toward carbon neutrality by or before 2050, and the elimination of routine flaring emissions by 2030.</p> <p>At COP29, OGDC published its first report with the goal of establishing a baseline, prioritizing, and tracking progress on emissions reductions among the 55 signatory companies, which account for about 40% of global oil production.</p> <p>In 2025, OGDC moved from the baseline phase to the implementation of concrete actions. Signatory companies reported data on most of their operated production, set interim targets for emissions reductions by 2030, and developed specific plans for methane and the elimination of routine flaring.</p>
<p>International Association of Oil and Gas Producers (IOGP)</p> 	<p>IOGP has been representing the upstream segment of the O&G industry for over 45 years, promoting the sharing of knowledge and practices related to safety, health, the environment, and climate. Its members account for the supply of over 40% of global oil and gas demand.</p> <p>At IOGP, in addition to various other groups focused on environmental issues and operational safety and health, we participate in the Low Carbon Operational Efficiency Committee (Low Carbon Operational Efficiency – LCOE) and its respective expert groups on Flaring & Venting and Methane Management, Energy Efficiency, Electrification, and the Carbon Capture and Storage (CCS) Committee.</p>
<p>International Sustainability and Carbon Certification (ISCC)</p> 	<p>In January 2026, we became a member of the International Sustainability and Carbon Certification (ISCC) as part of our strategy to prioritize certification protocols focused on the sustainability of raw materials and renewable products through full supply chain traceability.</p> <p>ISCC is recognized as a global benchmark in the certification of sustainable production chains. Headquartered in Germany, the organization currently has over 340 members, operates in 138 countries, and maintains more than 15,000 valid certificates, some of which are already related to products and operational units of Petrobras and Petrobras Biocombustível.</p> <p>In 2023, we obtained the first ISCC certification for the renewable fraction (HVO) of Diesel R, produced at the Presidente Getúlio Vargas Refinery (Repar). Since then, we have expanded our portfolio of sustainable products and obtained new certifications, aligned with the Company’s strategic planning and market demands.</p> <p>By joining ISCC, Petrobras joins relevant global players in the energy sector, enabling it to participate more actively in the association’s technical committees.</p>

<p>Brazilian Hydrogen Association (ABH2)</p> 	<p>We joined ABH2 in 2024, an organization that has been active since 2017 in developing and promoting the hydrogen economy in Brazil, fostering the chain of production, conditioning, storage, distribution, and use of hydrogen for energy purposes. In addition to engaging in initiatives aimed at creating public policies on hydrogen in Brazil, the association actively participates in the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE), a collaborative intergovernmental initiative for the development and deployment of hydrogen and fuel cell technologies in the economy. ABH2 is the lead partner in Brazil for the Partnering for Accelerated Climate Transitions (UK PACT) program, funded by the United Kingdom to accelerate climate and energy transition initiatives. As part of this program, ABH2 was selected to develop the project “Comprehensive Strategic Plan for Hydrogen in Brazil: Mapping, Certification, Hubs, and Capacity Building for a Low-Emission Future,” which aims to create a comprehensive strategic plan for the development of low-emission hydrogen in the country. The work includes mapping production and demand, certification, defining hydrogen hubs, and market capacity building, as well as regulatory recommendations and decision-making support tools.</p>
<p>Brazilian Association of Thermal Power Generation (ABRAGET)</p> 	<p>We are members of ABRAGET, which aims to study, debate, and seek institutional solutions for all issues that may enable the economic and financial balance of the country’s thermal power plants and has been working on the development of energy policies to ensure the security and stability of the national electricity system, and has contributed suggestions for legislative improvements to the regulated carbon market and the legal framework for low-carbon hydrogen.</p>
<p>CCS Brazil Association</p> 	<p>We joined CCS Brazil in 2025, an association dedicated to the technical, institutional, and regulatory strengthening of Carbon Capture, Utilization, and Geological Storage (CCUS) technologies in Brazil, fostering cooperation among government, industry, academia, financiers, and society. The organization promotes alignment among strategic stakeholders and contributes to building the foundations necessary for the safe and consistent advancement of carbon management solutions in the country. In 2025, CCS Brasil drove the national agenda for carbon capture, and storage through strategic events, technical training, and regulatory coordination, reinforcing the commitment to a low-carbon transition.</p>
<p>Brazilian Wind Energy Association (ABEEólica)</p> 	<p>We joined ABEEólica in 2025, reinforcing our commitment to the energy transition. A non-profit organization founded in 2002, it represents the wind energy industry in Brazil, including companies across the entire production chain. Focused on developing and consolidating wind energy as a clean, competitive, and strategic source for the national energy mix, ABEEólica operates through regulatory advocacy, technical studies, events, best practice guidelines, and support for capacity building in the sector.</p>

<p>Brazilian Business Council for Sustainable Development (CEBDS)</p> 	<p>We participate in CEBDS, an organization that connects companies, government, and civil society to drive sustainable solutions. In 2025, CEBDS played a key role in promoting strategic initiatives focused on the climate and sustainability agenda, with the active participation of Petrobras, creating spaces for connection between companies, partners, and the government.</p>
<p>IPIECA</p> 	<p>We have been a member of IPIECA since 2007. The organization has been active for over 50 years in promoting and exchanging best practices in sustainability, contributing to the development and dissemination of guidelines for the O&G industry. It has approximately 40 corporate members and over 30 associations, forming a network that represents more than 400 oil and gas companies. Petrobras began its participation in IPIECA in 2007.</p> <p>Since 2022, IPIECA has established sustainability expectations for its members in accordance with the 'IPIECA Principles,' which reinforce the organization's role in inspiring action and leading the global oil, gas, and alternative energy industry through a sustainable energy transition. The eight principles are grouped into four pillars of IPIECA's strategy, articulating a common ambition among members in support of its vision namely: Climate, Nature, People, and Sustainability. Regarding the Climate pillar, we endorse its two principles: (i) to support the Paris Agreement and its objectives, and (ii) to promote emissions reduction and innovation and enable the adoption of low-carbon products and solutions in oil, gas, and/or alternative energy.</p>
<p>Regional Association of Oil, Gas, and Biofuels Companies in Latin America and the Caribbean (ARPEL)</p> 	<p>ARPEL, founded in 1965, aims to promote cooperation and mutual assistance among companies in the sector across Latin America and the Caribbean, actively contributing to industrial integration, competitive growth, and sustainable energy development.</p> <p>Its members represent a high percentage of <i>upstream</i>, <i>midstream</i>, and <i>downstream</i> activities in the region, including national and international operating companies, suppliers of technology, goods, and services for the value chain, as well as national and international sectoral organizations.</p> <p>ARPEL's mission is to foster integration, growth, operational excellence, and robust socio-environmental performance across the regional energy sector by facilitating dialogue, encouraging cooperation, leveraging synergies among stakeholders, and promoting the shared creation of value through knowledge exchange and capacity building among its members.</p> <p>In 2025, a key focus will be the continued dissemination of ARPEL's public stance on just energy transitions in Latin America and the Caribbean, grounded in the region's specificities. In this regard, recognizing the urgency of measures to mitigate climate change, the organization emphasizes that energy transition pathways must consider social and economic impacts on developing communities with high rates of unemployment, inequality, and energy poverty. The topics of Just Transition and Adaptation were addressed during a dedicated event at COP30 in Belém, organized by ARPEL in collaboration with IPIECA, with an emphasis on engaging the productive sector in dialogue.</p>

Brazilian LCA Business Network



The LCA Network is a national network that brings together companies and institutions to exchange experiences in Life Cycle Assessment (LCA) and has the mission to "Mobilize companies, coordinate with governments, and educate consumers with the aim of incorporating LCA as a tool to determine product sustainability."

The Network was launched in 2013 and is today a leading authority in the application and development of Life Cycle Assessment in Brazil, addressing current issues related to product sustainability. The Network is a member of the UNEP (United Nations Environment Programme) Life Cycle Initiative.

In 2025, Petrobras rejoined LCA Network and resumed participation in the Network's collaborative environment, with the aim of applying LCA in the development of new solutions and products that enhance transparency and contribute to sustainability.

Cooperation in Other Sectors

We aim to extend our collaboration beyond the industry through a strong commitment to dialogue and the pursuit of solutions. We also work in partnership with leading organizations that promote sustainable development, such as the World Economic Forum (WEF); the Life Coalition (Instituto Life); the National Confederation of Industry (CNI); and the state-level Federations of Industries across Brazil.

Furthermore, we collaborate with the Brazilian Association of Automotive Engineering (AEA), an organization that fosters the development of national automotive engineering and provides technical support for various public policies in the sector. Our participation includes technical discussions on vehicle emissions, energy efficiency, fuel quality, biofuel blends, and broader sustainability topics.

Petrobras Connections for Innovation

We engage with a wide range of actors in innovative ecosystems including universities, science and technology institutes, startups, and large companies—to establish partnerships aimed at developing new technologies. These initiatives focus on emissions reduction and renewable energy solutions that support our decarbonization commitments while enhancing operational efficiency. The Petrobras Connections for Innovation program is structured into eight modules for disseminating opportunities, representing the different collaborative models we offer. In 2025, we partnered with more than 230 institutions across 19 Brazilian states, involving over 10,000 researchers.

Workforce Engagement

Promoting sustainable business and decarbonizing our operations are among our strategic priorities and are reflected in initiatives designed to engage our employees in this process.

We invest in training focused on climate change and energy transition. Our corporate university, *Universidade Petrobras*, has developed a comprehensive training portfolio that includes essential courses on emissions mitigation in our operations and preparation for a just energy transition. The 54 Technical Committees within our Knowledge System connect more than 120 strategic knowledge areas, aiming to drive the company's Strategic Plan. An Energy Transition Academy was established in

2024, encompassing technical knowledge committees in the following areas: Low-Carbon Energy and Bioproducts; Climate Change and Decarbonization; Energy Transition Intelligence; and Gas and Energy Technologies.

One highlight is the knowledge pathway dedicated to decarbonization for the upstream segment. This program offers a variety of online and in-person courses covering the fundamentals of climate change as well as practical aspects of operational decarbonization, such as flare reduction and fugitive emissions mitigation. Simultaneously, we train our employees on downstream segment and product decarbonization, focusing on energy efficiency and life-cycle assessment. We also offer training addressing the challenges of the energy transition, covering topics such as renewable energy generation, biofuels, low-carbon hydrogen, and carbon capture, utilization, and storage (CCUS). Additionally, we include climate change mitigation training as part of the onboarding process for new employees. In summary, our training and knowledge management initiatives aim to prepare our workforce for a rapidly evolving sector, fostering a culture of climate responsibility across the company.

Carbon Neutral Program Workshops

In 2025, workshops were held to develop and mature previously identified emissions mitigation opportunities, fostering in-depth discussions and alignment for action implementation. A notable event was the OKRs (Objectives and Key Results) Workshop, essential for establishing clear, specific, and measurable targets for the Carbon Neutral Program, strengthening governance and implementing priority actions.

In the second half of the year, the CN Program hosted sessions to build decarbonization roadmaps with a technology-focused perspective for the Gas & Energy (G&E), Exploration & Production (E&P), and Refining areas, supporting the development of the company's Integrated Roadmap. Approximately 100 employees participated in the roadmap-building phase—including leaders from IT (technology initiatives), decarbonization, engineering, operations, and consultants. These workshops were designed to ensure the integration of multidisciplinary knowledge, deepen the analysis of emerging and established technologies, critically evaluate technical, economic, and regulatory aspects, and identify segment-specific mitigation opportunities. These sessions not only facilitated roadmap development through collaborative methodologies but also aligned decarbonization initiatives with corporate targets across different time horizons.

The second phase, which consolidated the Integrated Roadmap, involved participation from the Cenpes management groups and approximately 80 employees in consolidation workshops, bringing together teams from diverse areas. This comprehensive approach establishes a cohesive strategy aligned with current and future demands, ensuring the incorporation of multiple perspectives, supporting the prioritization of innovative, viable and cost-effective solutions, and enhancing Petrobras' competitiveness and sustainability in the face of rapid technological and regulatory evolution. This reflects the dynamism of the company's portfolio and further strengthens workforce engagement.

Customer Engagement

Engaging with customers is essential to strengthen commercial relationships, deepen trust, and add value. In a competitive and dynamic market, we seek differentiation by improving service and supply reliability. This engagement occurs through technical and management events, site visits, meetings, integration initiatives, satisfaction surveys, and dedicated channels such as the Customer Portal, Customer Service (SAC), and Technical Assistance Program. These tools allow us to identify customer

needs, improve post-sale experiences, identify business opportunities, and strengthen interpersonal relationships.

Beyond commercial aspects, Petrobras offers lower-carbon products—such as Diesel R, SAF, Bunker B24, and the CAP Pro line—contributing to our customers' decarbonization. We participate in initiatives such as the CDP Supply Chain, providing information on operational emissions associated with sold products and contributing to joint emission reduction actions and discussions. Our commitment is to meet customer expectations with integrated solutions, transparent communication, and a focus on quality, sustainability, competitiveness, and service excellence.

Supplier Engagement

We have structured a supplier engagement strategy aimed at expanding synergies in sustainable practices, strengthening climate governance, and promoting innovative decarbonization solutions.

In the 2026–2030 Business Plan, Petrobras established a target for 70% of its suppliers classified as relevant to publish their Greenhouse Gas (GHG) inventories, preparing the supply chain for the transition to a global low-carbon economy, enhancing the environmental efficiency of offered products and services, and reducing carbon exposure risk. By 2025, 53% of relevant suppliers had published inventories, recognizing the importance of monitoring and managing their emissions.

To support this strategy and align suppliers with Sustainability topics, initiatives such as the “ESG Journey for Suppliers” stand out. Launched in 2022, the platform is freely accessible to current or potential suppliers and other interested parties. This training program provides online courses, guides, and podcasts focused on sustainability, supporting participants in developing ESG-related competencies, including Climate and Environmental aspects.

This training strategy aligns with IPIECA's work plan priorities for the “supply chain” topic, aiming to develop the skills and knowledge required to achieve strategic objectives and maintain continuous improvements. IPIECA's guidance also served as a foundation for improving Petrobras' Scope 3 inventory quantification, specifically Categories 1 (purchased goods and services) and 2 (capital goods), using an expenditure-based methodology with emission factor data from the U.S. Environmental Protection Agency (US-EPA) (CO₂ emission intensity per USD).

GHG emissions associated with purchased goods and services and capital goods totaled approximately 9 MtCO₂e, representing 0.86% and 1.21%, respectively, of total Scope 3 emissions in the 2024 base year. This refinement allowed us to identify the highest-emitting segments in our inventory—such as steel derivatives, chemicals, catalysts, and EPC (Engineering, Procurement, and Construction) services—guiding an action plan to continue engaging our supplier base in emissions mitigation.

To enhance and share knowledge on supply chain decarbonization and sustainability, we participate in working groups such as OGCI's “Sustainable Procurement” and IPIECA's “Carbon Management and Scope 3 Emissions in the Supply Chain.” Since 2024, Petrobras has also actively participated in the Fintech Working Group at the Financial Innovation Laboratory (LAB), a multi-sectoral forum and public-private dialogue platform focused on promoting sustainable finance and innovation in Brazil, identifying and generating opportunities for our supply chain.

Our Carbon Neutral Program includes a supply chain component, with initiatives supporting supplier engagement in decarbonization and expanding sustainable procurement practices. Internal processes for identifying opportunities and analyzing GHG performance in our supplier chain are managed jointly by the Climate Change and Decarbonization, Procurement, and other operational areas.

To ensure these commitments in supplier contracts, Petrobras has procedures for analyzing and including sustainability requirements in procurement processes, including market consultation to

assess maturity levels, aligned with our Business Plan. In addition to contractual requirements related to emissions, these topics are incorporated into several Operational Excellence Programs:

- **PEOTRAM (Operational Excellence Program for Air and Maritime Transport):** This annual audit system in our air and maritime transport operations seeks operational excellence in helicopter and offshore/specialized vessel services. Since 2021, the system has been adapted to include suppliers' GHG emission requirements.
- **PEO-SONDAS (Operational Excellence Program for Offshore Rigs):** Aims to enhance operational and process safety by improving management quality of contracted offshore drilling companies, promoting continuous improvement and management excellence. Third-party audits are conducted at base and offshore units to assess contractors' management systems regarding Human Resources, Asset Management, Integration, HSE, Operations, and Supplier Management.
- **PEOTER (Operational Excellence Program for Onshore Operations):** Seeks to develop onshore service providers in Operational Excellence and Safety, standardizing and improving management and operational practices while considering risks and characteristics of activities, strengthening accident prevention, environmental preservation, and health promotion.

Since 2024, our Best Suppliers Award includes the special "Decarbonization" category, recognizing efforts in emissions measurement and reduction, renewable energy use, and logistical and technological innovations. In its 8th edition, held in October 2025 during the the Offshore Technology Conference held in Brazil, the award recognized suppliers across 28 recognition groups and nine special categories, covering supplies considered strategic and critical for Petrobras.

We also invite suppliers to complete our ESG Questionnaire, a form designed to assess their level of maturity in sustainability initiatives. Since 2023, approximately 1,000 national and international companies have participated, contributing to GHG diagnostics and monitoring, as well as providing insight into the adoption of decarbonization practices.

CDP Supply Chain

We have demonstrated consistent progress in our performance in the CDP Supply Chain, a global program that allows large companies to evaluate and encourage their suppliers to measure, manage, and report environmental actions. Petrobras' evolution over recent cycles reflects strengthened climate governance, improved environmental management, and greater transparency across the value chain.

Since 2022, we have been recognized for leadership (A rating) in the "Supplier Engagement" criterion of the CDP Supplier Engagement Assessment (SEA). In the fourth cycle, 240 suppliers reported their actions and initiatives related to climate change practices, as well as water and forest resource management.

To engage suppliers in the 2025 CDP Supply Chain cycle and encourage higher-quality responses, we adopted a strategy combining educational communication, continuous support, and technical training. The goal was to elevate the climate commitment maturity of our value chain, promote transparency, and support the management of environmental risks and impacts.

A highlight of the last cycle was the high engagement rate of Petrobras suppliers in the CDP Supply Chain, surpassing the average response rate in the Oil & Gas sector. This result demonstrates the company's progress on strategic sustainability topics in a historically challenging sector in terms of emissions and climate-related risks. The rating reflects improved internal processes and an integrated approach to engaging suppliers, strengthening governance, and driving more robust environmental practices.

Through these initiatives, Petrobras reaffirms that engagement, training, technical support, and recognition are essential pillars to accelerate decarbonization in its supply chain of goods and services and to contribute to a low-carbon future.

Just Transition

A just and inclusive energy transition is one committed to promoting equity and social participation, minimizing negative impacts on communities, workers, companies, and socially vulnerable groups affected by changes in the energy system, while maximizing opportunities for socio-economic development, enhancing the competitiveness of the productive sector, and addressing inequality and poverty at international, regional, and local levels.²⁹

In Brazil, a Just Transition is one of the cross-cutting strategies of the 2024–2035 Climate Plan and aligns with the Ecological Transformation Plan and the National Energy Transition Policy. This cross-cutting strategy has the overall objective of guiding the implementation of the Climate Plan's actions, ensuring the promotion of a just transition and climate justice to build a more sustainable and equitable society.³⁰ In 2025, this topic was also highlighted in discussions at COP30, including the decision to develop, throughout 2026, a mechanism for a Just Transition aimed at increasing international cooperation, technical assistance, capacity building, and knowledge sharing.

Within this national context, alongside various other stakeholders, we are involved in the evaluation, development, and selection of technological pathways to meet society's energy needs, to stimulate production and demand through energy planning, while monitoring and supporting society-led initiatives coordinated by the Brazilian government. **We recognize our strategic and driving role in a just energy transition, integrating social inclusion into the stages of productive transformation, positioning ourselves as a reference for the private sector in seeking more cost-effective decarbonization pathways, expanding Brazil's energy supply, creating employment and training opportunities, investing in low-carbon R&D, and supporting socio-environmental initiatives.** We also commit to collaborating with stakeholders and protecting communities potentially affected by the energy transition, maintaining transparent dialogue in the development of transition and adaptation plans.

We understand that Just Transition is closely linked to the promotion of human rights, particularly through its contribution to the right to a clean and healthy environment and the right to an adequate standard of living that ensures health and well-being for present and future generations. For this reason, Just Transition is included as a specific principle in our Social Responsibility Policy and relates to all Petrobras values: sustainability, care for people, innovation, integrity, and commitment to Petrobras and the country.

Below, we highlight some of our practices, which apply to both traditional activities and new business areas related to the transition.

- **Stakeholder Dialogue and Engagement:** Our strategic plan is publicly disclosed to all our stakeholders, including communities within our operational areas, internal personnel, and suppliers. Additionally, we address the just transition in our interactions with trade unions within the scope of collective agreements. In general, our engagement dialogues stem from processes already established within our governance framework, including the integrated human rights due diligence process, social risk assessments of operational areas, the participatory mechanisms characteristic of environmental licensing, and community relationship management. Throughout 2025, we also highlighted dialogues promoted with

²⁹ Brazil, CNPE, 2024.

³⁰ Cross-Cutting Strategies for Climate Action — Ministry of Environment and Climate Change.

public authorities on “Pathways for a Just Energy Transition,” as well as discussions among companies in Latin America and the Caribbean regarding just transition in the region (through ARPEL). In collaboration with research institutions, we emphasize engagement through partnerships fostering innovation via the Connections for Innovation Program.

- **Relationship Guidelines:** In our Community Relationship Guidelines, within the context of the transition to a low-carbon economy and climate adaptation, we include guidance to enhance opportunities in partnership with and through listening to local communities, particularly regarding the right to a clean and healthy environment and the sustainable development of the territory, with access to quality energy services and climate resilience. In 2025, we published new guidelines on “Involuntary Resettlement of People or Communities” and on “Remediation of Human Rights Impacts at Petrobras” (**Social Responsibility: actions for a better world | Petrobras**), reinforcing our commitment to respecting human rights in light of the impacts of our activities and projects on people and communities.
- **Our Human Rights Action Plan (PADH):** The human rights due diligence actions contained in the action plan follow formalized procedures guided by the United Nations Guiding Principles on Business and Human Rights, which establish that companies should have processes appropriate to their size and complexity, considering the inherent risks of their activities. In 2025, we continued implementing the **human rights due diligence** process and covered a total of 13 of our own operational units, resulting in the development of mitigation plans for the risks identified through consultation with rights holders, including employees, communities, unions, and social organizations. Following **due diligence**, the operational units establish a system for monitoring the plan and continuous oversight to assess the effectiveness of human rights risk mitigation actions.
- **Selection and Implementation of New Businesses:** We ensure that new business ventures have minimal negative impact on people and the environment, with robust processes for project assessment, licensing, surrounding area characterization, social and environmental risk analysis, and due diligence for community protection. The low-emission energy project assessment system includes a “regional characterization” that analyzes local indicators of the Sustainable Development Goals (SDGs) for the municipalities involved and the potential impacts of the installation. In this approach, attention to risk mitigation needs and opportunities for enhancing local benefits is integrated into the early project phases. **Portfolio change assessments** include metrics related to energy supply and production costs. In collaboration with external partners, we conduct studies on the lowest cost decarbonization pathways, aligned with regional potential, national energy planning, and Brazil’s NDC.
- **Optimization of Petrobras Installed Infrastructure:** We seek the full utilization and integration of our assets in the context of expanding energy supply and reducing emissions, including the production of renewable fuels. Leveraging qualified human capital, we aim to provide lower-emission products such as Diesel R—a fuel with renewable content produced through co-processing in Brazilian refineries. This solution exemplifies our commitment to anticipate and accelerate decarbonization opportunities, particularly in critical sectors such as heavy transport, which directly affects national logistics and food prices. We also invest in projects for Sustainable Aviation Fuel (SAF) and renewable marine fuels, such as Biobunker VLS B24, which contribute to decarbonizing the aviation and maritime transport sectors, in line with legislation and global trends.
- **Management of Indicators for a Just Transition:** Based on our current Human Rights Action Plan, we identify metrics and initiatives to demonstrate and maximize progress in a just energy transition. In addition to the provision of lower-emission energy and the corresponding decarbonization potential and production costs, the metrics include the social benefits of energy production investments, socio-environmental projects, and R&D&I. For example, we

track the generation of quality energy, the number of partner institutions involved in technology development, the percentage of investment in low-carbon R&D&I, employee training for energy transition and decarbonization, the number of individuals completing social technical and professional training programs, and the social return from socio-environmental projects. In addition to monitoring metrics, we have an indicator related to operational decarbonization (IGEE) linked to variable compensation across the company.

- **Training and Quality Jobs in the Energy Sector:** We aim to provide this training, directly and indirectly, with benefits for social inclusion and reducing inequalities, through our **Autonomy and Income Program**,³¹ which offers professional training courses in both initial and continuing education (FIC) and technical courses to individuals in socioeconomically vulnerable situations. The program prioritizes marginalized groups, such as women, Black people, people with disabilities, transgender individuals, and refugees. Selected participants are trained to work in the energy sector in areas covered by our operations. By 2025, 302 classes had been held across 42 municipalities. In the context of innovation and technological development, we began including diversity clauses in the Technological Cooperation Agreements signed with educational and research institutions, ensuring the inclusion of Black, mixed-race, Indigenous, women, and people with disabilities in project execution teams.

For active employees, training for future contexts is supported by the Petrobras Knowledge System within our Corporate University, including training on human rights and workplace violence prevention, as well as a pathway on climate change and energy transition. Additionally, we have multiple training initiatives to promote diversity, equity, and inclusion in the workforce and leadership, including the Female Mentorship Program, Racial Equity Program, Petrobras Program against Sexual and Workplace Violence, Mental Health Program, and Petrobras Well-being Program. For our suppliers, we include human rights clauses in contracts and offer a sustainability learning path through the ESG Journey.

³¹ For more information, see the [The Human Rights and Corporate Citizenship Supplement](#).

Appendices



Appendices

Appendix 1 – Note n° 5 to the 2025 Financial Statements

5. Climate change

Climate change may result in both negative and positive effects for the Company. Potential negative effects of climate change for the Company are referred to as climate-related risks. Inversely, potential positive effects of climate change for the Company are referred to as climate-related opportunities.

Climate risks are categorized as: (i) climate-related transition risks (transition risks); and (ii) climate-related physical risks (physical risks).

The Company's Business Plan 2026-2030 incorporates actions and goals related to the transition towards a low-carbon economy. These initiatives include, among others, decarbonization projects for operations aimed at achieving the Company's carbon sustainability commitments.

5.1. Potential effects of climate risks on accounting estimates

Accounting estimates are monetary amounts in financial statements that are subject to measurement uncertainty.

The following information used in relevant accounting estimates of the Company is largely determined based on the assumptions and projections of the Business Plan 2026-2030:

- value in use for impairment of assets testing purposes (note 4.2.1);
- timing and costs used in measuring the provision for decommissioning costs (note 4.6);
- highly probable future exports used in cash flow hedge accounting involving the Company's future exports (note 4.8); and
- useful life of PP&E and intangible assets used in measuring depreciation, depletion and amortization expenses (notes 23 and 24).

As presented in the following topic, the Company considered the effects related to climate risks in its Business Plan approved by the Board of Directors, which is updated annually, including actions to achieve its climate commitments and its long-term ambition to neutralize Greenhouse Gas (GHG) emissions of scopes 1¹ and 2² by 2050.

The aforementioned ambition and commitments are not guarantees of future performance by the Company and are subject to assumptions that may prove incorrect and to risks and uncertainties that are difficult to predict.

¹ direct GHG emissions, which occur from energy sources that are owned or controlled by the Company.

² Indirect GHG emissions, which come from energy sources purchased and consumed by the Company, which occur at the facilities where the energy sources are generated.

a) Transition risk to low carbon economy

Transition risks arise from efforts associated with the transition to a low-carbon economy. In this category, the Company has identified the following risks that can reasonably be expected to affect its cash flows, access to financing or cost of capital:

Risk	Description	Time length ⁽²⁾
Market	<p>Increased demand for energy and products with lower carbon emissions, in addition to a preference for fossil products with lower GHG intensity in production processes, lead to a reduction in oil demand and, consequently, to a decline in prices of fossil fuel products.</p> <p>In Brazil: the demand for fossil products may be affected, for example, by regulatory stimulation such as the Future Fuel Law and and by the developments of the National Policy on Climate Change and the National Policy on Energy Transition, aiming at meeting Brazil's emission reduction targets.</p>	Medium and long term
Technological and implementation	Loss of competitiveness due to the non-implementation or implementation of inefficient or non-effective technologies to reduce emissions from the Company's operations and products.	Medium and long term
Regulatory and legal	<p>Establishment of more restrictive regulatory requirements for controlling GHG emissions and other climate-related requirements, which may cause operational restrictions and financial penalties for the Company's activities.</p> <p>In Brazil, the approval of the law 15,042/2024, which creates the Brazilian Greenhouse Gas Emissions Trading System (SBCE), may result in additional costs relating to carbon pricing for the Company's operations.</p>	Medium and long term
Litigation and reputational ⁽¹⁾	Litigation and/or reputational damage due to non-compliance with climate commitments, perception of lack of transparency and/or acquisition of low-quality and low-integrity carbon credits.	Medium and long term

(1) Legislation that aligns a series of initiatives to stimulate and guide the production of biofuels and reduce greenhouse gas (GHG) emissions, encompassing the National Program for Sustainable Aviation Fuel (ProBioQAV), the National Green Diesel Program (PNDV), and the National Decarbonization Program for Natural Gas Producers and Importers and Incentives for Biomethane. Additionally, it modifies the maximum and minimum limits of the ethanol blend in gasoline and the biodiesel blend in diesel fuel and provides for the regulation and oversight of carbon dioxide capture and geological storage activities, as well as the regulation of synthetic fuel production and commercialization. It also promotes the integration of initiatives and measures adopted under the National Biofuels Policy (RenovaBio), the Green and Innovation Mobility Program (Programa Mover), the Brazilian Vehicle Labeling Program (PBEV), and the Vehicle Emissions Control Program (Proconve).

(2) Criteria adopted for the time length: short term (1 year), medium term (between 1 and 5 years), and long term (more than 5 years).

The risks above were considered in the development of the Company's Business Plan 2026-2030. Such consideration was based on the following external environment assumptions that reflect the dynamics of the energy sector:

- moderate economic growth compared to the recent past;
- shifts in consumption habits and behaviors;
- public policies focusing on mobility, air quality and adaptation of urban infrastructure to climate change;
- international coordination in efforts to reduce GHG emissions;
- reduction in the GHG emissions;

- regulations in favor of energy transition and decarbonization, which will drive the reduction of fossil fuel consumption; and
- diffusion of end-use technologies that reduce the need for fossil fuel consumption.

As a result of this, demand and prices, both domestic and international, of the main products considered in Business Plan 2026-2030 are negatively affected.

In 2025, the Company adopted three distinct scenarios that are used for different purposes in its planning activities. These scenarios are called Adaptation, Negotiation and Commitment. In all of them, there is a slowdown and subsequent contraction of fossil fuel sources, as well as an increase in demand for renewables and low-carbon solutions, in a different manner between developed and developing markets. The Negotiation scenario, which is used as a reference scenario for quantifying the Company's Business Plan, considers that fossil fuels, which currently represent approximately 80% of the world's primary energy sources, will represent around 48% by 2050. The share of oil will decrease from the current 30% to around 20% of the world's primary energy sources. Despite this reduction, oil demand is expected to remain significant over this time horizon.

The Brent price considered in the reference scenario of the Business Plan for 2050 increased from US\$ 65 per barrel in Business Plan 2025-2029 to US\$ 70 per barrel in Business Plan 2026-2030. For additional information about the behavior of the Brent price considered in the Company's Business Plans, see note 25. The following table compares the oil price used in the reference scenario for the years 2035 and 2050 with those projected in the Announced Pledges Scenario (APS) and Net Zero Emission (NZE) scenarios by the International Energy Agency (IEA), even though they are not directly used by the Company:

Brent price US\$/Barrel	2035	2050
Business Plan	70	70
APS 2024	67	58
NZE 2025	33	25

According to the IEA, the APS scenario³ released in 2024 considers that all climate commitments made by governments around the world, including Nationally Determined Contributions (NDCs), as well as long-term net-zero targets, will be met in full and on time, with an increase of approximately 1.7°C in temperature by 2100 (with a 50% probability of occurrence). Regarding the NZE scenario⁴ released in 2025, according to the IEA, it presents a pathway for the global energy sector to achieve net-zero CO₂ emissions by 2050, consistent with limiting the temperature increase to 1.5 °C (with at least a 50% probability of occurrence).

The Company's accounting estimates did not incorporate the effect of carbon pricing. Currently, due to uncertainties regarding the implementation and dynamics of the carbon market in Brazil, the Company considers it necessary to await the regulation of Law No. 15,042 in 2024, which establishes the SBCE. This regulation will provide the necessary and sufficient details to reliably and reasonably assess the impact on the cash flows of Petrobras's assets and its CGUs. In October 2025, the

³ The APS scenario, which was included in previous editions, was not addressed in the World Energy Outlook 2025 (WEO 2025). This scenario, which assumes the full and timely implementation of major national energy and climate targets—such as countries' Nationally Determined Contributions (NDCs) - was not analyzed by the IEA because several countries had not released updated NDCs in 2025. Therefore, for comparison purposes, Petrobras continue to use the APS projections published in the WEO 2024 report.

⁴ The NZE scenario presented in the WEO 2025 outlines a pathway to achieve net zero energy-related CO₂ emissions by 2050. To this end, the agency highlights, for the first time, the trajectory of non-energy-related emissions, emphasizing the need to reduce deforestation as well as to expand the deployment of emissions-removal technologies.

Extraordinary Secretariat for the Carbon Market was established to organize the SBCE, which will issue the necessary additional regulation to implement Law No. 15,042 of 2024.

a.1) Potential effects on the value in use in impairment tests

When measuring the value in use of its assets, the Company bases its cash flow projections on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions.

The Company's actions and goals for its transition to a low-carbon economy have not indicated that any assets may have been impaired.

A faster transition to a low-carbon economy than foreseen in Business Plan could result in Brent prices and demand for the Company's products that are lower than the ones considered to estimate the value in use of the Company's assets for impairment testing purposes.

The reduction in the value in use of the Company's assets may result in the recognition of losses due to the non-recoverability of the carrying amounts of these assets.

Given that the oil price is a variable that decisively influences the recoverable amount of assets, the Company carried out a sensitivity analysis of the effect of using the Brent prices considered in the APS and NZE scenarios, for the impairment test of the Company's E&P assets in Brazil.

Using the prices in the APS and NZE scenarios to perform a sensitivity analysis on projected gross revenues deducted of production taxes, net of income taxes, and keeping unchanged all other components, variables, assumptions and data for calculating the recoverable amount, the Company's E&P segment, regarding the impairment loss recognized by the Company, as disclosed in note 25, would have additional impairment reversal of US\$ 303 in the APS scenario and additional impairment losses US\$ 17,874 in the NZE scenario, concentrated in the Campos basin fields.

The Company does not consider this sensitivity analysis based on APS and NZE Brent price scenarios to be the best estimates to determine expected effects on the recoverable amount of assets, sales revenues or net income.

Considering that the Company did not incorporate in its accounting estimates the carbon price effects, the Company carried out a sensitivity analysis of the effect of GHG emissions pricing costs on the impairment test of assets in the E&P segment in Brazil, considering a monetary charge per ton of CO₂ equivalent emission starting from 2030, and the existence of free emission allowances.

In this context, using a base price of US\$ 10/CO₂ in 2030, US\$ 35.3/CO₂ in 2035, US\$ 60.6/CO₂ in 2040, US\$ 85.9/CO₂ in 2045, and US\$ 111.2/CO₂ in 2050, considering emission allowances to be distributed free of charge, with gradual reduction, to simulate additional cash outflows (net of income taxes), and keeping all other components, variables, assumptions and data for the calculation of recoverable amount unchanged, the E&P segment would have an additional US\$ 69 impairment loss.

The Company does not consider this sensitivity analysis of the effect of greenhouse gas emissions pricing costs on the impairment test of assets to be the best estimate to determine expected effects on the recoverable amount, neither the estimated effects on expenses nor net income.

a.2) Potential effects on decommissioning costs

Due to its operations, the Company has legal obligations to remove equipment and restore onshore and offshore areas. On December 31, 2025, the provision for decommissioning costs recognized by the Company, relating to E&P segment in Brazil, totaled US\$ 28,400, as set out in note 21. On an undiscounted basis the nominal amount would be US\$ 57,030.

The estimated timing used by the Company to account for decommissioning costs are consistent with the useful lives of the related assets. The average decommissioning period of oil and gas assets weighted by the carrying amounts of such assets is 14 years.

The Company's actions and goals for its transition to a low-carbon economy have not materially affected the amount and period of its provision for decommissioning costs.

During 2025, there were no issuances of government regulations related to climate matters that changed or had potential to change the amount and period for decommissioning the Company's assets.

A transition to a low-carbon economy that is faster than anticipated by the Company may accelerate the timing to remove equipment and restore onshore or offshore areas. Such acceleration would increase the present value of the decommissioning obligations recognized by the Company.

To illustrate the effect of a possible acceleration of the transition to a low-carbon economy, the Company estimates that the provision for decommissioning costs would increase by US\$ 1,318, US\$ 4,067 and US\$ 6,532 if the timing currently used were brought forward by one, three and five years, respectively. This sensitivity analysis assumed that all other components, variables, assumptions and data for calculating the provision remained unchanged. The year ranges used are not intended to be predictions of likely future events or outcomes.

a.3) Potential effects on "highly probable future exports" used in cash flow hedge accounting involving the Company's future exports

A transition to a low-carbon economy that is faster than it was anticipated by the Company may negatively effect the Company's future exports. Such effect may result in certain exports, whose foreign exchange gains or losses were designated for hedge accounting, no longer be considered highly probable, but remain forecasted, or, depending on the magnitude of the transition and its speed, cease to be considered forecasted. The consequences of such effects are described in the accounting policy of note 33.3.1 (a) involving the Company's future exports.

The calculation of "highly probable future exports" is based on the projected exports in Business Plan 2026-2030, as set out in note 4.8. The Company considers only a portion of its projected exports as "highly probable future exports". When determining future exports as highly probable, and therefore eligible as a hedged item for application of cash flow hedge accounting, the Company considers the effects related to the transition to a low-carbon economy. Carbon prices were not incorporated in such estimates.

The Company's actions and goals for its transition to a low-carbon economy have not materially affected its highly probable future exports.

Using the prices in the APS and NZE scenarios we carried out a sensitivity analysis to simulate the need to reclassify the foreign exchange gains or losses recorded in equity to the statement of income. Such analysis simulated a new future cash flow from exports, changing only the oil price, keeping all other

components, variables, assumptions and data unchanged. In such an analysis, it would be necessary to reclassify the foreign exchange losses, in the amount of US\$ 16, recorded in equity to the statement of income in the NZE scenario.

The simulations used to perform such sensitivity analysis, based on Brent prices of the scenarios APS and NZE, are not considered by the Company as the best estimates to determine expected effects of the reclassification of foreign exchange variation recorded in equity to the statement of income.

a.4) Potential effects on the useful lives of PP&E

A transition to a low-carbon economy that is faster than the Company anticipates may reduce the useful life of its assets, which could lead to an increase in annual depreciation, depletion and amortization expenses.

Assets directly related to the production of oil and gas in a contracted area are depleted using the units of production method and depreciated or amortized using the straight-line method. As of December 31, 2025, the carrying amount of these assets in operation in Brazil is US\$ 108,424. Based on this carrying amount and assuming current depreciation and amortization rates are maintained, the balance of these assets would not be material by 2050. This simulation is not considered by the Company to represent an expectation of carrying amounts in 2050.

As mentioned in item "Transition risk to low carbon economy", the reference scenario of the Strategic Plan indicates that there will be persistent global demand for oil in the coming decades. Additionally, calculations of expected production and oil and gas reserves in this scenario consider the effects of the transition to a low-carbon economy.

The Company's refining plants consist of 11 refineries and 2 fertilizer plants in Brazil. Based on the current depreciation rates of the assets in operation applied to the respective carrying amounts at December 31, 2025, which amounts to US\$ 9,702, and assuming no additional investment, these refineries would have no material depreciation amounts after 2050. This simulation is not considered by the Company to represent an expectation of carrying amounts in 2050.

The Company estimates persistent demand for oil products in the coming decades, although decreasing, which should be progressively supplied by models with lower carbon intensity. Thus, the depreciation rates used by the Company for the refining plants are in line with the transition to a low-carbon economy.

The Gas and Energy assets in Brazil, including thermoelectric power plants, are depreciated using the linear method. Based on the current depreciation rates of the assets in operation applied to their respective carrying amounts as of December 31, 2025, totaling US\$ 3,813, and assuming no additional investment, these assets would have no material depreciation amounts after 2050. This simulation is not considered by the Company to represent an expectation of carrying amounts in 2050.

In this context, based on available information, the Company does not foresee significant changes in the useful life of its refineries, assets directly related to oil and gas production and those related to the Gas and Energy arising from the transition to a low-carbon economy. Such assets represent 93% of the Company's total assets in operation.

b) Physical Risks

Physical risks result from climate change that can be event-driven (acute physical risk) or from long-term shifts in climate patterns (chronic physical risk). In this category, the Company does not foresee that changes caused by climate change will have a material effect on accounting estimates, considering the risks currently identified.

5.2. Decarbonization investments in long-term assets

The Company systematically identifies opportunities to decarbonize its operations and, in line with its strategy focused on oil and gas with economic and environmental resilience, has been investing in initiatives aimed at reducing or avoiding greenhouse gas emissions.

The following table presents the balance of expenditures capitalized in the carrying amounts of long-term assets related to investments made in decarbonization initiatives within the Company's operational activities:

Operating segment	12.31.2025	12.31.2024
E&P	1.497	994
RT&M	90	23
G&LCE	42	19
Total	1.629	1.036

The Company estimated expenditures on decarbonization asset projects for the fiscal year 2025 in the amounts of US\$ 507 for E&P, US\$ 55 for RT&M and US\$ 27 for G&LCE, with actual expenditures in 2025 totaling US\$ 503, US\$ 67 and US\$ 23, respectively.

The main investments made refer to decarbonization technologies in new production systems to be used in the pre-salt layer, which are being incorporated into seven FPSOs (Floating Production, Storage and Offloading units) associated with production development projects in oil and gas fields where Petrobras acts in partnerships, as presented below:

FPSO	Field	Petrobras' interest	Start of
P-78	Búzios	89%	2025
P-79			2026 ⁽¹⁾
P-80			2027 ⁽¹⁾
P-82			
P-83			
P-84	Atapu 2	66%	2029 ⁽¹⁾
P-85	Sépia 2	55%	2030 ⁽¹⁾

(1) Expected.

As these technologies are inseparable from the FPSOs, the amounts related to decarbonization technologies are determined by multiplying the total expenditures incurred under the contract by an index representing the construction cost of the FPSO with and without the technology.

These fields integrate CGUs with no impairment loss recognized in the consolidated financial statements of 2025.

The incorporation of these decarbonization technologies ensures that the new units present lower carbon intensities, which is crucial for achieving the GHG emissions reduction targets set out in Business Plan 2026-2030.

As described in Business Plan 2026-2030, the Company has 5 commitments to reduce GHG emissions under operational control (scopes 1 and 2) by 2030. One of the commitments involves reducing absolute operational emissions by 30% by 2030, when compared to 2015.

The commitments to reduce GHG emissions do not constitute guarantees of future performance by the Company and are subject to assumptions that may not materialize, as well as to risks and uncertainties that are difficult to predict. Furthermore, current and planned investments also do not constitute guarantees of achieving these commitments.

Emission offsets through carbon credits may be used as a complementary tool in the Company's decarbonization initiatives. Transactions involving assets linked to GHG reduction, such as the acquisition and retirement of carbon credits, are not material for these consolidated financial statements. The use of carbon credits for this purpose does not constitute a guarantee of the Company's performance.

Appendix 2 – Metrics table

The table presents the metrics we employ to assess carbon risks and opportunities.

INDICATOR	UNIT	COVERAGE	DESCRIPTION	USE OF THE METRIC
Total Absolute Operational Greenhouse Gas Emissions	tons of CO ₂ e	100% of activities with operational control	Total GHG emissions, including Scope 1 and Scope 2, in terms of CO ₂ equivalent (CO ₂ e) from us and our equity interests in which we have operational control.	Public Commitment: 30% reduction by 2030 (base year 2015)
Operational Emissions from Oil and Gas Activities	tons of CO ₂ e	Oil and Gas Exploration and Production, Gas Processing and Treatment, and Oil Refining Activities with operational control	Total GHG emissions, including Scope 1 and Scope 2, in terms of CO ₂ equivalent (CO ₂ e), excluding GHG emissions from the operations of thermoelectric plants.	Process monitoring
Greenhouse Gas Emissions Intensity of E&P	kgCO ₂ e/boe	Oil and gas exploration and production activities with operational control	GHG emissions, in terms of CO ₂ e, from E&P activities concerning the total operated oil and gas production (wellhead) recorded in the same period. Scope 1 and 2 GHG emissions are considered. This indicator represents the rate of greenhouse gas emissions per unit of barrel of oil equivalent produced and is used to analyze the carbon performance of assets in our current and future portfolio.	Public Commitment: 15 kgCO ₂ e/boe maintained until 2030.
Upstream methane emissions intensity (IOGP)	tCH ₄ /thousand t hydrocarbons	Oil and gas exploration and production activities and gas processing and treatment activities with operational control	The indicator uses the IOGP metric that represents the ratio between methane emissions and total operated hydrocarbon production.	Public Commitment: 0.20 tCH ₄ /thousand t hydrocarbons in 2030
Upstream methane emissions intensity (OGCI)	%	Oil and gas production activities and gas processing and treatment activities with operational control	The indicator uses the OGCI metric that represents the ratio between the volume of methane emissions and the volume of gas delivered to the market.	Process monitoring
Associated Gas Utilization Index	%	Oil and gas exploration and production activities and gas processing and treatment activities with operational control	The indicator represents the percentage of the volume of associated gas used in relation to the total volume of associated gas produced.	Process monitoring
Greenhouse Gas Emission Intensity in Maritime Transport per ton transported x mile	gCO ₂ e/(ton x mile)	Maritime Transport Activities of vessels chartered under the Time Charter Party (TCP) modality	Ratio between the total mass of CO ₂ e emitted on vessels and the product of the cargo effectively transported on vessels by the distance sailed in nautical miles (ton x mile).	Process monitoring

INDICATOR	UNIT	COVERAGE	DESCRIPTION	USE OF THE METRIC
Greenhouse Gas Emission Intensity in Maritime Transport by cargo capacity x mile	gCO ₂ e/(DWT x mile)	Maritime Transport Activities of vessels chartered under the Time Charter Party (TCP) modality	Ratio between the total mass of CO ₂ e emitted on vessels and the product of the vessels' capacity (DWT) by the distance sailed in nautical miles.	Process monitoring
Greenhouse Gas Target Compliance Index for E&P Logistics	-	Operations providing maritime support for cargo transportation, air transportation of people and small cargo, and land transportation operations for cargo	Relative quantity of greenhouse gas emissions from E&P Logistics, considering the weighting by the volume of maritime (75%), air (20%) and land (5%) operations.	Process monitoring
Intensity of Greenhouse Gas Emissions from Maritime Cargo Transportation Vessels in E&P Logistics	gCO ₂ e/(ton x mile)	Operations of support vessels that transport cargo (Platform Supply Vessel - PSV) to the Maritime Units	The ratio between the total mass of CO ₂ e emitted by support vessels that transport cargo and the product of the cargo moved per nautical mile sailed.	Used to compose the Greenhouse Gas Target Compliance Index for E&P Logistics
Greenhouse Gas Emission Intensity of Air Transport Operations in E&P Logistics	gCO ₂ e/[(passenger flown x hours flown)]/number of flights	Air transport operations for people and small cargo to Maritime Units	The ratio between the total mass of CO ₂ e emitted and the product of the number of passengers transported by the hours flown, divided by the number of flights.	Used to compose the Greenhouse Gas Target Compliance Index for E&P Logistics
Greenhouse Gas Emission Intensity of Land Operations in E&P Logistics	gCO ₂ e/ton of cargo	Land freight transportation operations in E&P Logistics	The ratio between the total mass of CO ₂ e emitted and the cargo transported by land mode	Used to compose the Greenhouse Gas Target Compliance Index for E&P Logistics
Intensity of Greenhouse Gas Emissions from Refining	kgCO ₂ e/CWT	Refining activities with operational control	GHG emissions, in terms of CO ₂ e, from refining activities in relation to the activity unit called CWT (Complexity Weighted Tonne). CWT represents a measure of activity that considers both the effect of the processed cargo and the complexity of each refinery, allowing the comparison of the potential for GHG emissions between refineries with different profiles and sizes. This indicator is part of the analysis of the carbon performance of the assets in our current and future portfolio.	Public Commitment: 30 kgCO ₂ e/CWT by 2030.

INDICATOR	UNIT	COVERAGE	DESCRIPTION	USE OF THE METRIC
Energy Sustainability Index™	-	Refining activities with operational control	Energy consumed in relation to the standard reference energy. Indicates the quality of energy consumption in refineries, also taking into account the carbon footprint of the energy purchased (electricity and steam purchases). The IES acknowledges the importance of low-carbon energy sources while maintaining focus on the efficiency of the process units.	Ambition 2030: 86
Intensity of Greenhouse Gas Emissions in Thermal Power Plants	tCO ₂ e/MWh	Commercial thermoelectric power generation activity with operational control	GHG emissions, in terms of CO ₂ e, from the processes of Thermal Power Plants per electrical energy generated. This indicator is part of the analysis of the carbon performance of the assets in our current and future portfolio.	Process monitoring
Greenhouse Gas Target Compliance Index for TPPs	%	Commercial thermoelectric power generation activity with operational control	GHG emissions performance of the Thermoelectric Park relative to its respective reference performance previously determined by the design conditions and operational situations of serving the electrical system and steam export, related to the energy efficiency achieved, and the reference of the TPPs. The total relative performance of the park is calculated as the weighted average of the energy generated by each TPP in the period.	Process monitoring
Emissions from the value chain	tCO ₂ e	-	Sum of the main GHG emissions present in the Petrobras value chain, including emissions classified as scope 1, scope 2, and scope 3 in categories 10 and 11 (indirect emissions from the processing of products sold and indirect emissions related to the use of products sold)	Process monitoring

INDICATOR	UNIT	COVERAGE	DESCRIPTION	USE OF THE METRIC
Portfolio GHG emissions intensity (IP)	gCO ₂ e/MJ	Operational emissions: 100% of activities with operational control; Products: energy products sold on an equity basis by Petrobras	Sum of emissions from activities with operational control. (100% of Scope 1 and 2 emissions) and end-use emissions (Scope 3, category 11) related to the combustion of energy products sold on an equity basis by Petrobras ¹ divided by the sum of the energy (in MJ fossil equivalent ²) of the energy products sold on an equity basis by Petrobras ³ . ¹ Using, whenever possible, emission factors provided by the Brazilian GHG Protocol Program. ² The electricity sold is transformed into equivalent fossil energy to take into account conversion losses during the generation process, using a factor of 0.45, which represents the average efficiency in electrical generation from fossil sources expected for 2050 (Energy Institute, 2023) ³ The energy of fuel products is calculated, whenever possible, based on the lower calorific value of each product, also using, whenever possible, emission factors provided by the Brazilian GHG Protocol Program.	Process monitoring
Evolution of renewable fuel production capacity	-	Renewable fuel production activities on a Petrobras equity basis	Renewable fuel production capacity on a Petrobras equity basis in relation to the renewable fuel production capacity in 2022. The assessment is carried out in terms of equivalent energy (boed). In cases of co-processing, only the capacity related to the production of the renewable fraction is considered in the calculation of the metric.	Process monitoring
Percentage capacity of renewable electricity generation	%	Activities for electricity generation on a Petrobras equity basis	Installed capacity for renewable electricity generation (on a Petrobras equity basis) in relation to the installed capacity for renewable electricity generation and in thermoelectric plants (on a Petrobras equity basis)	Process monitoring
Carbon break-even pricing	USD	Projects undergoing evaluation	The indicator represents the value of a carbon tax that would bring the NPV of the project under analysis to zero using a simplified internal methodology.	Process monitoring
NPV sensitivity to carbon price	% or monetary unit	Projects undergoing evaluation	The indicator represents the impact on the NPV of the project under analysis derived from a possible carbon pricing, using a simplified internal methodology.	Process monitoring
Portfolio NPV loss	%	Company Portfolio	The indicator represents the impact on the NPV of the company's portfolio when compared with international scenarios listed in this Supplement, based on the effect of oil and carbon price assumptions during the evaluated periods.	Process monitoring

Appendix 3 - Glossary

Abbreviations and Acronyms

CCS/CCUS: Carbon Capture, Utilization and Storage

Cenpes: Leopoldo Miguez de Melo Research and Development Center

CWT: Complexity Weighted Tonne

E&P: Exploration and production

FCC: Fluid catalytic cracking

FGRS/FGRU: Flare Gas Recovery System/Unit

GTU: Gas Treatment Unit

HDT: Hydrotreating

IEA: International Energy Agency

IOGP: International Association of Oil and Gas Producers

IPCC: Intergovernmental Panel on Climate Change

ISSB: International Sustainability Standards Board

LNG: Liquefied Natural Gas

LULUCF: Land Use, Land-Use Change, and Forestry

NDC: Nationally Determined Contribution

O&G: Oil and gas

OGCI: Oil and Gas Climate Initiative

R&D&I: Research, development, and innovation

SAF: Sustainable Aviation Fuel

SBCE: Brazilian Greenhouse Gas Emissions Trading System (*Sistema Brasileiro de Comércio de Emissões*)

SDG: Sustainable Development Goals

TCFD: Task Force on Climate-related Financial Disclosures

TOE: Tonne of oil equivalent

TPP: Thermal Power Plant

Definitions

AR4 – Fourth Assessment Report

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), published in 2007, presents projections of global temperature increase based on six emission scenarios, assessing the impacts, vulnerabilities, and possible strategies for mitigation and adaptation to climate change.

CDP

CDP, formerly known as the Carbon Disclosure Project, is a global non-profit organization with an environmental impact disclosure system for the public and private sectors. The self-declaration of data and information allows investors, stakeholders and other audiences to monitor the progress of companies in their environmental policies.

Decarbonization of operational activities

Reduction of absolute greenhouse gas (GHG) emissions and/or the reduction of intensity of GHG emitted in revenue-generating and expense-generating activities of Petrobras, in line with the economic activities linked to its corporate purpose. These activities aim at the resilience of Petrobras' existing portfolio.

DJBIC – Dow Jones Best-in-Class World Index

S&P Global index comprised of global leaders in sustainability, identified through the Corporate Sustainability Assessment (CSA). It represents the top 10% of the 2,500 largest companies in the S&P Global BMI Index, based on long-term economic, environmental, and social criteria.

Enhanced Oil Recovery (EOR)

Advanced technique used in the oil and gas industry to increase oil extraction from reservoirs. The process involves injecting high-pressure CO₂ into the reservoirs, where the gas mixes with the oil, reducing its viscosity and increasing reservoir pressure. This facilitates the flow of oil to the production wells, allowing a greater quantity of oil to be recovered.

FPSO - Floating Production Storage and Offloading

A ship-platform (or unit) that can produce, store, and transfer oil and gas, providing definitive oil production systems.

Fugitive emissions

Diffuse releases into the atmosphere, which can be solid, liquid, or gaseous, generated by a source that does not have a specific process to control its flow.

Gas flaring

Process used in the oil and gas industry to burn excess gases that cannot be processed or sold. This burning takes place in a structure called a flare stack, which is a chimney designed to burn the gas in a controlled manner.

GHG Protocol – Greenhouse Gas Protocol

The GHG Protocol establishes global frameworks for measuring and managing GHG emissions from the private and public sectors, value chain, and mitigation actions. The protocol works with governments, industry associations, NGOs, companies and other organizations.

GWP – Global Warming Potential

Global Warming Potential measures how much heat a given mass of a chemical substance retains in the atmosphere over a period of time compared to carbon dioxide (CO₂), which has a base of 1. It is used to compare the impact of different gases over a period, usually 100 years, using CO₂ as a reference.

ISCC – International Sustainability and Carbon Certification

ISCC is an independent organization with global operations in certification systems that endorse the sustainability of renewable raw materials and products, through the evaluation of sustainability criteria throughout the production chain. The ISCC certification system is a multi-step process, applied to all types of agricultural, forestry, and waste materials that contribute to the circular economy and

the bioeconomy. Across the world, various products, such as food, feed, chemical compounds and fuels, as well as energy, can be certified by ISCC.

LCA – Life cycle assessment

Technique that identifies and quantifies the resources used and emissions into the air, land and water, enabling the assessment of the environmental impacts associated with a product throughout its production chain or useful life, that is, throughout its entire life cycle. Its principles and calculation procedures are described in ISO 14040 and ISO 14044 standards. The life cycle of mineral fuels involves the stages of oil exploration and production, oil transportation, processing in refineries, distribution and use of products.

MACC – Marginal Abatement Cost Curve

This methodology allows evaluating and comparing different opportunities for mitigating emissions through their Marginal Abatement Costs (ratio between the net present value of the opportunity and its GHG abatement potential). Based on this ratio, it is possible to order the opportunities, facilitating the identification of solutions with the best cost-benefit for implementation.

OGMP 2.0 – Oil and Gas Methane Partnership

Global initiative coordinated by the UN for the quantification, reporting, and management of methane emissions, focusing on mitigating climate change in the oil and gas sector. The initiative brings together more than 100 companies from this industry, coordinated by the United Nations Environment Programme (UNEP).

Organizational unit

A unit that manages operations related to the company's core activities.

Paris agreement

Global treaty adopted in December 2015 by the signatory countries of the United Nations Framework Convention on Climate Change (UNFCCC) during the 21st Conference of the Parties (COP21). Through this agreement, governments committed to taking action to keep the global average temperature "well below" 2 °C above pre-industrial levels and to make efforts to limit the increase to 1.5 °C. To this end, countries presented comprehensive national action plans to reduce their emissions through the formulation of their Nationally Determined Contribution (NDC).

Scope 1 emissions

Direct GHG emissions occur as a result of the company's own operations in emission sources that are owned or controlled by the company.

Scope 2 emissions

Scope 2 accounts for GHG Indirect emissions related to emissions from the production of electrical and/ or heat energy purchased for consumption by the company. These occur at third-party sources.

Scope 3 emissions

Scope 3 for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the company's activities but occur from sources that are not owned or controlled by the company.

Steam reforming units

Industrial facilities used to produce hydrogen from hydrocarbons such as natural gas, ethanol, or biogas.

Value chain

The full range of interactions, resources, and relationships related to the reporting entity's business model and the external environment in which it operates. A value chain encompasses the interactions, resources, and relationships that the entity uses and relies on to create its products or services from conception to delivery, consumption, and end of life cycle, including interactions, resources, and relationships in the entity's operations, such as human resources; in its supply, marketing, and distribution channels, such as the supply of materials and services, and the sale and delivery of products and services; and in the financial, geographic, geopolitical, and regulatory environments in which the entity operates.

VCS - Verified Carbon Standard

The Verified Carbon Standard is a globally adopted greenhouse gas credit certification program from Verra (organization). In the voluntary carbon credit market sector, over 75% use the standard.

Venting

Process of releasing gases or vapors from a system into the atmosphere, usually in a controlled manner. This can occur in various industries, including petrochemicals, during maintenance operations such as depressurizing tanks or equipment, or in emergency situations. Venting is used to prevent pressure buildup and ensure operational safety. However, this practice can contribute to the emission of air pollutants, including greenhouse gases, and therefore it is important that it be carried out in accordance with environmental regulations and best practices, minimizing environmental impacts. Proper management of atmospheric emissions is fundamental to promoting sustainability and environmental responsibility in industrial operations.

Zero Routine Flaring (ZRF)

Initiative by the World Bank that aims to establish a commitment with governments and oil companies to eliminate routine flaring by 2030. The goal is to support cooperation among stakeholders so that solutions for gas flaring can be found through appropriate regulation, technology implementation, and financial agreements.

Appendix 4 – Map to TCFD requirements

TCFD RECOMMENDATION	DISCLOSURE	LOCATION
Governance: <i>Disclose the organization’s governance around climate-related risks and opportunities.</i>		
a) Describe the board’s oversight of climate-related risks and opportunities.	Risk Management Governance Governance related to Climate Change and Energy Transition	Pg. 21 Pg. 55-57
b) Describe management’s role in assessing and managing risks and opportunities.	Risk Management Governance Governance related to Climate Change and Energy Transition	Pg. 21 Pg. 55-57
Strategy: <i>Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material.</i>		
a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Risks related to climate change and the energy transition Climate Change Opportunities and Energy Transition	Pg. 22-32 Pg. 89-106
b) Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning.	Risks related to climate change and the energy transition Financial resilience analysis	Pg. 22-32 Pg. 36-38
c) Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Financial resilience analysis	Pg. 36-38
Risk Management: <i>Disclose how the organization identifies, assesses, and manages climate-related risks.</i>		
a) Describe the organization’s processes for identifying and assessing climate-related risks.	Risk Management Governance	Pg. 21
b) Describe the organization’s processes for managing climate-related risks.	Risk Management Governance Risks related to climate change and the energy transition	Pg. 21 Pg. 22-32
c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management.	Risk Management Governance	Pg. 21

<p>Targets and Metrics: <i>Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</i></p>		
<p>a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.</p>	<p>Ambitions and commitments to reduce our carbon footprint Appendix 2 – Metrics Table</p>	<p>Pg. 44 Pg. 150-153</p>
<p>b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.</p>	<p>Carbon Performance</p>	<p>Pg. 109-119</p>
<p>c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</p>	<p>Ambitions and commitments to reduce our carbon footprint Carbon Performance</p>	<p>Pg. 44 Pg. 109-119</p>

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Disclaimer

This document may contain forecasts about future events, which reflect only the expectations of the Company's management regarding future conditions of the economy, in addition to the industry in which it operates, the performance, and the financial results of the Company, among others. The terms "anticipates", "believes", "expects", "forecasts", "intends", "plans", "projects", "aims at", "should", as well as other similar terms, are intended to identify those predictions, which, evidently, involve risks and uncertainties foreseen or not by the Company (such as risks related to changes in general economic and commercial conditions, prices of crude oil and other commodities, refining margins and current exchange rates, uncertainties inherent to estimates of our oil and gas resources and reserves, risks related to our Strategic Plan and our ability to implement it, events in the Brazilian and international political, economic, legal, and social scenarios, obtaining governmental approvals and licenses, and our ability to obtain financing) and, consequently, are not guarantees of the Company's future results. Therefore, the results may differ from current expectations, and the reader should not rely exclusively on the information herein.

The Company is not obliged to update the presentations and forecasts in light of new information or future developments. The values reported for 2025 and onwards are estimates.

The identified opportunities must undergo profitability assessment based on our corporate scenarios and follow the project approval governance to be sanctioned. Additionally, the projects adhere to procedures that establish specific criteria for evaluating the segment and chosen business model, and must have their technical and economic feasibility confirmed by technical review groups and Statutory Technical Committees (CTEs).

The goals, commitments, ambitions, and perspectives presented throughout this Climate Change and Energy Transition Supplement may be affected by external and/or internal factors. The commitments presented herein do not constitute guarantees of future performance by the Company and are subject to assumptions that may not materialize, as well as risks and uncertainties that are difficult to predict. Among the factors that may lead to future results differing from our expectations, we refer to the factors described in the "Risk Factors" section on Form 20-F and on Petrobras' Reference Form, as of the base date of December 31, 2024. Additionally, this document contains some financial indicators that are not recognized by BR GAAP or IFRS. These indicators do not have standardized meanings and may not be comparable to similarly described indicators used by other companies. We provide these indicators because we use them as measures of the Company's performance, and, therefore, they should not be considered in isolation or as a substitute for other financial metrics that have been disclosed in accordance with BR GAAP or IFRS.

The performance results in emissions in 2024 presented in this Climate Change Supplement will still be verified by a third party; therefore, variations may occur, and no significant changes are expected.

This Climate Change and Energy Transition Supplement follows the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

