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 discloses 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.
## 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.

<table>
<thead>
<tr>
<th>Governance</th>
<th>Strategy</th>
<th>Risk Management</th>
<th>Metrics and Targets</th>
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<tbody>
<tr>
<td>Investors want to make sure that climate change is considered appropriately when a business makes strategic decisions.</td>
<td>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.</td>
<td>Companies must provide examples on risk management processes, internal controls and external assurance practices in its mainstream reports.</td>
<td>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.</td>
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</tbody>
</table>
## TCFD at a glance

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<tr>
<td>Disclose the organization’s governance around climate related risks and</td>
<td>Disclose the actual and potential impacts of climate-related risks and</td>
<td>Disclose how the organization identifies, assesses, and manages climate-related</td>
<td>Disclose the metrics and targets used to assess and manage relevant climate-related</td>
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<td>opportunities.</td>
<td>opportunities on the organization’s businesses, strategy, and financial</td>
<td>risks.</td>
<td>risks and opportunities where such information is material.</td>
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<td>planning where such information is material.</td>
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<tr>
<td>a) Describe the board’s oversight of climate-related risks and opportunities.</td>
<td>a) Describe the climate-related risks and opportunities the organization has</td>
<td>a) Describe the organization’s processes for identifying and assessing climate-related</td>
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<td>b) Describe management’s role in assessing and managing climate-related</td>
<td>identified over the short, medium, and long term.</td>
<td>risks.</td>
<td>risks and opportunities in line with its strategy and risk management process.</td>
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<td>risks and opportunities.</td>
<td>b) Describe the impact of climate related risks and opportunities on the</td>
<td>b) Describe the organization’s processes for managing climate-related risks.</td>
<td>b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG)</td>
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<td>organization’s businesses, strategy, and financial planning.</td>
<td>c) Describe how processes for identifying, assessing, and managing climate-related</td>
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<td>c) Describe the resilience of the organization’s strategy, taking into</td>
<td>risks are integrated into the organization’s overall risk management.</td>
<td>emissions, and the related risks.</td>
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<td>consideration different climate-related scenarios, including a 2°C or</td>
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<td>c) Describe the targets used by the organization to manage climate-related risks and</td>
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<td>lower scenario.</td>
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<td>opportunities and performance against targets.</td>
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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.

Galp is currently participating in a technical working group, led by the CDP, to develop a science-based target-setting methodology for the sector. The guidance is due to be launched in 2021.

Galp, together with seven other leading companies in the energy sector (BP, Eni, Equinor, Occidental Petroleum Corporation, Repsol, Shell and Total), endorse the “Energy Transition Principles”, which establishes the commitment to contribute to the acceleration of the energy transition and the reduction of GHG emissions, in accordance with the goals set in the Paris Agreement.

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 (UNFCC). 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.

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.
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 2020 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 2020 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 [2020 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.

Adapt commercial offer to the future demand pattern, with new low to no carbon products

Implement initiatives for energy efficiency and GHG emissions reduction across refining and midstream activities

Develop renewable power generation portfolio (3.8 GW pipeline of Solar PV projects in Iberia up to 2024 and ambition of 10 GW of renewables by 2030)

Build a new business, focused on sale, installation and operation of decentralized solar PV assets

Partner in pan-European project to develop a green hydrogen supply chain in Sines (reducing local refinery grey hydrogen production)

Develop CCS R&D projects and technologies using CO₂ as raw material in industrial processes, CO₂/CH₄ separation and CO₂ reinjection solutions

For more details on Galp’s strategy, please see our 2020 Integrated Management report.
Seeking to ensure strategy’s resilience to different credible scenarios

In order to ensure that Galp is part of the solution to face today’s and tomorrow’s challenges and to guarantee the resilience of our strategy, we have developed two alternative and contrasting scenarios, ‘Fragmented’ and ‘Committed’. These scenarios are based on the premise that technological development is and will continue to advance and contribute positively to less carbon intensive energy solutions. However, uncertainty related to the global agreement on carbon emissions reduction and its potential impact on global trade treaties should play a key role in unlocking future technologies and accelerating the decarbonisation of the energy sector on a global scale.

‘Committed’ is a 1.5°C-compliant scenario and aligned with EU carbon neutrality targets for 2050. 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 a 1.5°C-compliant scenario environment.

In a less globalised world, with scattered policies and trade barriers, disjointed regulation is unable to unlock the full technological potential, preventing an adequate energy transition.

A renewed alignment amongst major geopolitical blocks promotes commercial trade and develops an adequate political framework for decarbonisation, reducing global emissions to promote a 1.5°C-compliant course.

For more details on Galp’s strategy, please see our 2020 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.

<table>
<thead>
<tr>
<th>Risk Categories</th>
<th>Risk Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>Galp’s assets and results are dependent on several market factors, including the price of oil products, natural gas, LNG, electricity, as well as exchange and interest rates.</td>
</tr>
<tr>
<td>IT &amp; Cybersecurity</td>
<td>A breach of Galp’s digital security or failure of its digital infrastructure could hinder its operations, increase costs and affect its reputation. It is critical to ensure Galp’s cyber and digital integrity and readiness.</td>
</tr>
<tr>
<td>Portfolio</td>
<td>The execution of Galp’s strategy and its sustainability may be affected if the Company is unable to develop, maintain or efficiently manage a high-value asset portfolio.</td>
</tr>
<tr>
<td>Innovation</td>
<td>Failure to properly anticipate market changes and customer expectations can compromise Galp’s long-term competitiveness and financial sustainability.</td>
</tr>
<tr>
<td>Market</td>
<td>In an environment highly conditioned by the dynamics of demand and supply, Galp’s ability to adapt to new paradigms and react to competition is crucial to ensure good financial performance and achieve the strategic goals.</td>
</tr>
<tr>
<td>Project Execution</td>
<td>Galp’s organic growth and results depend on the execution of its main investment projects.</td>
</tr>
<tr>
<td>Geopolitics</td>
<td>Exposure to political developments and consequent changes in the operating environment can undermine the operations and adversely affect the value of Galp’s assets and results.</td>
</tr>
<tr>
<td>Business Continuity</td>
<td>Failure to effectively respond to crisis situations or disruptions may jeopardize the continuity of operations and damage Galp’s reputation and shareholder value.</td>
</tr>
<tr>
<td>Credit</td>
<td>Exposure to credit risk may significant and adversely affect Galp’s operational results and financial condition.</td>
</tr>
<tr>
<td>Legal</td>
<td>Legal and regulatory changes may alter the business context in which Galp operates, impacting its profitability.</td>
</tr>
</tbody>
</table>
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 Commission composed by three non-executive board members.

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 or a corporate division by the respective Local Risk Officer, that periodically informs the Corporate Risk Management Department.

For more details on the climate-related risks processes and its integration in the overall risk management, please see our 2020 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 or NPV (e.g. up to 10%).

Addressing specific risks and opportunities

When approaching and managing specific risks and opportunities, there are other functional areas with risk control responsibilities besides the Corporate Risk Management Department. 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 and other corporate divisions, thereby ensuring that an action plan is implemented to manage and mitigate these risks.

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.

Analysing the Value@Risk

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

CO₂ in the Business Plan analysis:

In 2020 the Carbon Intensity Evaluation was incorporated in the Business Plan’s Value@Risk analysis, in order to assess the impact of the different businesses options vs. our emissions commitment.

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.

CO₂ in Projects analysis:

When assessing new projects, we analyze the GHG emissions from the entire value chain of the project, incorporating this analysis into the risk management assessment in order to assess the impact of the different projects vs. our emissions commitment.
The footprint of our businesses

Our carbon footprint is carefully calculated on an annual basis, using the methodological framework established by The Greenhouse Gas Protocol, supplemented by the relevant industry adaptation promoted by IPIECA (International Petroleum Industry Environmental Conservation Association).

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

### Carbon footprint

- **Upstream**: 3.1 mtonCO₂
- **Commercial**: 0.04 mtonCO₂
- **Refining & Midstream**: 3,078 ktonCO₂
- **Renewables & New Businesses**: 46.9 mtonCO₂
- **Purchased goods and services**: 4.61 mtonCO₂
- **Fuel and energy related activities**: 0.99 mtonCO₂
- **Business travel**: 0.002 mtonCO₂
- **Transportation and distribution**: 0.29 mtonCO₂
- **Processing of sold products**: 15.57 mtonCO₂
- **Use of sold products**: 24.74 mtonCO₂
- **Investments**: 0.74 mtonCO₂

1. Operated blocks
2. Includes the use of products sold by Galp to end-use consumers
3. Includes GHG emissions related to corporate activities, not specific to any business segment. Carbon footprint calculation does not integrate the upstream, refining & midstream and commercial value chain and contains other scope 3 emissions.
Assessing the carbon intensity of our businesses and value chain

In 2020, Galp’s Carbon Intensity methodology was revised in order to reflect changes in its energy products portfolio and its future evolution, and also to address the future societal challenge of satisfying an increasing energy demand with a lower carbon footprint. This metric incorporates direct and indirect emissions (scopes 1, 2 and 3) from the life cycle of energy products sold by Galp, and therefore takes into account the production, transformation and transport of these products and of the ones purchased from 3rd parties, fully reflecting the Company’s efficient operations. The energy sold by Galp and incorporated in this metric encompasses the sales of liquid fuels, natural gas and electricity but excludes non-energy products such as lubricants and petrochemicals.

The Covid-19 pandemic has impacted the global demand for oil products, resulting in a challenging international refining context throughout the year. The decrease in the level of crude oil processing has impacted the energy efficiency of the facilities, despite the positive results achieved by the various projects implemented. Nonetheless, a trend of continuous improvement was maintained, with a 7% reduction in carbon intensity in both refineries compared to 2015.

**Upstream carbon intensity**

We achieved a carbon intensity of 9.9 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.
Galp’s role in decarbonizing the economy

Avoided GHG emissions

In 2020, Galp avoided the emission of approximately 922 ktonCO₂e through the implementation of energy efficiency measures in its refineries, the integration of biofuels, the production and sale of renewable energy, the supply of decentralised energy production and energy efficiency services, and the delivery of electricity for electric mobility.
Galp defined commitments, objectives and goals to address the energy transition

Our key commitments

• To develop new solutions, products and businesses, in order to support society in the transition into a low-carbon economy.
• 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 assets, operations and products.
• To plan the adaptation to climate change, minimizing operational risks resulting from extreme weather events.

Our key objectives and goals

• Reduce the carbon intensity of Galp’s product portfolio by at least 15% by 2030 and align our portfolio with the European Union’s goal of carbon neutrality in 2050.
• Acquire 100% renewable electricity in our operations in Portugal, reducing our total Scope 2 emissions to close to zero.
• Allocate 40% of the average annual planned investment in capturing opportunities related to energy transition.
• Allocate 10%-15% of the average annual investment in renewable energies and new businesses.
• Invest up to €181m until 2025 in innovation, research and the development of solutions to increase the sustainability of our products and operations.
• Scale new E6P projects to zero flaring under normal operating conditions.
• 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 (e.g. 2nd generation biodiesel through HVO co-processing technology and residual raw materials, biomethane, biorefineries).
• Increase our presence in the generation of electricity from renewable sources in order to reach an installed capacity of 10 GW in 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 2020
- Galp’s Corporate Governance Report 2020
- Galp's Answer to CDP Climate Change 2020
- 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
Leading today’s energy into our future

Non-financial Information
Task Force on Climate-related Disclosures
2020