

Non-financial Information

Task Force on Climate-related Disclosure

2019

**ENERGY
IN MOTION**

About this report

This report was prepared with the aim of providing a transparent and accurate overview on how Galp is implementing the recommendations and supporting recommended disclosures of the Task-Force on Climate-related Financial Disclosures Recommendations, as well as to present the good practices implemented by Galp and its alignment with the aforementioned recommendations.

The report identifies several climate-related policies, processes and practices, implemented by Galp related to addressing different topics on climate-related governance, strategy and risk management. The Company also presents several metrics and targets set towards climate change adaptation and mitigation, including the transition to a low carbon economy.

The information disclosed in this report is publicly available and has been verified, within the scope of the Integrated Management Report 2019 and the Non-financial Information - GRI Standards Report 2019.

TCFD at a glance

To help identify the information needed by investors, lenders, and insurance underwriters to appropriately assess and price climate-related risks and opportunities, the Financial Stability Board established an industry-led task force: the Task Force on Climate-related Financial Disclosures (TCFD).

The TCFD developed four widely adoptable recommendations on climate-related financial disclosures that are applicable to organizations across sectors and jurisdictions. The Task Force structured its recommendations around four thematic areas that represent core elements of how organizations operate.

Governance	Strategy	Risk Management	Metrics and Targets
Investors want to make sure that climate change is considered appropriately when a business makes strategic decisions.	The TCFD recommends that companies identify climate related risks and opportunities over the short, medium and long term and quantify their impact on the business, including analyses of the resilience of their strategy to those risks.	Companies must provide examples on risk management processes, internal controls and external assurance practices in its mainstream reports.	The TCFD highlights the need for a better linkage and coherence between operational metrics such as GHG emissions, water usage, energy usage, and the strategic targets and financial metrics.

TCFD at a glance

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization's governance around climate related risks and opportunities.	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.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
<ul style="list-style-type: none"> a) <u>Describe the board's oversight of climate-related risks and opportunities.</u> b) <u>Describe management's role in assessing and managing climate-related risks and opportunities.</u> 	<ul style="list-style-type: none"> a) <u>Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.</u> b) <u>Describe the impact of climate related risks and opportunities on the organization's businesses, strategy, and financial planning.</u> c) <u>Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.</u> 	<ul style="list-style-type: none"> a) <u>Describe the organization's processes for identifying and assessing climate-related risks.</u> b) <u>Describe the organization's processes for managing climate-related risks.</u> c) <u>Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.</u> 	<ul style="list-style-type: none"> a) <u>Disclose the metrics used by the organization to assess climate related risks and opportunities in line with its strategy and risk management process.</u> b) <u>Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.</u> c) <u>Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</u>

TCFD at Galp

“At Galp, we aim to establish, maintain and reinforce a clear, transparent and continuous dialogue with our stakeholders and interested parties and the disclosure of the information about our activity, management and performance is part of Galp’s commitment to establish this strong relationship. Since 2016, Galp publishes an integrated report, reinforcing our belief that the creation of economic, environmental and social value has to come together. The merge of financial and non-financial reporting in one piece discloses our processes and performance in a transparent and accurate way, as well as its results and corporate governance practices. At the same time, the use of international standards and monitoring tools guarantees that the information collected and published in our reports is reliable and useful and also represents our commitment to continuous improvement in the adoption of best practices.

Taking this into account, Galp readily recognised the importance of the Financial Stability Board’s (FSB) Task Force on Climate-related Financial Disclosures (TCFD) recommendations as a transparent, consistent and comparable way to provide climate-related financial information in a low carbon transition economy.

By aligning our report with the TCFD’s main guidelines, we expect our performance can be assessed in an integrated way, whilst establishing the appropriate connections between our strategy, our business and governance model, and our operational and financial performance, considering relevant external factors.”

Carlos Costa Pina, Chief Sustainability Officer and Chief Risk Officer of Galp
in CDSB/CDP Europe (2018) – Corporate climate and environmental disclosure under the EU Non-Financial Reporting Directive

Galp actively and transparently participates in global initiatives on climate change



We take on the importance of a responsible leadership that integrates climate challenges into its strategy. Galp's support to the TCFD reflects a commitment to promoting a more balanced relationship between meeting energy needs and minimising our operations' carbon intensity, as well as to a transparent reporting of climate-related information.



Galp works closely with CDP, participating in technical working groups and answering to both investor questionnaires – CDP Climate Change and CDP Water Security.



In 2015, in the capacity of exploration and production operators, we endorsed the Zero Routine Flaring by 2030 initiative. Our goal is to scale the new E&P projects to zero flaring under normal operating conditions.



We have joined the We Mean Business coalition, integrated in the NAZCA Tracking Climate Action initiative of the United Nations Framework Convention on Climate Change (UNFCCC). Galp has made a commitment to take action, especially on climate issues, by using an internal carbon price in the investment decision-making processes, by the corporate commitment assumed in the Climate Change Policy, and by implementing the TCFD recommendations.

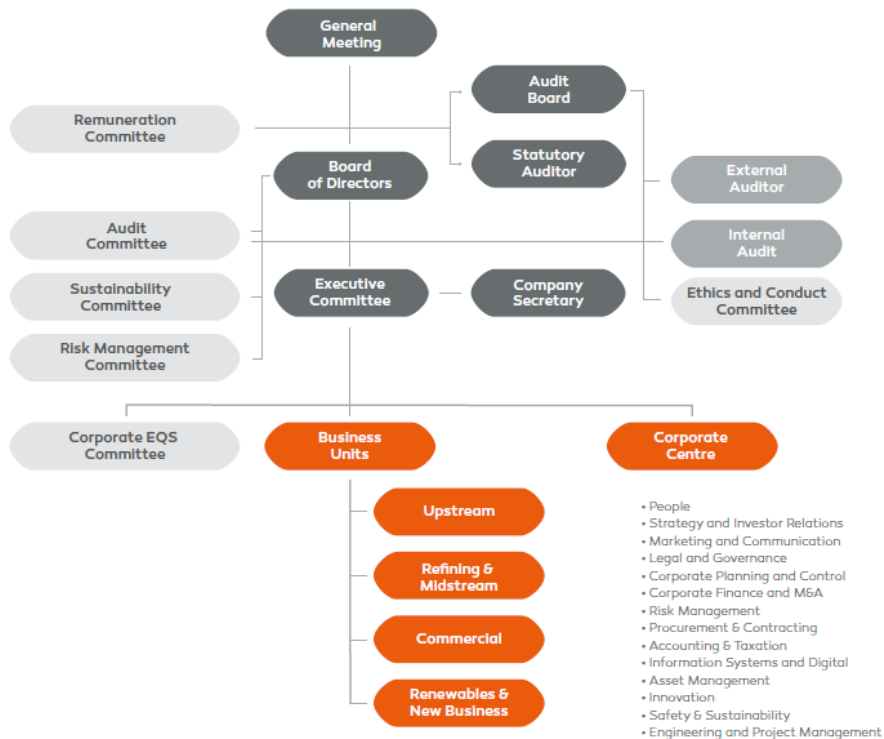
A resilient and agile organisation, prepared for a complex and dynamic world

Galp's current organisational structure is based on four business units and a corporate centre which is coordinated by each of the executive directors. The organization is also supported by specialised committees that cover matters of special relevance for the company. Within the scope of TCFD the following stand out:

- Sustainability Committee
- Risk Management Committee
- Corporate Environment, Quality and Safety (EQS) Committee

Both the Sustainability and Risk Management are board-level committees, composed by non-executive directors, reporting directly to the Board of Directors its main decisions and its activity on monitoring and overseeing the performance of goals and targets, in particular for addressing climate-related issues.

For more details on the board's oversight of climate-related risks and opportunities, please see our [2019 Governance report](#)



A governance model to manage the transition to a lower carbon economy

Climate change issues are a relevant part of the company's strategy and are discussed whenever relevant within the scope of activities and responsibilities of each governing body. The climate and energy transition related risks and opportunities integrate the Company's strategic formulation processes and are overseen by the Board of Directors (BoD) and the Executive Committee (EC), with their members participating actively in specialised committees.

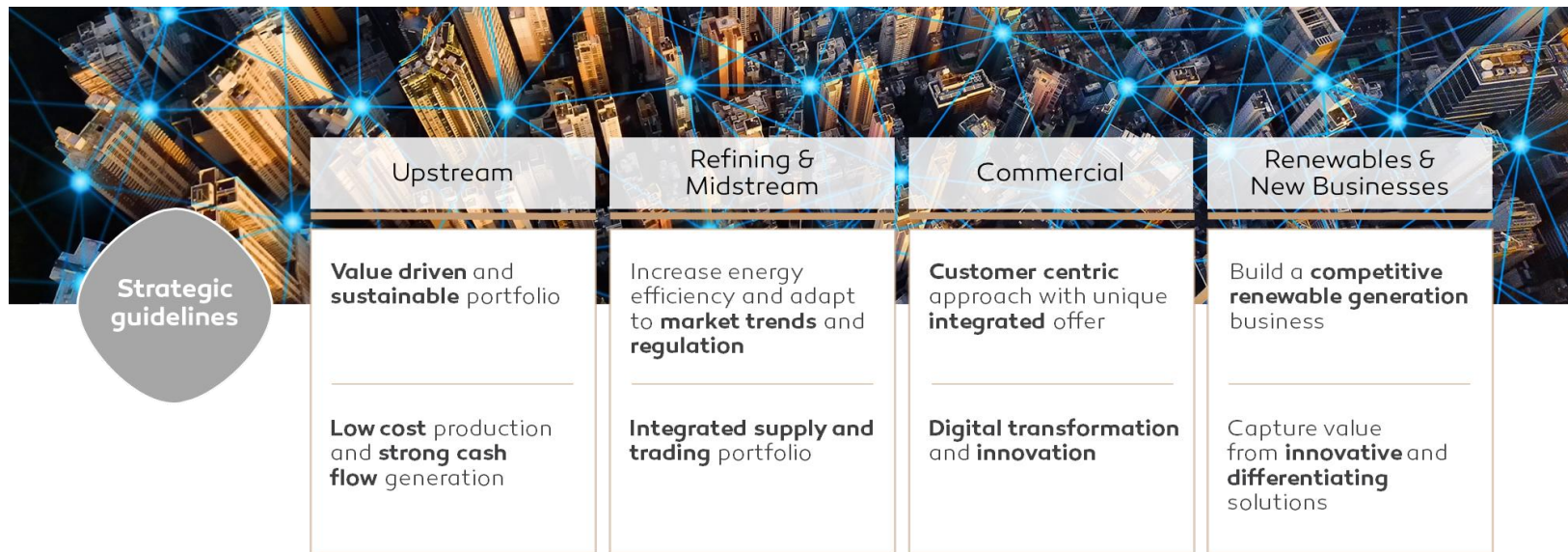
These governing bodies meet periodically to define, guide and supervise the strategic guidelines, related to Climate Change, in the context of the Strategy and Business Plan approved and in line with the company's Climate Change Policy.



For more details on the management's role in assessing and managing climate-related risks and opportunities, please see our [2019 Corporate Governance Report](#)

Integrating energy transition across all business units

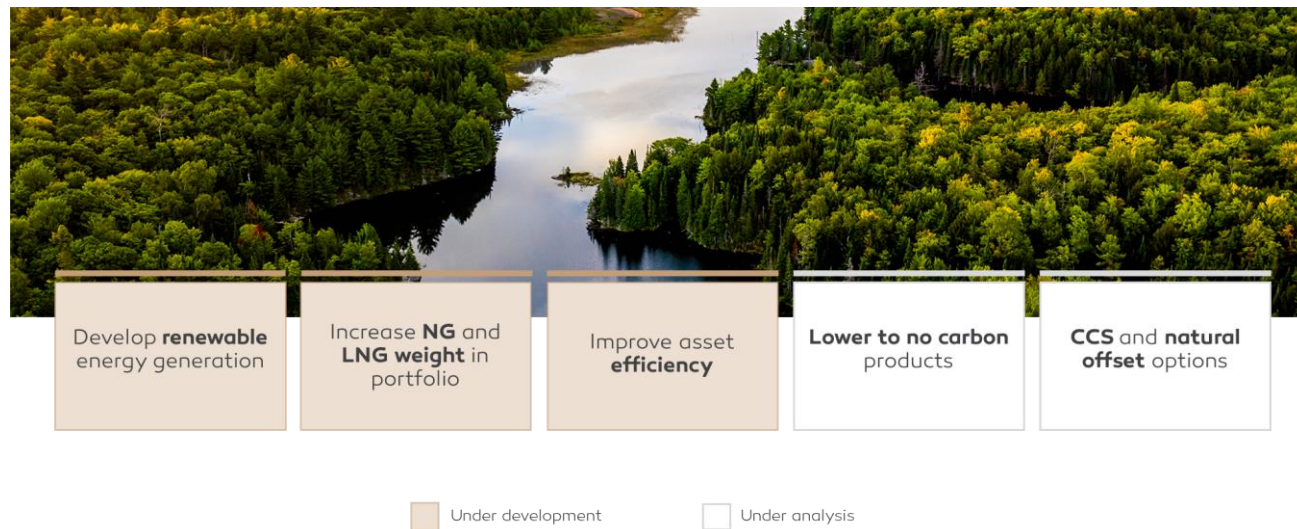
The energy paradigm in the world is changing and Galp aims to play an active role in this transformation, namely by adapting its portfolio to the future needs, whenever possible and in synergy with the current businesses, by diversifying our assets, with a consequent mitigation of risks resulting from carbon intensity reduction; and developing innovative and differentiating solutions that promote the transition into a low-carbon economy.



For more details on Galp's strategy, please see our [2019 Integrated Management report](#)

Addressing transition challenges while reducing carbon intensity

As an integrated energy player our current market presence puts us in a strong position to integrate current products with new services and business models during the decarbonisation of the economy.



Investment strategy

Investing in sustainable growth across the energy value chain



Energy transition
>40%

Renewables
New Businesses
10-15%

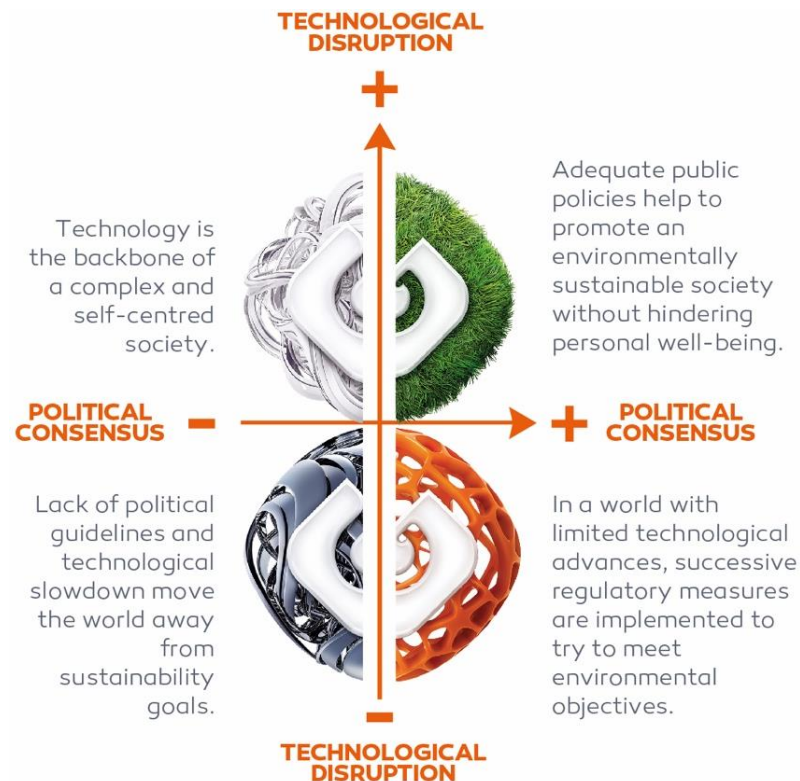
For more details on Galp's strategy, please see our [2019 Integrated Management report](#)

Seeking to ensure strategy's resilience to different credible scenarios

We have developed four contrasting and alternative scenarios, with varying levels of technological disruption and regulation, which we consider to be critical uncertainties for the energy sector and seek to anticipate the dynamic relationship between consumer needs and desires and the mechanisms the energy sector finds to satisfy them. One of the scenarios is supported by the IEA SDS scenario data and its GHG emissions (tCO₂e) curve is consistent with a long term global average temperature rise of 1.7-1.8 °C above pre-industrial levels in 2040.

This scenario analysis has directly informed and influenced our business objectives and strategy, as the data allowed Galp to measure the potential impact of each scenario on the present value of the company, according to the existing strategy. It also allowed Galp to identify new potential businesses and strategic guidelines, which could increase the company's resilience to an IEA SDS-like environment. In the decision-making process of new investments and large projects, the feasibility and resilience of each investment/project is evaluated against the four scenarios developed.

For more details on the resilience of Galp's strategy in different climate-related scenarios, please see our [2019 Integrated Management report](#)



The main risks and opportunities for Galp

Galp takes the view that the transition to a low carbon economy creates opportunities but may also have potential repercussions for its business model, either as a result of regulatory changes or shifts in consumption and technological patterns.

Risk Classes	
Price	Galp's assets and results are dependent on various market factors, including the price of oil products, natural gas, LNG and electricity, as well as foreign exchange and interest rates.
Legal	Legislative and regulatory changes may alter the business context in which Galp operates.
Assets	The execution of Galp's strategy may be affected if Galp is unable to develop, maintain or manage an efficiently high-value asset portfolio.
Logistics chain	The reliability of assets and the efficiency on their operation are a decisive factor for Galp's competitiveness.
Market	In a highly competitive environment, Galp's ability to react to competition is crucial for ensuring good financial performance and reaching strategic goals.
IT & Cybersecurity	A breach of Galp's digital security or breakdown of its digital infrastructure may affect its operations, increase its costs and affect its reputation. The integrity and readiness of our systems are also crucial for our activities.
Project execution	Galp's organic growth and results are dependent on the execution of its main investment projects.
Geopolitics	Exposure to political developments and the resulting changes in operating environment can undermine the operations and adversely affect the value of Galp's assets and its results.
Business Continuity	The failure to react effectively to crisis situations or disruptions may be damaging to Galp's activity, reputation and shareholder value.
Credit	The exposure to credit risk may significant and adversely affect Galp's operational results and financial situation.

Time ranges considered for assessing climate-related R&O

Short-term
Up to 1 year
Annual strategic budget

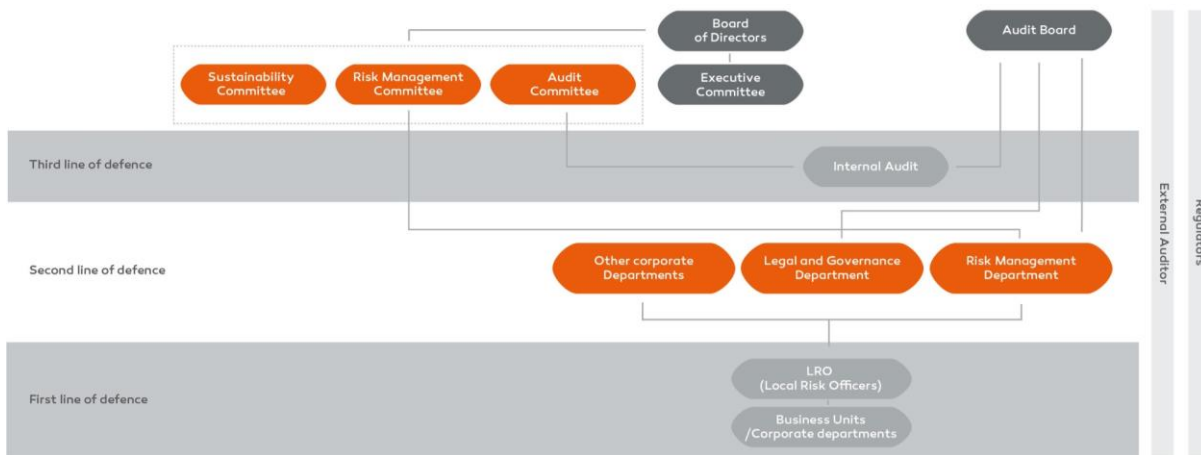
Medium-term
Up to 5 years
General strategic cycle

Long-term
More than 5 years
Long-term strategic cycle

Integrating the climate-related risks in the risk management approach

Galp has in place a decision-making process that incorporates a risk assessment for all strategic decisions. To assure independence and objectiveness in the analysis, this exercise is conducted by the Risk Management Department and is addressed to the Chief Risk Officer, that is an executive board member, and to the Risk Management Committee.

Regarding its current activities, Galp implemented the three lines of defence framework that enables a consistent relationship between risk management activities developed at different levels and of different periodicity. It assures that any relevant climate-related risk (or other) identified by a business manager is analysed and assessed at a business unit level by the respective Local Risk Officer that periodically informs the corporate risk department.



For more details on the climate-related risks processes and its integration in the overall risk management, please see our [2019 Integrated Management report](#)

Our climate-related risk management approach

Our approach

Our general risk assessment methodology incorporates a quantitative analysis typically supported by a Monte-Carlo simulation and a qualitative analysis that includes an evaluation of the risk response strategy regarding relevant risk sources. A substantive change (financial impact) can be described as one that can directly affect the Company, e.g. financially - changes in EBITDA (e.g. up to 10%).

Analysing the Value@Risk

An annual special report is delivered to the Audit Board to be aware of the Company's Value@Risk, taking into account the expected evolution of Galp's business (including the climate change risks and opportunities) over a five-year period.

Addressing specific risks and opportunities

When approaching and managing specific risks and opportunities, there are other functional areas with risk control responsibilities besides the risk management teams. For the climate-related R&O, the Safety and Sustainability Department is responsible for the corporate management of sustainability risks (including those arising from climate change, product quality, safety and security). The risk management approach must be implemented in conjunction with the business units, thereby ensuring that an action plan is implemented to manage and mitigate these risks.

CO₂, a variable to be taken into account

Galp considers an internal carbon price of \$50/tonCO₂e on GHG direct emissions in the investment analysis, ensuring the incorporation of a potential global carbon price. Moreover, when assessing new projects, we analyse the GHG emissions from the entire value chain of the project, ensuring the alignment of our assets and operations with a lower carbon economy.

Assessing the physical risks

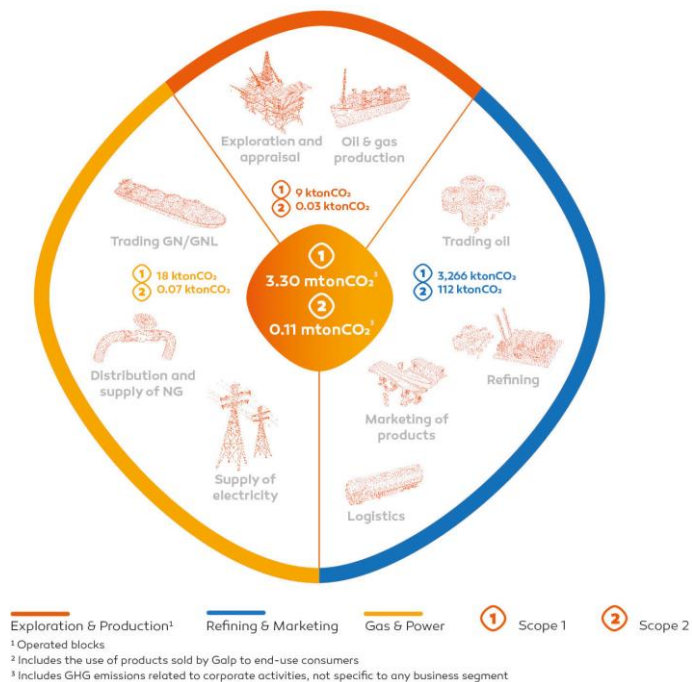
Galp assesses the infrastructure exposure (asset level) to climate-related physical risks. A specific risk analysis are conducted considering bioclimatic parameters, geographic location, infrastructure features and their business value. Together with other asset level analysis, Galp designs adaptation and mitigation measures as well as business continuity plans.

The [2019 Corporate Governance Report](#) describes, in a detailed manner, all governing bodies, corporate structures and individuals, with responsibilities on the risk management processes, as well as, their specific responsibilities.

The footprint of our businesses

Our carbon footprint is calculated on an annual basis, using the methodological framework established by The Greenhouse Gas Protocol, supplemented by the relevant industry adaptation promoted by IPIECA.

Galp promotes a comprehensive approach to its carbon footprint by including direct (scope 1) and indirect (scope 2 and 3) emissions that covers the value chain of our businesses.



3 Scope 3

	Purchased goods and services	6.47 mtonCO ₂ e
	Fuel and energy related activities	0.94 mtonCO ₂ e
	Business travel	0.01 mtonCO ₂ e
	Transportation and distribution	0.72 mtonCO ₂ e
	Processing of sold products	16.45 mtonCO ₂ e
	Use of sold products ²	34.01 mtonCO ₂ e
	Investments	0.69 mtonCO ₂ e

Assessing the carbon intensity of our businesses and value chain

CO₂/CWT



In the refining segment, Galp's 2019 performance was affected by sectoral and procedural maintenance works, in addition to extraordinary events, with an impact on normal operating levels. However, we maintain a trend of continuous improvement with a reduction in carbon intensity of 13% and 8%, compared to 2013, respectively at the Sines and Matosinhos refineries.

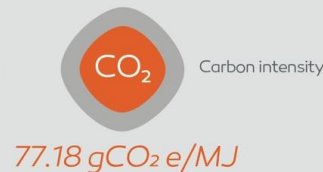
Upstream carbon intensity

We achieved a carbon intensity of 9.4 kgCO₂e/boe, considering direct greenhouse gas emissions from operations and the hydrocarbon production of operated and non-operated assets, on a WI basis.

In the Brazilian pre-salt, we have developed sustainable and competitive technologies that enable carbon sequestration and capture by separating carbon dioxide from the natural gas produced. CO₂ is then reinjected into the reservoirs, contributing not only to an improvement in operational efficiency but also to reducing the carbon footprint and water consumption, a resource commonly used to improve pressure and stability in reservoirs.

The Science-Based Targets Initiative has not yet approved a methodology for the Oil and Gas sector. Galp is currently participating in a technical working group, led by the CDP, to develop a science-based target-setting methodology for the sector.

OUR PROGRESS



The carbon intensity adapted to our value chain is applicable to all business segments. The carbon intensity was calculated considering the GHG emissions from our activities, including the scopes 1, 2 and 3, and the energy marketed by the various business segments, namely crude oil, natural gas, liquid fuels, biofuels and electricity. Since 2019, the Carbon Intensity Index (CII) is a quantitative indicator set by the Remuneration Committee for determining the annual variable remuneration of the company.

Galp defined commitments, objectives and goals to address the energy transition



Our key commitments

- To manage climate-related risks and opportunities, through the active participation of various departments and teams of the Company.
- To encourage research and development of solutions that minimize risks and maximize opportunities related to energy and climate.
- To promote energy efficiency and innovative solutions, in order to reduce the carbon intensity of our activities.
- To develop new solutions and businesses, in order to support society in the transition into a low-carbon economy.
- To plan the adaptation to climate change, minimizing operational risks resulting from extreme weather events.



Our key objectives and targets

- From 2021 onward, we are committed to acquiring 100% renewable electricity in Portugal, expecting to reduce our total Scope 2 emissions to close to zero.
- By 2022, we will cut the carbon intensity by 25% in Sines refinery and 15% in Matosinhos refinery, based on 2013 carbon emission values.
- Scale new E&P projects to zero flaring under normal operating conditions.
- Build an innovative and differentiated lower carbon business portfolio, through a 40% CAPEX allocation to energy transition businesses and 10-15% CAPEX allocation to renewables and new businesses.
- Develop the natural gas production project in Mozambique, contributing to the increase of gas in our upstream portfolio.
- Develop biofuel production as a contribution to a low carbon economy
- Increased our presence in power generation from renewable sources aiming to reach a 10 GW total installed capacity by 2030.

References

Galp recommends the reading of the following references as a complement to the information disclosed in this document:

- [Galp's Integrated Management Report 2019](#)
- [Galp's Corporate Governance Report 2019](#)
- [Galp's Answer to CDP Climate Change 2019](#)
- [Galp's website | Energy and Climate](#)
- [Galp's website | Climate Change and Energy Transition](#)
- [Galp's website | Low Carbon Initiatives](#)
- [Galp's website | Carbon Metrics](#)
- [Galp's Sustainability – Our Commitments](#)
- [Galp's Capital Markets Day 2020](#)
- [Remuneration Policy 2019](#)

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