C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Galp is an integrated energy operator with activities that span from exploration and production of oil and natural gas to refining and marketing of oil products and biofuels, distribution and supply of natural gas and generation and marketing of electricity. To guarantee success, and thrive through the energy transition, Galp has updated its purpose to 'Let's regenerate the future together'. To fulfil this purpose, Galp will regenerate its portfolio, its relationships but also its people. Overall, this will set a direction for the company, internally and externally, towards a low carbon future.

All these changes will translate into our portfolio and operations. Between 2023-2025, we intend to allocate 70% of our net capital to low and zero carbon products and services. By 2030, we aim to have a more electrified, diversified and decarbonized global portfolio, offering a combination of long-term growth and value opportunities in the energy sector.

Our mission is to create value for all our stakeholders (customers, employees, shareholders, suppliers and business partners), acting in energy markets with ambition, innovation and competitiveness, promoting respect for the principles of ethics and sustainability. Our activities are strongly expanding worldwide, being predominantly located in Portugal, Spain, Brazil and Africa. The activity of our Company is also based on 4 key business pillars: Upstream, Commercial, Industrial & Midstream and Renewables & New Businesses.

The Upstream business comprises a portfolio of c.20 projects in different phases, such as exploration, development and production in 4 countries (Brazil, Angola, Mozambique and Namibia). Galp's portfolio comprises a selection of projects located in the world class pre-salt Santos basin, high potential natural gas projects in the Rovuma basin in Mozambique, and promising exploration assets in São Tomé and Príncipe and Namibia.

The Industrial & Midstream business unit, which includes Refining & Midstream, incorporates the refining, co-generation, biofuels and logistics business, as well as the Group's oil, gas and power supply and trading activities. Galp operates an integrated refining system comprising Sines refinery in Portugal (the Matosinhos Refinery closed in 2021) with a total processing capacity of 226 kbpd, and 88 mmboe of raw materials processed. In 2022 this business units also sold c. 0.6 TWh of electricity from cogeneration,handled 54.6 TWh of NG/LNG in sales and trading,and 15.8 mton of oil products supply.

The Commercial pillar integrates a distribution network including approximately 1475 service stations. Refined products are primarily marketed in the Iberian Peninsula, but also in Africa, with total sales to direct clients of 7.4 mton and 4.1 TWh of electricity in 2022. The Commercial business unit is leading the transition into low carbon fuels and mobility, providing Galp customers with diversified solutions, including a network of >2.4 k charging points in Iberia and targeting >10 k charging points by 2025, while simultaneously offering low carbon fuels for aviation and maritime transport. Through Galp Solar, the Company has been helping customers increase their energy efficiency and save on power consumption by providing them with decentralised electricity equipments. It reached >25K decentralised solar energy installations in Iberia during 2022 and is targeting >300 MW installed capacity by end 2025.

With c.70% of its planned investments up to 2025 to be allocated to projects that promote the energy transition, Galp aspires to anticipate new trends, adapt its portfolio to future needs and promote a progressive reduction of its carbon intensity, while maintaining a track record of value creation. The Renewables and New businesses unit represents a clear step for Galp to embrace the energy transition by developing a sustainable and diversified portfolio of renewable power generation and is focused on developing a sustainable and diversified portfolio of renewable energy generation, currently focused on Iberia and Brazil, which can be leveraged by synergies with the company's remaining energy businesses.

In 2022, Galp added c.400 MW, totalling c.1.4 GW of installed capacity under operation out of a portfolio of c.9 GW, of which 4 GW are expected to be operational by 2025. We are targeting a gross renewable operating capacity of c.12 GW by 2030. We are evaluating the development of green hydrogen solutions, leveraging our privileged position and industrial skills, targeting up to 700 MW electrolyser capacity by 2030. Additionally, we are also assessing entry opportunities in the battery value chain, namely in lithium processing, having announced the development of Europe's largest and most sustainable lithium conversion plant to be built in Portugal, with an annual production capacity of up to 35 kton of lithium hydroxide and a start of commercial operations in 2026, in a joint venture with Northvolt.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date
January 1 2022

End date
December 31 2022

Indicate if you are providing emissions data for past reporting years
Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for
3 years

Select the number of past reporting years you will be providing Scope 2 emissions data for
3 years

Select the number of past reporting years you will be providing Scope 3 emissions data for
3 years

C0.3

(C0.3) Select the countries/areas in which you operate.
Brazil
Cabo Verde
Eswatini
Guinea-Bissau
Mozambique
Namibia
Portugal
Sao Tome and Principe
Spain

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.
EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.
Other, please specify (Galp is reporting emissions and energy data from the operations it controls, plus the equivalent data from participated Upstream projects where it has an equity stake. This is meant to increase transparency regarding our environmental performance.)

C-OG0.7

(C-OG0.7) Which part of the oil and gas value chain and other areas does your organization operate in?

Row 1

Oil and gas value chain
Upstream
Midstream
Downstream

Other divisions
Biofuels
Grid electricity supply from gas
Grid electricity supply from renewables

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	PTGAL0AM0009
Yes, a SEDOL code	B1FW751
Yes, a Ticker symbol	GALP PL
Yes, a Ticker symbol	GALP.LS

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	At Galp, the integration of climate and energy transition related risks and opportunities - over the short, medium and long-term - in the Company's strategic formulation process and investment planning represents a key factor towards a rigorous oversight needed to execute an ambitious energy transition strategy. The Company recognises the importance of responsible leadership and of the definition of robust and effective governance mechanisms that integrate key climate and energy transition related challenges into our strategy.Due to the importance and potential impact of climate-related risks and opportunities in Galp's operations, revenues and the materiality of these topics for society, investors and other stakeholders, they are overseen by the Board of Directors (BoD) and the Executive Committee (ExCom), where the CEO is the designated member responsible for climate strategy. The BoD and the ExCom play a central role in overseeing the investment proposals, to ensure that they are compatible with the decarbonization and energy transition strategy, measured based on their impact on the carbon metrics and targets. The BoD annually approves the 10-year business plan that materializes the Company's energy transition strategy, its short- and long-term incentives, and the risk appetite statements for the main risks that the Company faces in the execution of its strategy. In Addition, the BoD regularly reviews Galp's risk portfolio and oversees the Company's consolidated performance, which includes climate-related disclosures, and progress on climate-related targets, as reported in the Integrated Management Report approved by the BoD. The Sustainability Committee, supported by the Risk Management (RM) Committee, is the board-level committee responsible for climate-related topics, being key in assisting the Board in integrating sustainability principles into the decision-making process and ensuring that the main risks and opportunities (including climate-related topics) that we face are identified and continually managed. The Chairman of the Sustainability Committee was also the vice-Chairman and the Lead Independent Director of the Board, and a member of the Risk Management Committee. The BoD and the Sustainability Committee, RM Committee, Remuneration Committee and Audit Board have oversight on climate-related issues, including associated risks and opportunities, which are relevant to the delivery of long-term value in the context of the energy transition.
Chief Executive Officer (CEO)	The CEO is a member of Board of Directors and Executive Committee and the designated member responsible for climate strategy. The Board of Directors (BoD) oversees the Company's strategic formulation process and investment planning, along with the Executive Committee (EC). Energy transition and decarbonization are priority matters managed directly by the Executive Committee. It is the Executive Committee that proposes to the Board of Directors the company's strategy, including its climate strategy, objectives and targets and oversees the implementation of that strategy, monitoring the performance of carbon metrics and the fulfilment of the climate targets. Business and annual investment plans are also overseen by the Executive Committee in order to ensure the alignment with the energy transition and climate targets.
Board-level committee	The Risk Management Committee, comprising 3 non-executive Board members, is responsible for advising the Board on the oversight and monitoring of Galp's main risks, including climate-related risks; evaluating the compliance with risk tolerance levels and the implementation and effectiveness of decided mitigation actions; assessing Galp Group's internal control and risk management systems; issuing appropriate opinions and recommendations; and evaluating compliance with Galp's risk management policy. It collaborates with the Sustainability Committee in identifying and quantifying climate-related risks.
Chief Risk Officer (CRO)	The Chief Risk Officer (CRO), a member of the Board of Directos and the Executive Committee, ensures, among others, that risk appetite, including climate-related risks, is considered in decision-making, oversees and guides the risk assessment processes and the definition and implementation of response actions across the organisation; and ensures that the risk management guidelines defined by the Executive Committee are complied with and reflected in the internal risk management standards.
Board-level committee	The Audit Board supervises risk management (including climate-related risk), internal control and internal auditing systems, while also controlling the Company's financial information. It also supervises the company's activity, receives and processes reports of irregularities and is the internal body responsible for assessing corporate governance matters. The Audit Commi ttee oversees the supervision of the internal auditing system and reports to the Board of Directors.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing the setting of corporate targets Monitoring progress towards corporate targets Reviewing and guiding the risk management process Other, please specify (Defining the risk management strategy , approving the Risk Management Policy, approving the risk appetite, Supervising risk portfolio, always including climate related risks)	<Not Applicable>	In accordance with the Regulations of the Board of Directors (BoD), Galp's BoD meets periodically, if possible once a month, and also whenever convened by the Chairman of the Board of Directors or by any two directors, to review and guide the company's strategy, monitor the implementation of strategic guidelines and performance against objectives. The BoD approves strategic investments/divestments in excess of €75 million and annually approves the Company's annual Budget, which is an integral part of the 10-year Business Plan. According to the key long-term variables approved by the BoD to assess investments, valuations must embed a long-term carbon price assumption. Galp has the ambition of driving and thriving through the energy transition, reshaping its high-quality portfolio, and becoming a net zero company by 2050. This ambition is overseen by the Board of Directors and the Executive Committee to ensure that climate & energy transition targets, risks and opportunities are integrated into our strategic formulation process and investment planning. The BoD also regularly reviews Galp's risk portfolio , its short- and long-term incentives, which include climate related KPIs and overviews Galp's consolidated performance as reported in the Integrated Management Report, including environmental and emissions related indicators and performance. Climate related risks have been identified as a significant risk and as such are managed by the Board of Directors and Executive Committee. Regarding the Executive Committee (EC), the respective meetings are held mostly on a weekly basis for reviewing and guiding plans of action, risk management policies, setting performance objectives, among others, including to approve investments below 75M€, also considering a long-term carbon price assumption. The Sustainability Committee is the Board level committee responsible for climate-related issues, being key in assisting the BoD in integrating sustainability principles into the decision-making process and, with the support of the Risk Management Committee, ensuring that the main risks and opportunities we face are identified and continually managed. The Sustainability Committee, Executive Committee and Board of Directors, are informed on a quarterly basis on Galp's carbon metrics performance against targets and are updated on the decarbonisation roadmap status or any key climate change related issues via a specialized report, prepared by the corporate Strategy and Sustainability team, with the support of the Risk Management team, when necessary.
Scheduled – some meetings	Overseeing and guiding the development of a transition plan	<Not Applicable>	During 2022 the Board of Directors had several energy transition focused sessions that covered topics such energy scenarios, decarbonisation targets, climate related governance and risk management, capital stewardship and the EU Sustainable investment taxonomy, the just transition and ESG index performance. Dedicated sessions on the evolution of new energies (e.g. green hydrogen) also took place. The objective of these sessions is to inform the board on the context and challenges of the energy transition and assist them in the guidance and oversight of a future energy transition plan based on the current energy transition strategy and planned investment of 70% of net CAPEX in low carbon projects in the 2023-2025 period.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	The Board of Directors oversees Galp's strategy and climate-related topics. Within the Board there are several members with relevant competences on climate and energy transition related issues. The CEO has extensive experience in the energy sector and the Oil&Gas industry, as well as in developing energy transition / decarbonisation strategies, including the development of new, low carbon and sustainable energies. In addition, the CEO also has relevant experience regarding the impact of climate risks and opportunities on strategic lines and competitiveness, as well as the appropriate allocation of capital, with a focus on low and zero carbon businesses, whilst maintaining our financial discipline. In 2022, the Vice-Chairman of the Board of Directors was also the Chairman of Galp's Sustainability Committee, a member of Galp's Risk Management Committee and the Lead Independent Director of Galp's Board of Directors. He has ample experience in the areas of corporate governance, international business and sustainable value creation. Other members of the Board have significant experience in the sustainable mobility, renewable energy, and energy storage businesses in different geographies, including in the risk management, business development and trading areas. In 2022, we had upskilling sessions for the challenges of the energy transition. - Several Galp Executive Committee and Board members participated in energy transition related events (e.g. Galp Electric Summit, CNN Portugal Summit, etc) and during BoD meetings climate and ESG issues were addressed, such as climate risks, decarbonization targets, energy scenarios, ESG regulation and the impact of the war on energy markets. - During 2022, several workshops were also held for Executive and Board members on various topics such as hydrogen, renewables, strategy, among others. A specific energy transition session was given to the Board of Directors in mid-2022, involving the Strategy & Sustainability team as well as some specialized external partners, which addressed topics on the global energy perspective and response to the energy transition and how Galp contributes, our climate strategy, our ESG performance and just transition journey.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Developing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
More frequently than quarterly

Please explain
Galp's Chief Sustainability Officer (CSO) is the Director of the Strategy and Sustainability Department, responsible for corporate management of sustainability risks – including those arising from climate change - and has the power to establish and propose assessment and monitoring methodologies. These methodologies are implemented in a coordinated effort with the business units and Corporate Risk Management team, thereby ensuring that an action plan is established to minimise and mitigate these risks.
The CSO and the Strategy and Sustainability team are also responsible for developing and assist in implementing a climate transition plan, setting and monitoring climate-related targets, and addressing climate related public policy and value chain engagements.

Position or committee
Sustainability committee

Climate-related responsibilities of this position
Integrating climate-related issues into the strategy
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
More frequently than quarterly

Please explain
The Sustainability Committee, composed by three non-executive directors, is the board level committee responsible for climate-related issues, being key in assisting the Board of Directors in integrating sustainability principles into the decision-making process and, with the support of the Risk Management Committee, ensuring that the main risks and opportunities that we face are identified and continually managed. The Committee has the duty of proposing sustainability-related objectives and targets to the board, as well as monitoring and reporting on the performance indicators in the economic, social and environmental areas, including those related to climate change, the energy transition and social responsibility, consistent with the stipulated policies, commitments, objectives and targets. It also monitors the alignment of Galp's strategic plan with its sustainability commitments, and issues appropriate opinions and recommendations. The Chairman of the Sustainability Committee was also the Vice-Chairman of the BoD, the Lead Independent Director of the BoD, and a member of the Risk Management Committee

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Position or committee
Risk committee

Risk Manangement Committee

Climate-related responsibilities of this position
Conducting climate-related scenario analysis
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
The Risk Management Committee, comprising 3 non-executive Board members, is responsible for advising the Board on the oversight and monitoring of Galp's main risks; evaluating the compliance with the tolerance levels and the execution and effectiveness of decided mitigation actions; assessing Galp Group's internal control and risk management systems; issuing appropriate opinions and recommendations; and evaluating compliance with Galp's risk management policy. It collaborates with the Sustainability Committee in identifying and quantifying climate-related risks. In 2022, the Committee analysed the Risk Profile of the Business Plan 2023-2033 and the Risk Appetite Statement for the strategic objectives inherent in the business plan, including a Carbon Intensity Assessment through sensitivity analysis.

Position or committee
Chief Risks Officer (CRO)

Climate-related responsibilities of this position
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
More frequently than quarterly

Please explain

The Chief Risk Officer (CRO), a member of the BoD and the Executive Committee, ensures, among others, that the risk appetite, including climate-related risks, is considered in decision-making, that the strategic action plans that minimise risks are in place, and that risk levels are within defined tolerances.

Position or committee
Chief Financial Officer (CFO)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
More frequently than quarterly

Please explain
The Chief Financial Officer, a member of the Board of Directiors and Executive Committee, ensures that the strategic action plans that minimise financial risks are in place, and that the business plan, which is an integral part of the company's energy transition and decarbonisation strategy, is implemented accordingly. Since the CFO is present in the Risk Management Committee and attends most Sustainability Committees meetings he is able to align climate/water-related topics with Business Plan objectives. The CFO also oversees annual budgets, major capital and/or operational expenditures related to low-carbon products or services, and acquisitions, mergers, and divestitures. All of these are made after the impact on the company's climate-related targets are evaluated and integrate a long-term carbon price assumption in their economic assessment.

Position or committee
Chief Executive Officer (CEO)

Climate-related responsibilities of this position
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
More frequently than quarterly

Please explain
Climate related issues integrate Galp's strategic formulation process and investment planning. These are overseen by the Board of Directors (BoD) and the Executive Committee (ExCom), where the CEO is the designated member responsible for climate strategy.
The Executive Committee proposes to the Board of Directors the company's strategy, including its climate strategy, objectives and targets, and oversees the implementation of that strategy, monitoring the performance of carbon metrics and the fulfilment of the climate targets. Business and annual investment plans are also overseen by the Executive Committee in order to ensure the alignment with the energy transition and the climate targets.

Position or committee
Other committee, please specify (Remuneration Committee)

Climate-related responsibilities of this position
Providing climate-related employee incentives

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
Half-yearly

Please explain
The Remuneration Committee is responsible for setting the amount of remuneration owed to the members of Galp's corporate bodies, approves the Remuneration Policy, which includes criteria for attributing and measuring the variable component of their remuneration.
Galp's commitment to decarbonisation and with driving the energy transition is mirrored by its Remuneration Policy, which aims to reinforce the values, enable skills, abilities, and behaviours, given the Company's culture, long-term interest, strategy and sustainability.
The short term incentive for the Executive Committee includes safety and decarbonisation KPIs, with a combined weight of 15%. As the BoD member responsible for climate strategy, the CEO has his long-term incentive, materialized by the right to a set of Galp shares attributable after 3 years, closely correlated with the decarbonisation of the company.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Climate related issues are incorporated into the compensation of all of Galp's employees , with specific KPIs for the CEO, Executive Committee members and business unit directors.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive
Chief Executive Officer (CEO)

Type of incentive
Monetary reward

Incentive(s)
Shares

Performance indicator(s)
Progress towards a climate-related target
Reduction in emissions intensity

Incentive plan(s) this incentive is linked to
Long-Term Incentive Plan

Further details of incentive(s)
The CEO's remuneration includes a Long Term incentive through the right to a number of Galp shares, attributable after 3 years. The number of shares effectively attributed, will be calculated by multiplying the number of provisional shares attributed by a performance factor, graded from 0 to 2.25, based on the following 3 categories, all with the same relative weight: reduction of the sales carbon intensity (climate related KPI category), Total Shareholder Return; and Peer ranking in terms of TSR and growth of Cash Flow From Operations.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
Galp's commitment to decarbonisation and with driving the energy transition is mirrored by its Remuneration Policy, which aims to reinforce the values, enable skills, abilities, and behaviours, given the Company's culture, long-term interest, strategy and sustainability. Currently, both short-term and long-term incentives for CEO have the carbon intensity index as a KPI. The addition of the carbon intensity of sold products as a weighting factor for the CEO's LTI increases the incentive and accountability to reach long-term targets and materialize the company's strategy by reducing absolute emissions and the carbon intensity of the energy produced and sold by the company, since all these variables are taken into account in this metric,

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Entitled to incentive
Director on board

Type of incentive
Monetary reward

Incentive(s)
Bonus – set figure

Performance indicator(s)
Progress towards a climate-related target
Reduction in emissions intensity

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
The indicators set by the Remuneration Committee for determining the annual variable remuneration for executive committee members are as follows: (i) Cash Flow From Operation (CFFO), with a weight of 75%; (ii) Energy Production Growth with a weight of 10%. (iii) Total Recordable Injury Rate (TRIR), with a weight of 10%; (iv) Carbon Intensity Index (CII - with scope 1, 2 and 3 GHG emissions resulting from energy production, transformation and commercialization), with a weight of 5%

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
Galp's commitment to decarbonisation and with driving the energy transition is mirrored by its Remuneration Policy, which aims to reinforce the values, enable skills, abilities, and behaviours, given the Company's culture, long-term interest, strategy and sustainability. For the Executive Committee, in particular, the variable remuneration is linked to Carbon Intensity Index of sold products (CII – with scope 1, 2 and 3 GHG emissions resulting from energy production, transformation and commercialization). The addition of the carbon intensity of sold products as a weighting factor for the short term incentive of Executive Committee members increases the incentive and accountability to reach climate related targets and materialize the company's strategy by reducing absolute emissions and the carbon intensity of the energy produced and sold by the company, since all these variables are taken into account in this metric.

Entitled to incentive
All employees

Type of incentive
Monetary reward

Incentive(s)
Bonus – set figure

Performance indicator(s)
Achievement of climate transition plan KPI
Progress towards a climate-related target
Reduction in absolute emissions

Reduction in emissions intensity

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
From 2022 onwards, hydrocarbon production related metrics are no longer featured as weighting factors in all employees' incentives. The short-term incentive, which represents the annual variable remuneration for all employees, has weighting factors directly connected to the reduction of absolute operational emissions (scopes 1 and 2) (7.5%) and the reduction of the carbon intensity of downstream sales (7.5%), which materialise emission reductions across all the Company's operations and value chains and the successful execution of its transition strategy. The performance scorecard was reviewed in 2022 to give more empowerment to ESG related metrics, that now weight 25% of all annual performance indicators, covering safety and decarbonisation KPIs. In addition, 20% of the employees' scorecard is allocated to the completion of strategic milestones that include, among others, topics related to energy transition related and low-carbon projects such as electric mobility, biofuels and H2, and an additional 15% weighting factor is related with the deployment of renewable electricity capacity, another key pillar in Galp's transition strategy

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
Galp's commitment to decarbonisation and with driving the energy transition is mirrored by its Remuneration Policy, which aims to reinforce the values, enable skills, abilities, and behaviours, given the Company's culture, long-term interest, strategy and sustainability. Currently the short-term and incentives for all employees integrates several emissions (absolute and intensity metrics) and other energy transition related weighting factors for its calculation . This is meant to strengthen the commitment of company employees towards the energy transition, the execution of its energy transition strategy and improve performance in the sustainability areas (including climate change). Therefore, all Galp employees have climate and ESG related KPIs in their incentives and performance evaluation that will reflect the successful execution of its strategy and the reduction of sbsolute emissions, of the carbon intensity of the energy it produces and sells and the execution of several key low carbon projects.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?
Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	Strategic budget
Medium-term	5	10	Business plan and General strategy cycle
Long-term	10	30	Long term strategy cycle

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Galp aims to adapt its portfolio to future needs, gradually diversifying a part of its capital allocation to new businesses/low carbon, with the corresponding risk reduction. For this,Galp implements scenario planning and sensitivity analysis, which consider different climate change and environmental contexts, test potential effects and determine value at risk. Climate change associated risks and opportunities(R&O) have been identified as significant risks/oppportunities and, as such, are managed by the Board of Directors (BoD) and Executive Committee (ExCom). Galp is also incorporating carbon into its project investment analysis. We consider an internal carbon pricing (consistent with external long-term energy transition scenarios - >€90/ton of CO2 by 2025, >€100/ton of CO2 by 2030, >€150/ton of CO2 by 2050)when evaluating medium/long-term investment projects, ensuring that potential costs arising from a global internal carbon price are incorporated into investment analyses.

When assessing GHG emissions, we include the entire value chain of the project, ensuring proper management of the risk associated with decarbonisation.

For this analysis, the upstream and downstream GHG emissions of the activity being assessed are estimated and incorporated, together with the impact of these on Galp's carbon footprint and emission and intensity reduction targets. We model the evolution of GHG emissions from our activities and projects, incorporating this information into the decision-making process of top management. Together with a due diligence analysis of the activity's carbon intensity, ensuring the alignment of our assets and operations with a lower carbon economy.

Galp conducts regular risk reappraisals. In the analysis and identification of risks related to climate change, the participation and commitment of top management representatives ensures that these risks are fully addressed and considered in the company's business strategy. 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. In addition, the Risk Management Department annually develops, and shares with ExCom and the Audit Board, an analysis of the Company's value@risk over a 10-year period (business plan 2022-2032), taking into account the expected evolution of Galp's activity and the business context. Along with other relevant risks and opportunities, climate-related risks and opportunities are also embedded in the risk analysis which incorporates a quantitative analysis, supported by Monte-Carlo simulation, and a qualitative analysis that includes an evaluation of the risk response strategy regarding relevant risks.

The Sustainability Department, in close collaboration with the Risk Management and Planning&Performance departments evaluates the variation of the carbon intensity of the Company, considering the same 10-year business plan, in order to ensure the alignment of the Company's strategy with its emissions and intensity targets. A substantive change(financial impact)can be described as (direct operations) one that can directly affect the Company, e.g. changes in EBITDA (e.g. above 10%).Although these analyses are usually fitted for the medium and long-term periods(>6 years), if a relevant short term impact can potentially exist, it is included in the assessment to assure that the senior management is incorporating in its decision all the relevant information.

Regarding risk management, Galp implemented the three lines of defence model that enables a consistent relationship between risk management activities developed at different levels of the Company. It assures that relevant climate-related (or other) risk identified by a business manager are analysed and assessed at a business unit level, and are reported to the Risk Management department by the respective Local Risk Officer. The first line of defence is responsible for the daily activities of internal control and risk management. It must identify and understand the risk environment, assess and communicate the value of potential risk exposure, determine and implement the best way to capture or mitigate such risk exposure. The second line of defence is responsible for defining and ensuring the implementation of procedures and methodologies, monitoring risks and risk response controls and measures, and periodically reporting on risk and the status of action plans to the RM Committee, the ExCom, the Audit Board and the BoD, as appropriate. The third line of defence is responsible for the oversight of risk and internal control systems.It shall supervise and evaluate the effectiveness of risk management and the internal control process, using internal and external independent entities.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
Galp is aware of the importance of climate change associated risks and opportunities (R&O), and climate-related risk have been identified as a significant risk and, as such, is managed by the Board of Directors (BoD) and Executive Committee (ExCom).
Climate and energy transition related challenges require a responsible leadership that integrates them into Galp's strategy. The climate and energy transition related R&O integrate the Company's strategic formulation process and investment planning. These are overseen by the BoD and the ExCom, where the CEO is responsible for climate strategy.
The Sustainability Committee (SC), supported by the Risk Management Committee (RMC), is the board level committee responsible for climate related issues, being key in assisting the Board in integrating sustainability principles into the decision-making process and ensuring that the main risks and opportunities that we face are identified and continually managed.
Annually, the Board examines and approves Galp's risk portfolio and appetite, the 10-year business plan that materializes the Company's energy transition strategy, its short- and long-term incentives and overviews the Company's consolidated performance as reported in the Integrated Management Report.
Also on an annual basis, the RM Department develops, and shares with the ExCom and the Audit Board, an analysis of the Company's value@risk over a 10-year period, taking into account the expected evolution of Galp's activity and the business context. In addition to other relevant risks and opportunities, climate-related risks and opportunities are also embedded in the risk analysis which incorporates a quantitative analysis, supported by Monte-Carlo simulation, and a qualitative analysis that includes an evaluation of the risk response strategy regarding relevant risks. The variation of absolute emissions andt carbon intensity of the businesses is calculated, taking into account the same 10-year business plan and surrounding context, in order to ensure coherence between the company's strategy and climate related targets.
Although these analyses are usually fitted for the medium and long-term periods (>6 years), if a relevant short term potential impact exists (asubstantive financial impact can be described as one that can directly affect the Company, e.g. financially - changes in EBITDA (e.g. > 1 0%)), it is included in the assessment to assure that the senior management is incorporating in its decision all the relevant information.
The risk analysis and the resulting risk matrix are regularly discussed with the Executive Committee and the Risk Management Committee.
For risk management Galp implemented the three lines of defence model that enables a consistent relationship between risk management activities developed at different levels . It assures that any relevant climate-related risk identified by a business manager is analysed and assessed at a business unit (BU) level with the support of the respective Local Risk Officer, that periodically informs the corporate risk department.
The first line of defence is responsible for the daily activities of internal control and risk management. It must identify and understand the risk environment, assess and communicate the value of risk potential exposure, determine and implement the best way to capture or mitigate such risk exposure.
It is up to the second line of defence the standardization and monitoring of risk and controls in the Group's processes. It should monitor corporate risk, define risk standards and periodically communicate the risk and status of the action plans to the RMC, the ExCom, the Audit Board and the BoD, depending on the topic.
The third line of defence is responsible for strategic and corporate risk oversight and the internal control system. It shall supervise and evaluate the effectiveness of risk management and the internal control process, using internal and external independent entities.
Galp integrates climate and sustainability risks and opportunities, through mechanisms and requirements that are considered in the decision-making processes connected to the various project development stages, throughout their life cycle. The identification and assessment of risks and opportunities (R&O) associated with Climate Change take into account the context and key trends, consider a benchmarking analysis, the political and socio-economic context, a regulatory, carbon market and strategic analysis and the expectations of stakeholders. The climate change and energy transition related R&O integrate the Company's strategic formulation processes and are overseen by the BoD and the ExCom, with their members participating actively in specialised committees in these areas such as the SC, RMC, among others. Strategy formulation supported by scenario & sensitivity analysis considering climate change and environmental contexts, test potential effects and determine value at risk of the company. Galp measures volume and margin effects using a contrasting set of variables (aligned with the IEA scenarios). It has also conducted an analysis to the chronic and acute physical risks using relevant IPCC physical models, including one 1.5ºC aligned model (RCP 1.9/2.6 and RCP 4.5) covering the most relevant geographies and BUs. The extent of the R&O related to physical climate parameters is particularly relevant at asset level – the main intent is to incorporate an assessment of infrastructure exposure (asset level) to the physical risks of CC into the decision-making process, analysing the exposure to this risk and draw up plans or adaptation measures.
Furthermore, Galp assesses the CC-related R&O (transitional R&O) that can affect Galp at the company level, such as market risks/opportunities, derived from poor/high performance (e.g. performance of GHG emissions under EU-ETS) related to climate change or development of products with high/low carbon content (e.g. biofuels; Galp Solar; production of renewable electric energy or green hydrogen); legal risks, derived from international & EU policies (climate-energy policy contexts in relation to carbon fuels and O&G reserves). The strategic guidelines defined reflect the operational chain and are unfolded in targets and actions at BU and site-level. This process allows to identify R&O of CC and set priorities at assets level.Galp has made a strategic commitment to gradually diversify the portfolio by producing and selling low carbon products, energy solutions that lead to lower carbon emissions and develop new business models with lower carbon intensities.
Also, in investment analyses an internal carbon price varying between the current ETS EUA and 150€/tCO2 in 2050 is applied, incorporating potential global internal carbon price costs. When assessing GHG emissions, we include the entire value chain of the project, ensuring proper management of the risk associated with decarbonisation.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current national and international climate related laws and regulations (or others) are a risk factor of high importance for OPEX and investment and/or divestment decision-making, as they affect, for example, the project location, the form of exploitation, the means used and the repatriation of capital. For example, Galp is subject to existing EU legislation (e.g. EU-ETS, Renewable Energy Directive, Energy Taxation Directive, among others) covering the industrial facilities (e.g. Sines Refinery and Cogeneration are covered by EU-ETS) and Galp Business units (e.g. Enerfuel plant in Sines, is affected by RED and so will be future green hydrogen and HVO projects and production). Thus, current legislation (related to climate topics or others) is an integral part of the Risk Assessment carried out by the Risk Management Department, included in the Country Risk Profile (under "Regulatory Risk"). Furthermore, Legal & Regulation risk is included in the company's risk matrix as a risk with very high impact and is monitored by the Risk Management Department.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	Emerging laws and regulations (related to climate topics or others) are a risk factor of extreme importance for OPEX and investment and/or divestment decision-making, as they can affect, for example, project location, the form of exploitation, the means used and the repatriation of capital. The approval of international agreements and/or new regulations, encouraging the use of low-carbon energies is an additional risk factor for Galp, as the company transitions into a lower carbon intensity portfolio. Thus, current and emerging legislation (e.g. related to low-carbon energies and the EU Commission's Fit for 55 package and the recent RePowerEU plan) are analysed by a multidisciplinary team – Strategy and Sustainability, Business Units, External Relations and Regulation, among others - and are an integral part of the Risk Assessment carried out by the Risk Management Department, included in the Country Risk Profile (under "Regulatory Risk"). More specifically, Galp continually assesses the impact of upcoming ESG regulations through its Sustainability teams and the Sustainability Committee, guaranteeing Board oversight, to anticipate a response strategy to ensure compliance with any new rules and targets. One of Galp's strategic goals is to build an innovative and differentiated lower carbon business through allocating 50% of its capex to low carbon initiatives including: (i) the development of a renewable generation portfolio, with a target gross capacity of 12 GW by 2030, with production both in Europe and outside of the continent, (ii) the development of a 270 kton HVO production in the Sines refinery, (iii) supporting our customers in this transition, by developing decentralised generation solutions, (e.g. renewable energy production; electric mobility, and low carbon fuels for all modes of transport), development of green hydrogen solutions with potential to reach 700 MW of electrolyser capacity by 2030 and entering the Li-on battery value chain through lithium processing and LiOH production. Furthermore, existing and upcoming regulation is included in the Legal & Regulation and ESG Regulatory Compliance risks which is positioned in the company's risk matrix as a risk with very high impact, and is monitored by the Risk Management Department.
Technology	Relevant, always included	The development of technology and/or the emergence of disruptive technologies can impact Galp's performance as a result of compliance risk, if these technologies derive from legal impositions to which Galp is subject - namely in terms of GHG emissions and/or risk of competition if Galp is unable to keep up with its peers in terms of cutting-edge technology (e.g. CCUS, low carbon fuels, etc). Growing digital transformation constrains companies to restructure business models through business-intelligence and operational models supported by innovative technologies and data analytics to improve speed, enable deeper insights and raise performance management efficiency. The ongoing digital transformation is also visible in the Oil&Gas industry, which is exploring ways to digitise, automate and solve complex industry challenges (either in traditional businesses, or in new businesses such as green H2), and transversal issues (e.g. development of new practices that accelerate the processing times and reduce manual work). Failure to adopt new and innovative technologies will contribute to less effective processes in the definition of strategic objectives, in the analysis and measurement of performance, in the reporting and review of performance, and may impair Galp's ability to make informed decisions and to incorporate lessons learned. However, innovative disruptive technologies bring increasing risks of cybercrime and data privacy. Galp faces strong competition in all its business segments and its competitive position and financial performance may be harmed, specifically if the Company is unable to respond adequately and in time to the new demand paradigm, reshaping its portfolio in accordance with the energy transition, accessing new technologies and keep up with innovation to improve operational efficiency, and recruit and retain talent. The inability to restructure business models through intelligent operational models supported by innovative technologies data analysis and, simultaneously, adopt a new paradigm of work model, while maintaining employee engagement and productivity, would undermine Galp's ability to properly execute its strategy, impacting results and financial performance. Technological risks are incorporated into Galp's strategic risks under Innovation&Technology risks. Additionally they integrate the specific Information Technology risks given the increasing importance of cyber risks and technological disruption in the company's businesses.
Legal	Relevant, always included	Galp is subject to a wide range of national and international laws and standards or those of the various countries in which it operates, whether industry-specific, or transversal. Part of Galp's activity (namely in the Upstream, Energy Management and Downstream business) is carried out in emerging, or developing economies, with a relatively unstable legal and regulatory framework, which can lead to legislative and regulatory changes that Galp is required to comply with and may alter the business context in which the Company operates. The Company's downstream and renewables activities in Iberia are also subject to political, legislative and regulatory risks, particularly with regard to regulatory and competition laws issues. Legal risks associated with the potential breach of contract by Galp's counterparties within the scope of the various projects and transactions in progress are also transversal to Galp's activities. A change in legal frameworks or any misbehaviour, irregularity (actual or alleged) or lack of compliance with those frameworks by the Company, its employees, governing bodies, suppliers/service providers or counterparties may have a negative impact on Galp's activity, adversely affecting its results, financial performance and reputation. Furthermore, ESG compliance is becoming increasingly regulated and being written into law (e.g. European Sustainable Investment Taxonomy, Corporate Sustainability Reporting Directive, etc) . Therefore Galp also monitors ESG Regulatory Compliance Risk since any failures by the company, its employees, governing bodies, suppliers/service providers or counterparties relating to compliance with ESG laws and standards, may have adverse effects on the Company's investment case and reputation and constitute a risk monitored by Galp's Risk Management team. Thus, Legal and Compliance and ESG Regulatory Compliance are an integral part of the Risk Assessment carried out by the Risk Management Department, included in the Country Risk Profile. Furthermore, this risk is included in the top risk matrix monitored by the Risk Management Department (as Legal & Regulations and ESG Regulatory Compliance).
Market	Relevant, always included	Galp faces strong competition in all its businesses and its competitive position and financial performance may be harmed, specifically if it is unable to respond to the new demand paradigm, reshaping its portfolio in accordance with the energy transition, accessing new technologies and keep up with innovation to improve operational efficiency, and recruit and retain talent. The company's portfolio is exposed to volatility in prices of crude oil, natural gas, LNG, electricity and CO2, and other raw materials, as well as changes in interest and exchange rates. The variability of commodity and financial prices, resulting from macroeconomic, geopolitical or technological factors that affect the dynamics of demand and supply, may have a material adverse effect on the value of Galp's assets, results and financial performance. Market, competition and price risks are considered strategic risks for and are therefore permanently monitored by the Risk Management department. To mitigate this risk Galp is building lower carbon businesses through allocating 50% of its CAPEX to low carbon initiatives: the development of a renewable generation portfolio, with a target gross capacity of 12 GW by 2030,with production both in Europe and outside of the continent, the development of an HVO production unit 270 ktpa capacity in the Sines refinery, supporting our customers in this transition by developing decentralised generation solutions (e.g. renewable energy production) electric mobility, development of green H2 solutions with potential to reach up to 700 MW of electrolyser capacity by 2030 and entering the Li-on battery value chain in a joint venture with Northvolt to produce Lithium hydroxide in Portugal. On the other hand, the increase in prices of oil or natural gas may affect the value and profitability of Galp's assets. Even though the prices that the Company charges its clients reflect market prices, they may not be adjusted immediately, and may not entirely reflect the changes in market prices. Thus, market is one of the top risks included in the Risk Matrix monitored by the Risk Management Department (as Sourcing and Supply and Price).
Reputation	Relevant, always included	Galp's reputation is an invaluable asset. Any incorrect behaviour, irregularity (real or alleged) or lack of compliance with either the regulatory framework that governs Galp's activity, or transversal standards and policies, failures in our corporate governance, or a lack of understanding of how Galp's operations affect neighbouring communities and the environment could damage the Company's reputation. Less appropriate behaviour by the Company, its employees, governing bodies, suppliers/service providers or counterparties may reflect on Galp. It is worth noting that, in the context of climate change and the energy transition, there is greater scrutiny of the Oil&Gas sector, and non-compliance with external frameworks, a delay or non-compliance with the Galp's Decarbonisation Roadmap may have an impact on its reputation. Any risk associated with ESG dimensions will have unfavourable impacts on Galp's image, on attracting investment, and on the relationship with stakeholders. Moreover, increased awareness of global society about climate change may lead to changes in consumer behaviour, increasing the consumer's preference for alternative fuels (e.g. biofuels, RFNBOs) and renewable electricity. Thus, reputational risk, classified as a Reputation and Image Risk is included in the Risk Matrix monitored by the Risk Management Department. The Company's Corporate Social Responsibility Policy, is guided by high ethical values and social responsibility standards. To ensure compliance with best practices and legislation and to prevent irregular conduct or inappropriate behaviour, Galp has several policies and standards; a Code of Ethics and Conduct, a Corruption Prevention Policy, a Human Rights Policy, a Prevention of Money Laundering and Terrorism Financing standard and a Data Protection Policy, supported by a governance structure that involves the Compliance division and established reporting lines. The company is also currently developing its Biodiversity policy and finishing its Sustainability roadmap to ensure best practices implementation and compliance within ESG topics. Galp monitors the ethical behaviour of its people, ensuring compliance with its values and those policies and standards, and assesses the external environment to understand potential reputational risks. It maintains an ongoing dialogue with its main stakeholders, shareholders and investors, business partners, suppliers and customers to obtain more information about society's expectations.
Acute physical	Relevant, always included	Acute physical risks associated with climate change may have a potential impact on Galp's activities, causing damage or interruptions and delays in its operations. The potential impact and likelihood of the effects of climate change on Galp depend on the specific components of the risk: acute physical risks (tornadoes, heavy rains, floods, extreme heat or cold, etc.) may cause damage or interruption and delay of operations of Galp's physical assets, some of which are in regions subject to such phenomena. The risk of exposure to events of a disruptive nature is identified and analysed in the context of the Climate Risk Assessment carried out by the Sustainability and Risk Management Department in collaboration with the business units. The nature, complexity and diversity of Galp's operations means that this type of events have high potential impact on the execution and operations conditions. Main industrial facilities of Galp (e.g. Sines refinery) might be threatened by these events (e.g. wildfires). Similarly, extreme storms can affect the capacity of refineries and that could compromise the supply of raw materials to these refineries through sea terminals. This is relevant as Galp processed in 2022 ≈ 88 mmboe of raw materials vital for the supply of fuels in the Iberian market. These events can also cause disruption in the company's renewable projects, compromising the physical integrity of equipments' and electricity generation. Galp addresses climate risk through its strategy to accelerate the transition to net zero emissions by reshaping its portfolio (expanding its renewable energy footprint, developing biofuels and green H2, etc), while focusing on the application of new technologies and best practices aimed at leveraging business transformation, adapting operations and increasing efficiency. Climate risk management is supported by a Governance structure involving the Board of Directors, the Executive Committee, and the Sustainability and the Risk Management Committees, and by a set of standards and policies related to quality, health, safety, security, environment and social issues. The risks and opportunities arising from climate change are addressed and incorporated into the strategic planning process, considering alternative scenarios and different time horizons. Thus, acute physical risks are classified as strategic risks and integrate the top risks included in the Risk Matrix monitored by the Risk Management Department (as Climate Change).

	Relevance & inclusion	Please explain
Chronic physical	Relevant, always included	Chronic physical risks associated with climate change may have a potential impact on Galp's activities, causing damage or interruptions and delays in its operations. The potential impact and likelihood of the effects of climate change on Galp depend on the specific components of the risk: chronic physical risks (sea level rise, drought/water scarcity, rise of average temperature, etc.) may cause damage or interruption and delay of operations of Galp's physical assets, some of which are located in regions subject to such phenomena. The risk of exposure to events of a disruptive nature is identified and analysed in the context of the Climate Risk Assessment carried out by the Sustainability and Risk Management Department in collaboration with the business units. The nature, complexity and diversity of Galp's operations, e.g. upstream and downstream (Refining segment) means that this type of risk has a high potential impact on the execution and operational conditions. Industrial facilities such as the Sines refinery located by the Atlantic Ocean coast might be threatened by e.g. sea level rise. This is particularly relevant as Galp processed in 2022 88 mmboe of raw materials vital for the supply of fuels in the Iberian market. Chronic risks can also cause disturbances to renewable projects, compromising the productivity of solar panels and reducing renewable electricity generation. Galp addresses climate risk through its strategy to accelerate the transition by reshaping its portfolio (supported by the expansion of its renewable energy footprint, the development of biofuels and green hydrogen, among others), while focusing on the application of new technologies and best practices aimed at leveraging business transformation, adapting operations and increasing energy efficiency. Climate risk management is supported by a Governance structure involving the Board of Directors, the Executive Committee, and the Sustainability and the Risk Management Committees, and by a set of standards and policies related to quality, health, safety, security, environment and social issues. The risks and opportunities arising from climate change are addressed and incorporated into the strategic planning process, considering alternative scenarios and different time horizons. Thus, chronic physical risks are classified as strategic risks and integrate the top risks included in the Risk Matrix monitored by the Risk Management Department (as Climate Change).

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Heat stress

Primary potential financial impact

Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Galp used scenario analysis to assess the physical risks and opportunities related to climate change.These correspond to IPCC scenarios (Intergovernmental Panel on Climate Change) such as RCP 1.9, which points to a temperature increase of 1.5ºC (less than 2ºC), and the RCP 4.5, which points to a temperature increase between 1.7 and 3.2°C by 2100. Due to the limited climate data related to the RCP 1.9 scenario, the data used on the variation of physical variables for the more sustainable scenario is aligned with an RCP 2.6. The IPCC RCP 2.6 and RCP 4.5 scenarios represent a 2°C and between 1.7 and 3.2°C in 2100 scenario, respectively. For these scenarios, several physical variables were evaluated and quantified. These were, for acute risks: number of hot days (Tmax>30°C),number of cold days (Tmin<0°C), number of days with extreme wind (wind speed>10 and 20m/s), number of days with extreme precipitation (days with precipitation>100mm),number of days with high fire risk (fire weather index>45). All the values for these variables were obtained considering the geographic coordinates of the various assets, using three different time horizons, considering the short, medium and long term (as recommend by TCFD):2025, 2030 and 2050. The data was collected from reliable sources such as initiatives developed and sponsored by the European Union (Copernicus) and the World Meteorological Organization (Cordex). Local sources are used as complementary (and back test) sources(Portal do Clima, Projeções Climáticas for Brazil, etc.).Due to climate change, days with very high temperatures will become more frequent. Internally we evaluate the risk arising from the increase in the number of days per year with maximum temperature above 35ºC. Taking into account the two physical scenarios considered (RCP 2.6 and RCP 4.5) we verified that there is a clear trend towards an increase in heat waves in all geographies where we operate. Although evaluated by the different business units, this risk was considered more relevant by Renewables.For each degree above 35ºC there is a production decline of 0.5% in our solar farms. Therefore, and taking into account the physical variables collected(number of days per year with temperature above 35ºC, and average temperatures on these days)and the expected evolution of the solar power price, the maximum expected loss was calculated for the two scenarios and three time horizons considered.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3770000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure
It was considered that for each degree above 35ºC there is a production decline of 0.5% in our Iberian solar farms. After the aforementioned scenario analysis it was found that according to variables in the RCP4.5 scenario the number of days with temperatures above 35ºC in the solar farms operated by the company would impact production negatively, generating losses of approximately 3.77 M€ by 2050, considering the number of days with temperatures above 35ºC, sunlight hours and expected evolution of the price of electricity generated from solar PV projects, in relation to a scenario with no significant changes in temperature.

Cost of response to risk
121000

Description of response and explanation of cost calculation
Galp is committed to the identification and quantification of climate related risks across its activities and geographies and has recently spent 121k€ in specialized study to address these issues, using scenario analysis with physical variables compatible with Galp's in house scenarios. The risk of decreased solar power production in very hot days was identified and quantified during this study and a plan for adaptation and mitigation is under preparation to address it.
The company will continue to quantify this risk in the future, applying the assessment to possible future projects and locations to increase awareness of the impact of physical chronic climate related risks on the economics of solar photovoltaic projects.

Comment
Galp is committed to the identification and quantification of climate related risks across its activities and geographies and in 2021 spent 121k€ in specialized study address these issues, using scenario analysis with physical variables compatible with Galp's in house scenarios. This was a first systematic quantification of these risks and the exercise is to be repeated on a yearly basis, following the same methodologies.

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Galp's activities, namely its refining operations (Sines refinery), are directly impacted by increased CO2 prices, since these are covered by the EU-ETS. The increased ambition in emissions reduction announced by the EU commission recently with the European Climate law and accompanying Fit for 55 legislative package will put increased pressure on CO2 prices as a result of the revision of the EU-ETS which will likely rise, as well as in the allocation of free emission allowances, which will likely decrease, especially if the refining sector is included in the Carbon Border Adjustment Mechanism (CBAM) in the future.
We estimated the (real) cost associated with the purchase of licences for Galp's activities up to 2030 (phase IV of EU-ETS, which directly includes the Sines Refinery) in a scenario where there were no emissions reductions initiatives implemented in the Sines Refinery (energy efficiency projects or replacement of fossil by renewable feedstocks) and prices increased until that year aligned with recent developments and forecasts.

Time horizon
Medium-term

Likelihood
Virtually certain

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
701100000

Potential financial impact figure – maximum (currency)
926900000

Explanation of financial impact figure
The impact presented for risks driven by changes in regulation and associated carbon prices corresponds the sum of the cost of paying for refinery CO2 emissions licences per year for the 2022-2030 (EU-ETS phase IV) period, in a scenario where no emission reduction initiatives are implemented at the Sines Refinery, refined products are not included in the CBAM until after 2030, ETS prices continue increasing and the number of free allowances keep decreasing due to updates in the refining benchmark and the triggering of a Cross Sectorial Correction Factor. This potential impact represents a total value between 701 and 927 M€ in real terms, a range obtained using two different scenarios for the evolution of CO2 price.

Cost of response to risk
490000000

Description of response and explanation of cost calculation
The estimated costs of the response to risk identified to mitigate the risks represent the net capex to be invested in the Industrial and Midstream unit (€490 M) during the 2021-25 period, which includes the refining business. 70% of that capex allocated to Industrial and Midstream and includes efficiency energy projects and business transformation for industrial sites, including the new HVO unit in Sines. The value also considers other initiatives within the segment that will increase resilience, decrease emissions and diversify and increase the offer of low carbon products, mitigating the risks from increased emission allowances prices.
In addition, Galp has an internal standard (NR-004) about GHG emission management, regarding ETS, defining the responsibilities in managing GHG data, to ensure compliance with applicable legal requirements and to enable timely action and fully informed decision making in the process, anticipating risk/opportunities related to the purchase/sale of allowances. This standard requires that managers of facilities covered by the ETS to, at least quarterly, report to the Executive Committee, actual and projected emissions, estimating deficits/surpluses. Galp also has an information system that tracks all regulatory changes, to be aware of all legislation with impact on the

activities of Galp. Regarding the Refineries operations.
Galp is currently focused on two objectives: the reduction of absolute emissions, directly impacting the dependence on the purchase of allowances, and improving the sectorial benchmark (CO2/CWT) in order to maintain or increase the number of long-term allowances provided. As a consequence, the Sines refinery has been reducing its emissions, approaching the sectorial benchmark, although in 2022 this progress was affected by the conflict in the Ukraine and the consequential decision to use higher carbon intensity fuels in the refinery in order to guarantee the affordable supply of energy products to the market (32.2 kg CO2/CWT in 2022). In parallel, the company is also investing 5% of CAPEX in the 21-25 period on New Energies projects including developing a Green Hydrogen project in Sines leading to the decarbonisation of the hydrogen used in the refinery and replacing of grey with green hydrogen in the refining processes and reducing CO2 emissions. Galp aims to have 100 MW electrolysis capacity installed by 2025 which can be expanded up to 700 MW in 2030 .

Comment
The estimated costs of the response to risk identified to mitigate the risks represent the average annual CAPEX to be invested in the Industrial and Energy Management business unit (€490 M) between 2021-25, which includes the refining business and where the energy efficiency and business transformation projects will be implemented, including the new HVO unit in Sines and the green hydrogen electrolysers that will produce the green hydrogen that will replace the current grey hydrogen in desulphurization.

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Other, please specify (Changes in precipitation patterns and extreme variability in weather patterns)

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Galp used scenario analysis to assess the physical risks and opportunities related to climate change.These correspond to IPCC scenarios (Intergovernmental Panel on Climate Change) such as RCP 1.9, which points to a temperature increase of 1.5ºC (less than 2ºC), and the RCP 4.5, which points to a temperature increase between 1.7 and 3.2°C by 2100. Due to the limited climate data related to the RCP 1.9 scenario, the data used on the variation of physical variables for the more sustainable scenario is aligned with an RCP 2.6. The IPCC RCP 2.6 and RCP 4.5 scenarios represent a 2°C and between 1.7 and 3.2°C in 2100 scenario, respectively. For these scenarios, several physical variables were evaluated and quantified. These were, for acute risks: number of hot days (Tmax>30°C),number of cold days (Tmin<0°C), number of days with extreme wind (wind speed>10 and 20m/s), number of days with extreme precipitation (days with precipitation>100mm),number of days with high fire risk (fire weather index>45). All the values for these variables were obtained considering the geographic coordinates of the various assets, using three different time horizons, considering the short, medium and long term (as recommend by TCFD):2025, 2030 and 2050. The data was collected from reliable sources such as initiatives developed and sponsored by the European Union (Copernicus) and the World Meteorological Organization (Cordex). Local sources are used as complementary (and back test) sources(Portal do Clima, Projeções Climáticas for Brazil, etc.).
The acute risk of being exposed to extreme wind events with speeds above those considered during the infrastructure design is the most significant physical risk identified and assessed in Galp.
The list of potential assets damaged by extreme wind events includes: damage /destruction of storage tanks in refineries and logistics parks (e.g. Sines, Matosinhos); Changes in swell patterns that could disrupt accessibility to ports, interrupt the logistics chain and compromise raw material supplies; Damage to photovoltaic installations, namely damage to solar panels and trackers in our solar farms.

Time horizon
Long-term

Likelihood
About as likely as not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
149970000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
From the assessment and quantification made, the most significant risk was derived from extreme wind events. It was considered the most relevant for the refining, the Refining and Midstream (Logistics) and the Renewables businesses due to possible equipment destruction. The risk was quantified for the 3 time horizons and for 2 climate scenarios. The results for the possible maximum loss are: 149.97M€ (2050) in the RCP 4.5 scenario. For each of the risks, different mitigation measures were identified by the business areas, taking into account how the risk materializes in each of them.

Cost of response to risk
122530000

Description of response and explanation of cost calculation
Regarding refining and the possible risk of damage/destruction of storage tanks in Galp's refinery logistics parks (e.g. Matosinhos, Mitrena, etc), mitigation measures were identified as reconstruction of the tanks, increasing their resistance to extreme winds, and strengthening of existing tanks when possible. Regarding the risk identified by Logistics, the possible mitigation measures are the strengthening of logistics chains and the hiring of spot vessels to mitigate the unavailability of ports due to the effect of extreme winds on the swell. Finally, regarding Renewables, the mitigation measure identified is to turn off the trackers when there is excessive wind, preserving the integrity of the equipment (already in operation) but possibly sacrificing some production. These mitigation measures have an associated cost of 122.53M€ (considering the reconstruction of all storage tanks – 2M€ by tank).

Comment
Galp is committed to the identification and quantification of climate related risks across its activities and geographies and spent 121k€ in specialized study address these issues, using scenario analysis with physical variables compatible with Galp's in house scenarios. This was a first systematic quantification of these risks and the exercise is to be repeated on a yearly basis, following the same methodologies.

Identifier
Risk 4

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Reputation	Stigmatization of sector

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Galp must demonstrate that the Company is committed with driving the energy transition and responding to the challenges posed by climate change and while simultaneously satisfying future energy needs and decarbonizing its operations and portfolio, decreasing its carbon footprint and providing its customers with low carbon energy and efficiency solutions.
If Galp does not deliver what is stated above there will likely be reputational risks associated, regarding negative perception of the company by its customers and other stakeholders. This negative perception about Galp's climate change strategy, management and performance could reduce investors' interest in the company. Furthermore, the increased awareness of society about climate change may lead to a change in consumers behaviour, increasing their preference for renewable and alternative fuels (e.g. biofuels, SAFs) and energy (renewable electricity, energy efficiency services) leading to lower demand for conventional products.
Galp is already facing this risk, and the company's customers are demanding more sustainable solutions and low carbon products and services, these newer demands may affect Galp's reputation. As a consequence, Galp refreshed its strategy in 2021 and committed to drive the energy transition and invest heavily in renewable energy and low carbon products (>50% net CAPEX during the 21-25 period) such as: biofuels with a 270 kpta capacity HVO unit to be built at Sines, renewable electricity with a current installed capacity of approximately 1.4 GW and a current project portfolio of 9 GW, targeting 4 GW in 2025 and 12 GW in 2030 of worldwide installed capacity; investments in improving energy efficiency and the integration of renewable energy in its industrial and retail facilities and investing in new, low carbon value chains such as green H2 targeting 100 MW of electrolyser capacity by 2025 and up to 0.7 GW by 2030 and the battery value chain, through a joint venture with Northvolt (Aurora) to develop a lithium conversion facility with an annual production capacity of up to 35,000 t lithium hydroxide.
The company will also develop and grow its electric mobility offer and network aiming to reach 10,000 charging points in operation in Iberia by 2025 while simultaneously offering services that will improve the energy efficiency of its customers through Galp Solar and DaLoop.

Time horizon
Long-term

Likelihood
About as likely as not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
16270000

Potential financial impact figure – maximum (currency)
162700000

Explanation of financial impact figure
The risks are associated with loss of brand value, consequently affecting Galp's operational performance and financial position. If Galp is perceived by stakeholders, as a company not committed with climate transition, it is reasonable to assume that the brand could lose up to 1% of its value. According to the 2022 assessment of Brand Finance, Galp's brand is the second most valuable in Portugal, and currently worth €1627 million. Assuming a conservative scenario of around 1-10% of brand depreciation, the financial implication may go from 16.27 up to €162.7 million.

Cost of response to risk
2100000000

Description of response and explanation of cost calculation
Galp is committed to drive the energy transition and refresh relations with its customers, providing them with low carbon energy and energy efficiency solutions for their activities. This means that the company is investing heavily in renewable energy and low carbon products (≈70% net CAPEX during the 2023-2025 period, i.e, 2100 M€ considering an investment of 70% of an average 1000 M€ net CAPEX in that period) such as: biofuels with a 270 kpta capacity HVO unit to be built at Sines, complementing the FAME producing Enerfuel plant, renewable electricity with a current installed capacity of approximately 1 GW and a current project portfolio of 9 GW, targeting 4 GW in 2025 and 12 GW in 2030 of worldwide installed capacity; investments in improving energy efficiency and the integration of renewable energy in its industrial and retail facilities and investing in new, low carbon value chains such as green hydrogen targeting 100 MW of electrolyser capacity by 2025 and up to 700 MW by 2030 and the battery value chain, where Galp formed a joint venture with Northvolt (Aurora) to develop a lithium conversion facility with an annual production capacity of up to 35,000 tons of lithium hydroxide starting commercial operations in 2026, and develop opportunities in the fast-growing battery value chain.
The company will also develop its electric mobility offer and network aiming to reach 10,000 charging points in operation in Iberia by 2025 while simultaneously, through Galp owned start-up DaLoop, offer Mobility management systems for companies and for large urban centres. Additionally, Galp Solar will make available decentralized solar PV and battery storage solutions, enabling our customers to lower their energy purchases and carbon footprint.

Comment
In 2022 Galp invested 33.5% of its CAPEX in sustainable, low carbon projects eligible according to the EU Taxonomy for sustainable activities, including 402 M€ in its

renewables business among other investments in the manufacture of hydrogen, biofuels, electric mobility, the battery value chain, and efficiency and CO2 emissions reduction projects in the Refinery.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Ability to diversify business activities

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Galp has conducted an analysis of climate change related opportunities that have the potential to generate a substantive positive change in its business operations, revenue, and/or expenditure. Opportunities are driven by the development and/or expansion of low emission goods and services, ability to diversify business activities and shift in consumer preferences. Following TCFD recommendations, this analysis involves the use of different scenarios to assess the performance of the different identified opportunities under different climate related variables. The financial implications of these opportunities were evaluated on a short, medium a long term.
Galp identified several opportunities arising from development and/or expansion of low carbon projects. To manage these opportunities, Galp is allocating 50% of its net capex in the 2021-25 period to low carbon initiatives.
One of these key initiatives and opportunities is the increased demand for renewable electricity both within and outside the EU backed by favourable regulatory (e.g. Fit for 55 package within the EU and the recent RePowerEU plan) and changing consumer preferences backgrounds. Therefore, the company created its Renewables and New Businesses unit in 2020 which is developing an ambitious renewable electricity generation portfolio, with a target gross operating capacity of 4 GW by 2025 aiming for 12 GW by 2030, with production both in and outside Iberia, distributed across wind and solar assets, whilst considering other technologies.
Galp's renewable projects will contribute to the growth of renewable energy production and usage and its projects in Iberia will be a key contributor to the Portuguese and Spanish decarbonisation targets and to the renewable energy production target in EU's Renewable Energy Directive.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
250000000

Potential financial impact figure – maximum (currency)
300000000

Explanation of financial impact figure
The financial impact figure (250-300M€) corresponds to a pro forma OCF from the renewables business expected in 2030. This Pro forma OCF considers all renewables projects as if they were consolidated according to Galp's equity stakes. These projects are also expected to deliver a > 9% equity IRR.

Cost to realize opportunity
270000000

Strategy to realize opportunity and explanation of cost calculation
During 2020 Galp announced the acquisition of 75.01% stake in a JV which incorporates a selection of high-quality solar PV projects in Spain with a total capacity of 2.9 GWp. By the end of 2021 the company already had 963 MWp in operation and had generated 1288 MWh of renewable electricity. In 2022 the number of projects online continued increasing, now totalling 1.4 GW that generated 1930 GWh of electricity. The project portfolio has increased to c. 9 GW between Portugal, Spain and Brazil. The company is now focused in developing its renewable portfolio while simultaneously adding further high-quality projects, targeting an installed capacity of 4 GW by 2025 and aiming for 12 GW by 2030. This renewable capacity will contribute to the increase of renewable energy in the electric grids where the projects are located, contributing to the decarbonisation of these geographies. The projects in Iberia will be a key contributor to the decarbonization plans of Portugal and Spain who have already pledged to become carbon neutral by 2050 and to the EU's target of 55% reduction of emissions and 40% of energy from renewable sources in the overall energy mix by 2030. The projects in Brazil will contribute to that country's 48.5% renewable energy in the internal energy offer by 2030.
The costs estimated correspond to the average annual capex necessary to invest in the identified opportunities, over the next 5 years, this would be approximately 30% of the group's net CAPEX for the 21-25 period (€0.8-1.0 bn p.a.). To enhance a balanced risk profile, Galp is targeting a balanced PPA coverage, optimised capital structure with D/E ratio of 60-70% and an active asset rotation and partnership model, with targeted average stakes at commercial operation date of c.50%.

Cost to realize the opportunity is an average of the range of 240-300M€ which corresponds to 30% of average yearly net CAPEX (estimated at a range of €0.8-1.0 bn p.a) to be invested in renewables in the 2021-2025 period.

Comment
Cost to realize the opportunity is an average of the range of 240-300M€ which corresponds to 30% of average yearly net CAPEX (estimated at a range of €0.8-1.0 bn p.a) to be invested in renewables in the 2021-2025 period per year. In 2022 Galp invested 402 M€ in its Renewables and New Businesses business unit and reported a pro-forma Ebitda of 180 M€.

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Ability to diversify business activities

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Galp has conducted an analysis of climate change related opportunities that have the potential to generate a substantive positive change in its business operations, revenue, and/or expenditure. Opportunities are driven by development and/or expansion of low emission goods and services, ability to diversify business activities and shift in consumer preferences. Following TCFD recommendations, this analysis involves the use of different scenarios in order to assess the performance of the different identified opportunities under different climate related variables. The financial implications of these opportunities were evaluated on a short, medium a long term.
Galp identified several opportunities arising from development and/or expansion of low carbon projects, the ability to diversify business activities and shift in consumer preferences which will impact hydrocarbon demand. To manage these opportunities, Galp is allocating 50% of its net capex in the 2021-25 period to low carbon initiatives.
With customers and regulators (e.g. Fit for 55 package and the recent RePowerEU plan) pushing for increased demand of low carbon products, Galp will invest in the diversification of its commercial sales portfolio to offer more low carbon products including low carbon fuels for all modes of transport (including SAFs) renewable electricity, electricity for mobility, non-fuel offer, decentralized power production equipment (through Galp Solar) and integrated fleet management services (through DaLoop).
The supply of decentralized power production will contribute to the EU's targets of energy efficiency and renewable energy production as states in the Energy Efficiency Directive and Renewable Energy Directive, while the supply of low carbon fuels for all modes of transport will contribute positively to the targets and mandates defined by the ReFuelEU and FuelEU regulations as well as in the Renewable Energy Directive and emission reduction targets from national and European climate laws.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The potential financial impact of the low carbon products offered and initiatives in the commercial business corresponds to over 40% of this business unit's 2025 expected OCF (160 M€). This moves represents an increase from an equivalent c.20% weight in 2021's OCF.

Cost to realize opportunity
160000000

Strategy to realize opportunity and explanation of cost calculation
Galp aims to transform its commercial business by diversifying its portfolio offering more low carbon solutions to its customers, in all modes of transport (e.g. SAFs for aviation, electricity for road mobility, etc) and therefore assisting them on the decarbonization of their activities.
By 2025, the company also aims to increase its electric mobility network to c.10,000 charging points in Iberia. Additionally, we plan to grow businesses that will produce efficiency gains and reduce emissions for our customers like decentralized solar PV panels and energy storage equipments sold by Galp Solar, and integrated fleet management services provided by DaLoop contributing to their decarbonization.
These changes in portfolio are aligned with the EU's climate and energy targets, namely in reducing the carbon intensity of transport as required by RED II, and satisfying the increase in low carbon fuels integrated in aviation and maritime transport as stated in the ReFuelEU and FuelEU regulations.
In 2022 the company became the first fuel supplier in Portugal to provide customers with Sustainable Aviation Fuels, partnering with TAP to deliver the first SAF powered flights. Galp also established a partnership with Douro Azul, one of the main national players in maritime tourism, for the supply of sustainable fuels to three cruisers, which enables an 80% carbon footprint reduction when compared to fossil fuels.
The costs estimated to realize the opportunity correspond to the average of the range of CAPEX necessary to invest in the identified opportunities over the next 5 years. This would be approximately 75% of the CAPEX allocated to the transformation of the Commercial business unit (between 400-500 M€), most of which will be allocated to low carbon solutions. Commercial net capex corresponds to 15% of Group's net CAPEX (€0.8-1.0 bn p.a.) for the 21-25 period.

Comment
The costs estimated correspond to the average of the range of CAPEX necessary to invest in the identified opportunities, over the2021-2025 period, this would be approximately 75% of the CAPEX allocated to the transformation of the Commercial business unit (between 400-500 M€). Commercial net capex corresponds to 15% of Group's net CAPEX (€0.8-1.0 bn p.a.) for the 21-25 period.

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Ability to diversify business activities

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Galp has conducted an analysis of climate change related opportunities that have the potential to generate a substantive positive change in its business operations, revenue, and/or expenditure. Opportunities are driven by development and/or expansion of low emission goods and services, ability to diversify business activities and shift in consumer preferences. Following TCFD recommendations, this analysis involves the use of different scenarios in order to assess the performance of the different identified opportunities under different climate related variables. The financial implications of these opportunities were evaluated on a short, medium, a long term basis.
Galp identified several opportunities arising from development and/or expansion of low carbon projects, the ability to diversify business activities and shift in consumer preferences. To manage these opportunities, Galp is allocating 50% of its net capex for the 2021-25 period to low carbon initiatives.
One of the identified opportunities was related with increasing demand for biofuels due to higher demand for less carbon intensive fuels and increase in ambition of regulation regarding the production of renewable energy and mandates for its integration in several modes of transport (e.g. Fit for 55 package and associated RefuelEU and FuelEU regulations) this lead the company to announce the investment in a HVO production unit with a capacity of 270 ktpa capable of producing both biodiesel and sustainable aviation fuels within the perimeter of its Sines refinery, and continuing investment in its Enerfuel FAME biodiesel producing unit.
The emissions reductions achieved by the use of these produced HVO biofuels will also contribute decisively to emissions reduction targets enshrined in the European and Portuguese climate laws and to the reduction of emissions intensity in transport mandated by the updated Renewable Energy Directive.

Time horizon
Medium-term

Likelihood
Virtually certain

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
50000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The financial impact figure (50M€) corresponds to the estimated yearly EBITDA figure of the HVO biofuels produced by Galp by 2025.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
Galp recently announced its plans to develop a 270 ktpa HVO renewable fuel unit within the perimeter of its Sines Refinery, marking the start of its transformation from a grey to a green energy hub. This new unit that is aligned with the expected increase in sustainable Biofuels demand to meet the RED II incorporation of renewable energy and reduction of emissions intensity in the transport sector targets and other emissions related targets for aviation and maritime transport within the Fit for 55 Package (e.g. ReFuelEU aviartion, FuelEU Maritime), designed to deliver the EU's target of 55% reduction in emissions by 2030. The flexibility of this HVO unit means that it has the capability of producing both sustainable road/maritime (biodiesel) and aviation fuels.
For the construction of this unit we are considering re-using equipment from the decommissioned Matosinhos refinery and take advantage of synergies in the Sines refinery during operation, namely the surplus hydrogen available, delivering a very cost effective project on the CAPEX and OPEX sides.
The costs estimated correspond to the approximate capex necessary to invest in the HVO unit which is estimated at around 200 M€ over 4 years, with production starting before 2025 and IRR expected at >15%.

Comment
The costs estimated correspond to the approximate CAPEX necessary to invest in the HVO unit which is estimated at around 200 M€ over 4 years, with production starting before 2025 and IRR expected at >15%.

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a climate transition plan within two years

Publicly available climate transition plan

<Not Applicable>

Mechanism by which feedback is collected from shareholders on your climate transition plan

<Not Applicable>

Description of feedback mechanism

<Not Applicable>

Frequency of feedback collection

<Not Applicable>

Attach any relevant documents which detail your climate transition plan (optional)

<Not Applicable>

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future

In 2021, Galp refreshed its vision and strategy centred on reshaping its Portfolio, refreshing Relations and reenergising People to thrive through the energy transition. The current decade will be spent transforming our industrial and commercial business, and growing and integrating our renewables business, expanding our position in the electricity value chain, aiming for 4GW renewable power installed capacity by 2025 and 12 GW by 2030, and developing new energies to accelerate our decarbonisation path (e.g. green hydrogen). Within industrial, Galp's strategy incorporates a commitment to the progressive decarbonisation of its operations, from the transforming of the Sines site from a grey refinery into a green energy park, to the production and sale of low carbon products to its customers.

Under this strategy, shared on its 2021 Capital Markets Day, Galp set the ambition to become a net zero emissions Company by 2050, with our decarbonisation path already underway with intermediate targets by 2030 (set in relation to a 2017 baseline):

- Reduce absolute emissions from operations by 40% (scopes 1 & 2, equity)
- Reduce Carbon Intensity Index (production-based) by 40% (scopes 1 & 2 & 3)
- Reduce Carbon Intensity Index (sales-based) by 20% (scopes 1 & 2 & 3)
- Net zero Company by 2050

The company has since been working on its Energy Transition Strategy where it will further detail its climate ambitions, key transition initiatives, capital stewardship, climate policy engagement, just transition and climate-related governance and risk management. Part of that disclosure, namely the climate-related governance, risk management and capital allocation has already been shared in the 2022's Integrated Management Report and in our 2022's TCFD Report.

We acknowledge and believe we live in a world that needs change in its energy system in order to limit future temperature increases and Galp wants to be a part of that change. We are currently building a set of cases that include credible ways to achieve that goal, which will be considered on our strategy and support a more detailed decarbonisation pathway towards Galp's ambition to achieve net zero by 2050. We are also aware that the alignment with a 1.5º world remains a challenge given the lack of consensus on a methodology to evaluate that alignment and the absence of a finalised Science Based Targets Initiative guidance and methodology for the oil and gas sector to set targets aligned with 1.5ºC climate scenarios.

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios: RCP 4.5	Company-wide	<Not Applicable>	Galp used scenario analysis to assess the physical risks and opportunities related to climate change. These correspond to IPCC scenarios (Intergovernmental Panel on Climate Change). The RCP 4.5, which points to a scenario with temperature increases between 2.5 and 3.0°C in 2100 was paired with Galp's slower transition scenario which is based on IEA's STEPS. Several physical variables were evaluated and quantified. These were, for chronic risks: increase in mean temperature (ºC), sea level rise (m), difference in mean precipitation (mm), mean wind (m/s). And for acute risks: number of hot days (Tmax>30°C), number of cold days (Tmin<0°C), number of days with extreme wind (wind speed>10 and 20m/s), number of days with extreme precipitation (days with precipitation>100mm), number of days with high fire risk (fire weather index>45). All the values for these variables were obtained considering the geographic coordinates of the various assets, using three different time horizons, considering the short, medium and long term (as recommend by TCFD): 2025, 2030 and 2050. The data was collected from reliable sources such as initiatives developed and sponsored by the European Union (Copernicus) and the World Meteorological Organization (Cordex). Local sources are used as complementary (and back test) sources (Portal do Clima, Projeções Climáticas for Brazil, etc.).
Physical climate scenarios: RCP 1.9	Company-wide	<Not Applicable>	Galp used scenario analysis to assess the physical risks and opportunities related to climate change. These correspond to IPCC scenarios (Intergovernmental Panel on Climate Change). The RCP 1.9, which points to a 1.5ºC temperature increase by 2100 and it was paired with Galp's accelerated transition scenario which is based on IEA's SDS. Several physical variables were evaluated and quantified. These were, for chronic risks: increase in mean temperature (ºC), sea level rise (m), difference in mean precipitation (mm), mean wind (m/s). And for acute risks: number of hot days (Tmax>30°C), number of cold days (Tmin<0°C), number of days with extreme wind (wind speed>10 and 20m/s), number of days with extreme precipitation (days with precipitation>100mm), number of days with high fire risk (fire weather index>45). All the values for these variables were obtained considering the geographic coordinates of the various assets, using three different time horizons, considering the short, medium and long term (as recommend by TCFD): 2025, 2030 and 2050. The data was collected from reliable sources such as initiatives developed and sponsored by the European Union (Copernicus) and the World Meteorological Organization (Cordex). Local sources are used as complementary (and back test) sources (Portal do Clima, Projeções Climáticas for Brazil, etc.).
Physical climate scenarios: RCP 2.6	Company-wide	<Not Applicable>	Galp used scenario analysis to assess the physical risks and opportunities related to climate change. These correspond to IPCC scenarios (Intergovernmental Panel on Climate Change). The RCP 2.6, which points to a temperature increase below 2ºC by 2100. Several physical variables were evaluated and quantified. These were, for chronic risks: increase in mean temperature (ºC), sea level rise (m), difference in mean precipitation (mm), mean wind (m/s). And for acute risks: number of hot days (Tmax>30°C), number of cold days (Tmin<0°C), number of days with extreme wind (wind speed>10 and 20m/s), number of days with extreme precipitation (days with precipitation>100mm), number of days with high fire risk (fire weather index>45). All the values for these variables were obtained considering the geographic coordinates of the various assets, using three different time horizons, considering the short, medium and long term (as recommend by TCFD): 2025, 2030 and 2050. The data was collected from reliable sources such as initiatives developed and sponsored by the European Union (Copernicus) and the World Meteorological Organization (Cordex). Local sources are used as complementary (and back test) sources (Portal do Clima, Projeções Climáticas for Brazil, etc.).
Transition scenarios: IEA SDS	Company-wide	<Not Applicable>	Galp developed macro assumptions aligned with accelerated transition scenarios from external providers consistent with IEA SDS (well below 2ºC) for key macro variables. These can be used to evaluate the impact of the energy transition, and the influence of associated market variables on the company's businesses, considering variables such as: crude oil brent price ($/bbl), gas price, CO2 price ($/ton), baseload power (EUR/MWh), refining margin ($ /bbl) , demand for commodities such as oil, gas and electricity, and the electricity generation mix between coal, oil, gas, nuclear, hydro, bio and other renewable sources (including solar and wind). Whenever justified these variables are also calculated and available at a geography level.
Transition scenarios: Bespoke transition scenario	Company-wide	2.1ºC - 3ºC	Galp used internally calculated variables aligned with unfavourable transition scenario to test the resilience of its businesses to adverse market conditions.s . The variables used in these stress tests include market variables on the company's businesses was evaluated, considering variables such as: crude oil brent price ($/bbl), gas price, CO2 price ($/ton), baselod power (EUR/MWh), refining margin ($ /bbl) , demand for commodities such as oil, gas and electricity, and the electricity generation mix between coal, oil, gas, nuclear, hydro, bio and other renewable sources (including solar and wind). Whenever justified these variables are also calculated and available at a geography level.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

Galp used scenario analysis to identify the main risks and opportunities that climate related issues pose to its businesses worldwide. The company sought to learn how its future strategy would adapt to different temperature and accompanying economic scenarios by answering to questions like:

- How will chronic climate related risks impact the company's activities in the different businesses and geographies where it operates?
- How will acute climate related risks affect the company's operations, and upstream and downstream activities across businesses and geographies?
- How will demand for products with different carbon intensities evolve in contrasting climate scenarios? And how will their prices change?
- How can future regulation evolve and affect our businesses and which businesses are the most resilient and sensitive to these changes?
- How can climate change related physical and transition risks affect the value of our assets?
- What variables should be closely analysed and monitored to support informed decision-making?
- What forces and developments have the greatest ability to shape future performance?
- What technologies will play a major role future energy supply?
- How will profits and margins be affected by different climatic and regulatory trends?

Results of the climate-related scenario analysis with respect to the focal questions

Scenario analysis allows companies to identify and quantify the most relevant physical and transition risks and opportunities in the short, medium and long terms.
The company's refreshed strategy and ambition to thrive during the energy transition mean that the company is well positioned to take advantage of numerous opportunities regarding the increase in demand from low carbon fuels such as renewable electricity, advanced biofuels, green hydrogen and batteries given its ongoing and planned investments in renewable electricity production, electric mobility and decentralized power production, HVO, green H2 production and the in the battery value chain. This strategy will be materialized by allocating c. 70% net CAPEX to low carbon opportunities in 2023-2025, while extracting value from our low carbon intensity, low breakeven and high cash flow Upstream portfolio.
This will allow Galp to decarbonize the energy it produces and sells, anchored on several key initiatives: 1) grow our renewable electricity installed capacity from c. 1.4 GW in operation by developing its current 9 GW portfolio across Iberia and Brazil; 2) reducing emissions from industrial operations and transforming our Sines Refinery into a Green Energy Park by improving the efficiency of the refinery reducing its emissions, through implementation of a series of energy efficiency projects, producing green H2 to fuel the plant, starting with a 2MW pilot electrolyser, which could be scaled up to 700 MW by 2030; 3) Sines will also see investment in advanced biofuels in the form of a 270 ktpa HVO unit capable of producing sustainable road and aviation fuels. 4) Galp's commercial portfolio will also be adapted to suit a low carbon future: the Electric Mobility network will reach 10k charging points in Iberia by 2025, and in 2022 the company offered the first low carbon fuels to aviation and maritime transport. Galp plans to continue expanding its low carbon fuel offer for all modes of transport (road, maritime and aviation) and adjust low carbon fuel blending to adapt to upcoming regulation and customer demand. Through Galp Solar, we make available decentralized energy (solar PV) production and storage solutions, enabling our customers to lower their energy purchases and carbon footprint, aiming >300 MW installed capacity by 2030; 5) Galp joined forces with Northvolt and created Aurora, a JV that aims to develop Europe's largest and most sustainable lithium conversion plant, with an up to 35 ktpa LiOH production capacity.
In the long term, the most relevant physical chronic risk identified was the number of consecutive days with temperatures above 35ºC, which will affect the productivity and revenues from solar PV farms. The most relevant acute physical is posed by high wind speed events that might compromise the integrity of structures like storage tanks. Besides the identification of these risks, scenario analysis also allowed for the development of accompanying mitigation plans.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Climate change risks and opportunities have impacted Galp's products and services portfolio. The company is committed to supply its customers with low carbon products and providing them with solutions to improve their energy efficiency. In terms of energy efficiency services, Galp now has 2 businesses - Galp Solar and DaLoop. Galp Solar sells decentralized power production, monitoring and storage systems catering to the B2C and B2B segments. Galp Solar uses advanced technologies, like satellite image analysis, artificial intelligence algorithms and big data, to optimise the acquisition and installation cost, offering a solution that caters to each customer's needs. At the end of 2022, Galp Solar already had installed c.32 MW, having completed more than 10,000 installations in Iberia. These represent an estimated production of about 3.4 GWh of renewable solar power generated since their installation and about 500 tonCO2e avoided Galp, through DaLoop, offers a Software as Service (SaaS) platform for managing EV charging infrastructure, the fleets and people that use it. DaLoop provides this platform to various entities such as charge point operators, mobility service providers, utilities, and facilities, offering them the necessary tools to securely expand and implement solutions for the fast-growing EV ecosystem. In 2022, DaLoop provided strategic solutions to support Galp's Electric Mobility business unit, secured customers in the UK and Spain, and completed a strategic project in the US as part of the Biden administration's "Build Back Better" regional challenge. Along with its regular electricity retail offer, since 2020 Galp started offering its B2C and B2B customers the possibility to purchase 100% renewable electricity. The company is also committed to deliver sustainable low carbon fuels to all modes of transport, having become a first mover in both air and water borne transport by providing low carbon fuels for the first Sustainable Aviation Fuel (SAF) powered flights from Portugal in 2022. In respect to water-borne transport, Galp started supplying sustainable, residual feedstocks derived HVO diesel to several Douro Azul ships, a Portuguese cruise company. The company will also build an advance HVO unit in Sines with a 270 ktpa capacity capable of producing sustainable diesel and SAF
Supply chain and/or value chain	Yes	Climate change risks and opportunities have affected Galp's supply value chain. Galp aims to play an active role in changing the energy paradigm, in particular by anticipating new trends, by adapting its portfolio to future needs, creating synergies with the present activity whenever possible, consolidating the Company's knowledge and enhancing asset diversification, with the corresponding risk reduction, namely through lower carbon intensity energy and new business solutions such as development of green hydrogen solutions with potential to reach 700 MW of electrolyser capacity by 2030, entering the Li-on battery value in partnership with Northvolt and solar energy through the sale of PV panels. Galp set an ambition to install 4 GW of renewable electricity generation capacity by 2025, reaching 12 GW by 2030 with operations in diverse geographical settings. The company ended 2022 with 1.4 GW of renewable projects in operation and a portfolio of c. 9 GWp distributed between Iberia and Brazil. Moreover Galp and TotalEnergies agreed to jointly explore and develop potential offshore wind opportunities along the Portuguese coast, combining Galp's strong presence, experience, and knowledge in the Portuguese market with TotalEnergies' expertise in large-scale offshore wind projects. The company has also announced Aurora, a JV with Northvolt that aims to develop, in Portugal, Europe's largest and most sustainable lithium conversion plant with up to 35ktpa LiOH capacity, equivalent to the amount necessary to produce >700k EV batteries annually. Galp will also invest in a 270 ktpa capacity HVO unit at Sines which will be able to produce biodiesel and SAF, contributing to the decarbonization of road and aerial transport. This will materialize a c. 200M€ investment with targeted FID in 2023. Additionally in late 2020 Galp announced the discontinuing of refining operations in the Matosinhos refinery after the first quarter of 2021. This reconfiguration will allow for a reduction of more than €90 m per year in fixed costs and investments, and more than 900 kton of CO2e emissions (scope 1 and 2) associated with the current system. The company will continue to supply the regional market, maintaining the access of the maritime terminal, storage and distributing facilities in Matosinhos and is currently assessing usage alternatives for the complex.
Investment in R&D	Yes	Climate change risks & opportunities have influenced Galp's investment in R&D as the Company believes that the goal of innovation is to build a portfolio of opportunities to boost the energy transition and accelerate the path to decarbonisation aligned with the Company's strategy, by testing new solutions and increasing the engagement with the innovation ecosystem. This means decarbonisation related projects are one of the priorities of Galp's innovation team. In 2022, Galp invested €29.7 million in R&D projects, in a total of 80 €M invested in ongoing projects, including 8 clean R&D projects The company has 3 innovation centres (Production&Operations, Commercial and Renewables), focused on building a portfolio of opportunities in the decarbonisation, optimisation, and digitalisation spaces, boosting the energy transition of the Company's different businesses, and identifying ideas and solutions that can lead to new services and products while stimulating collaboration, the innovation mindset, and culture In 2022 the Production&Operations centre analysed several technological routes for sustainable low carbon aviation and marine fuels production that can meet regulations and the company targets. There was also a focus on predictive maintenance and security while finding new solutions for an efficient energy matrix including studying biomethane and understanding the needs of other industries on their decarbonisation path. It has been working with different collaborative laboratories including Net4CO2, Bioref and Hylab studying decarbonisation solutions in the CO2, biofuels and H2 spaces. The Commercial centre partnered with startups Swobbee and Boost Logistics to launch a micro-mobility battery-swapping service, aiming to increase fleet management operations efficiency and sustainability through a decentralized charging network. Swapping stations were installed in Lisbon and Madrid, with 10k batteries swapped in the first 4 months. It also launched Optimize, which aims to protect B2B clients from the volatility of energy markets, offering them solutions to become more efficient and less dependent on the gas&power grids The Renewables innovation centre developed projects focused on digitalization, renewable energy storage and synergies between agriculture and solar power production in an Agrivoltaics partnership with Instituto Superior de Agronomia in Lisbon
Operations	Yes	Climate change risks and opportunities have greatly influenced Galp's strategy and operations. The company continues to identify and implement efficiency and emission reduction projects in its activities, which will allow it to decrease 40% of its operational emissions from its 2017 baseline. Galp's strategic goal is to build an innovative and differentiated lower carbon business through allocating 70% of its net capex to low carbon initiatives including: (i) the development of a renewable generation portfolio, with a target gross capacity of 12 GW by 2030, with production both in Europe and outside of the continent, (ii) the development of a 270 kton HVO production in the Sines refinery (iii) supporting our customers in this transition, by developing decentralised renewable energy generation and storage solutions, tailored to their needs (e.g. decentralized renewable energy production, electric mobility), development of green hydrogen solutions with potential to reach 700MW of electrolyser capacity by 2030 and entering the Li-on battery value chain through lithium chemical processing in a JV with Northvolt. In 2022, Galp invested c. 5 million in operational eco-efficiency in refining. The company also identified several projects to be implemented by 2025, with an estimated investment of €50 m which will materialize emissions savings c.100 ktonCO2e/year. In the upstream, Galp continues to ensure the sustainability and low carbon intensity (10.1 kg CO2e/boe in 2022) of its Upstream portfolio by working with partners to identify further energy efficiency and emission reduction opportunities During 2022, around 1,930 GWh of renewable energy was generated from solar photovoltaic projects in Spain and from the wind power project in Portugal, avoiding c.309 kton CO2e emissions. The company also had in place almost 2000 charging stations in Portugal and Spain, a significant increase from the previous year, allowing for the growth of electricity for mobility to 7.24 GWh correspond to an estimated 5.5ktons of avoided CO2 emissions when compared to the same energy used on an ICE vehicle, on a life cycle basis.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Capital expenditures Acquisitions and divestments Assets	Revenues: climate change related risks and opportunities have factored our financial planning process, namely revenues. The company has already developed several low carbon businesses with production and sales of low carbon energy and energy efficiency services. By the end of 2022 Galp's low carbon businesses included a gross renewable electricity installed capacity of 1.4 GW and a renewable portfolio with a further 9 GW under development, consisting in solar and wind energy projects, a FAME biodiesel operation (Enerfuel Industrial Plant in Sines), an electric mobility business with c. 2000 charging stations across Iberia and a decentralized solar power commercial business in Iberia through Galp solar as well as DaLoop that offers integrated solutions for its customers in transition to electrification, including charging, fleet management and vehicle sharing systems, encompassing more than 8,000 mobility assets. These resulted in an EU Taxonomy aligned turnover of 0.5% of the company total. With the strategic decision to strengthen the lower carbon energies in the portfolio (solar energy, wind energy, biofuels, EV, hydrogen, batteries, etc), the expectation is that the contribution of these products and services to the group's turnover will gain importance over the next decade. Capital expenditure: Galp identified several opportunities arising from development and/or expansion of low carbon projects, the ability to diversify business activities and shift in consumer preferences. To manage these opportunities, Galp is allocating 70% of its net CAPEX of c.1 bn€ per annum in the 2023-2025 period to low carbon projects including: (i) the development of a renewable generation portfolio, with a target gross capacity of 4 GW by 2025 and 12 GW by 2030, (ii) the development of a 270 kton HVO production unit capable of producing both sustainable biodiesel and SAF (iii) supporting our customers in this transition, by developing decentralised generation solutions, tailored to their needs (e.g. renewable energy production, electric mobility, provide low carbon fuels for all modes of transport), development of green hydrogen solutions with potential to reach up to 700 MW of electrolyser capacity by 2030 and developing the Li-on battery value chain through lithium chemical processing in the Aurora joint venture with NorthVolt with an expected output of up to 35 ktpa Li hydroxide. Acquisitions and divestments: In assessing new opportunities, Galp incorporates carbon into its investment analysis, through two different mechanisms. We consider a carbon price in investment decision-making processes, which together with a due diligence analysis of the activity's carbon intensity ensures the alignment of our assets and operations with a lower carbon economy and with the company's emission and intensity reduction targets by 2030. In this way, we contribute to the sustainability and resilience of our portfolio, which should be competitive, profitable and environmentally efficient and responsible. The Carbon Intensity and absolute CO2 emissions of each separate significant acquisition/divestment and overall 10-year Business Plan are also estimated and incorporated in the risk analysis to evaluate the risk of not achieving the proposed reduction targets and identify key variables and risks in its evolution. Galp discontinued the refining operations in the Matosinhos site after the first quarter of 2021. This reconfiguration will allow for a reduction of more than €90 m per year in fixed costs and investments, and around 900 kton of CO2e emissions (scope 1 and 2) associated with the current system. The company will continue to supply the regional market, maintaining the access of the maritime terminal, storage and distributing facilities in Matosinhos and is currently in the process of transforming the former petrochemical complex into a world class innovation district with part of the site being allocated for the construction of a university campus. Assets: Climate change related risks and opportunities have factored our financial planning process, namely in terms of our upstream assets. Galp presents a portfolio NPV breakeven forecast of approx. $29/bbl, resilient to lower oil price situations expected in fast transition scenarios. Moreover, the Coral FLNG gas project that came online in 2022 and the remaining Rovuma asset to be developed in Mozambique will change the upstream portfolio towards a lower carbon intensity energy mix.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with a sustainable finance taxonomy	At both the company and activity level

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric
Revenue/Turnover

Type of alignment being reported for this financial metric
Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported
EU Taxonomy for Sustainable Activities

Objective under which alignment is being reported
Total across all objectives

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)
130800000

Percentage share of selected financial metric aligned in the reporting year (%)
0.5

Percentage share of selected financial metric planned to align in 2025 (%)

Percentage share of selected financial metric planned to align in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned
The methodological approach adopted to assess eligibility included a detailed analysis of Galp's business activities , along the entire value chain, based on the delegated acts of the European Taxonomy concerning the objectives of climate change mitigation and adaptation. The identified eligible activities , linked to energy activities, are the following : • 3.10 Manufacture of hydrogen • 4.1 Electricity generation using solar photovoltaic technology • 4.3 Electricity generation from wind power • 4.13 Manufacture of biogas and biofuels for use in transport and of bioliquids • 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) • 7.6 Installation, maintenance and repair of renewable energy technologies.
Following the identification of the eligible activities, Galp assessed their alignment with the technical screening criteria. The first step was to verify the compliance of the eligible activities with the substantial contribution to the mitigation of climate change criteria. Although, most of our eligible activities are applicable for both the climate change mitigation and climate change adaptation environmental objectives, we consider that in 2022 we contributed more significantly to the mitigation of climate change. In addition to the substantial contribution criteria, the EU Taxonomy regulation includes the principle of Do No Significant Harm (DNSH). The DNSH verified Galps compliance with the minimum requirements that need to be met to avoid significant harm to any of the relevant environmental objectives. To find out about the relevant initiatives and commitments to the DNSH assessment, for each other environmental objectives, please visit our Annual Integrated Report 2022 pages 382-388. - https://www.galp.com/corp/Portals/0/Recursos/Investidores/SharedResources/Relatorios/en/2022/AIRGalp2022EN0Full.pdf
Finally, the compliance with the minimum safeguards is a must for economic activities to be considered Taxonomy-aligned. Galp complies with the minimum safeguards as

set out by EU Taxonomy, in accordance with Article 18 of the regulation. These minimum safeguards are assessed according to different standards, such as: • The OECD Guidelines for Multinational Enterprises • The UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work • The International Bill of Human Rights. Galp analysed its policies and procedures regarding human rights, bribery/ corruption, taxation, and fair competition, and concluded that they comply with the different minimum safeguards standards.

Financial Metric
CAPEX

Type of alignment being reported for this financial metric
Please select

Taxonomy under which information is being reported
<Not Applicable>

Objective under which alignment is being reported
<Not Applicable>

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)
401000000

Percentage share of selected financial metric aligned in the reporting year (%)
33.5

Percentage share of selected financial metric planned to align in 2025 (%)
75

Percentage share of selected financial metric planned to align in 2030 (%)
82

Describe the methodology used to identify spending/revenue that is aligned
The methodological approach adopted to assess eligibility included a detailed analysis of Galp's business activities , along the entire value chain, based on the delegated acts of the European Taxonomy concerning the objectives of climate change mitigation and adaptation. The identified eligible activities , linked to energy activities, are the following : • 3.10 Manufacture of hydrogen • 4.1 Electricity generation using solar photovoltaic technology • 4.3 Electricity generation from wind power • 4.13 Manufacture of biogas and biofuels for use in transport and of bioliquids • 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) • 7.6 Installation, maintenance and repair of renewable energy technologies.
Following the identification of the eligible activities, Galp assessed their alignment with the technical screening criteria. The first step was to verify the compliance of the eligible activities with the substantial contribution to the mitigation of climate change criteria. Although, most of our eligible activities are applicable for both the climate change mitigation and climate change adaptation environmental objectives, we consider that in 2022 we contributed more significantly to the mitigation of climate change. In addition to the substantial contribution criteria, the EU Taxonomy regulation includes the principle of Do No Significant Harm (DNSH). The DNSH verified Galps compliance with the minimum requirements that need to be met to avoid significant harm to any of the relevant environmental objectives. To find out about the relevant initiatives and commitments to the DNSH assessment, for each other environmental objectives, please visit our Annual Integrated Report 2022 - pages 382-388.
https://www.galp.com/corp/Portals/0/Recursos/Investidores/SharedResources/Relatorios/en/2022/AIRGalp2022EN0Full.pdf
Finally, the compliance with the minimum safeguards is a must for economic activities to be considered Taxonomy-aligned. Galp complies with the minimum safeguards as set out by EU Taxonomy, in accordance with Article 18 of the regulation. These minimum safeguards are assessed according to different standards, such as: The OECD Guidelines for Multinational Enterprises, The UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work, The International Bill of Human Rights Galp analysed its policies and procedures regarding human rights, bribery/ corruption, taxation, and fair competition, and concluded that they comply with the different minimum safeguards standards .
In addition to the activities included on the Eu Taxonomy, Galp considers it relevant to report the investment in other activities that, so far, are not eligible but may contribute significantly to mitigate climate change. In this sense, Galp includes in its Low Carbon capital allocation the investments in the battery value chain as it represents an essential activity in the value chain of battery manufacture, which is a taxonomy eligible activity. Furthermore, Galp implements several projects to reduce CO2 emissions from its refining business, and although it is an investment in activities that are not eligible, Galp considers that it represents an important contribution to climate change mitigation by avoiding emissions and lowering the life cycle carbon intensity of the refined fuels. Finally, Galp also includes the renewables and other eligible non-consolidated business under the EU Taxonomy. Considering our internal classification of sustainable activities, Galp's strategic plan foresees over 70% of the net capital expenditures planned during 2023-2025 to be allocated to low carbon activities.

Financial Metric
OPEX

Type of alignment being reported for this financial metric
Please select

Taxonomy under which information is being reported
<Not Applicable>

Objective under which alignment is being reported
<Not Applicable>

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)
1700000

Percentage share of selected financial metric aligned in the reporting year (%)
0.5

Percentage share of selected financial metric planned to align in 2025 (%)

Percentage share of selected financial metric planned to align in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned
The methodological approach adopted to assess eligibility included a detailed analysis of Galp's business activities , along the entire value chain, based on the delegated acts of the European Taxonomy concerning the objectives of climate change mitigation and adaptation. The identified eligible activities , linked to energy activities, are the following : • 3.10 Manufacture of hydrogen • 4.1 Electricity generation using solar photovoltaic technology • 4.3 Electricity generation from wind power • 4.13 Manufacture of biogas and biofuels for use in transport and of bioliquids • 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) • 7.6 Installation, maintenance and repair of renewable energy technologies.
Following the identification of the eligible activities, Galp assessed their alignment with the technical screening criteria. The first step was to verify the compliance of the

eligible activities with the substantial contribution to the mitigation of climate change criteria. Although, most of our eligible activities are applicable for both the climate change mitigation and climate change adaptation environmental objectives, we consider that in 2022 we contributed more significantly to the mitigation of climate change. In addition to the substantial contribution criteria, the EU Taxonomy regulation includes the principle of Do No Significant Harm (DNSH). The DNSH verified Galps compliance with the minimum requirements that need to be met to avoid significant harm to any of the relevant environmental objectives. To find out about the relevant initiatives and commitments to the DNSH assessment, for each other environmental objectives, please visit our Annual Integrated Report 2022 - pages 382-388.
https://www.galp.com/corp/Portals/0/Recursos/Investidores/SharedResources/Relatorios/en/2022/AIRGalp2022EN0Full.pdf
Finally, the compliance with the minimum safeguards is a must for economic activities to be considered Taxonomy-aligned. Galp complies with the minimum safeguards as set out by EU Taxonomy, in accordance with Article 18 of the regulation. These minimum safeguards are assessed according to different standards, such as: • The OECD Guidelines for Multinational Enterprises • The UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work • The International Bill of Human Rights Galp analysed its policies and procedures regarding human rights, bribery/ corruption, taxation, and fair competition, and concluded that they comply with the different minimum safeguards standards.

C3.5b

(C3.5b) Quantify the percentage share of your spending/revenue that was associated with eligible and aligned activities under the sustainable finance taxonomy in the reporting year.

Economic activity
Manufacture of hydrogen

Taxonomy under which information is being reported
EU Taxonomy for Sustainable Activities

Taxonomy Alignment
Taxonomy-aligned

Financial metric(s)
CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year
<Not Applicable>

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year
<Not Applicable>

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year
<Not Applicable>

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year
<Not Applicable>

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)
2500000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year
0.2

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year
0.2

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year
0.2

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year
<Not Applicable>

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year
<Not Applicable>

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year
<Not Applicable>

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year
<Not Applicable>

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year
<Not Applicable>

Type(s) of substantial contribution
Own performance
Activity enabling mitigation

Calculation methodology and supporting information
The Taxonomy-eligible and aligned Capex consists of investments related to generation of renewable photovoltaic and wind energy, biofuels, hydrogen, renewable energy technologies and electric mobility. This KPI is calculated considering the Capex derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the total Capex (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator cover additions to tangible, intangible assets and rightof-use during 2022, as presented in Notes 5, 6 and 7 of the consolidated financial statements. The denominator also covers additions to tangible and intangible assets resulting from business combinations.
Regarding the numerator, the Capex equals the part of the capital expenditure included in the denominator that is classified as Taxonomy-eligible economic activities.

Technical screening criteria met
Yes

Details of technical screening criteria analysis
Following the identification of the eligible activities, Galp assessed their alignment with the technical screening criteria. The first step was to verify the compliance of the eligible activities with the substantial contribution to the mitigation of climate change criteria. Although, most of our eligible activities are applicable for both the climate change mitigation and climate change adaptation environmental objectives, we consider that in 2022 we contributed more significantly to the mitigation of climate change. In addition to the substantial contribution criteria, Galp also assess the compliance with the minimum requirements that need to be met to avoid significant harm to any of the relevant environmental objectives.

Do no significant harm requirements met
Yes

Details of do no significant harm analysis
Galp' performed a Do No Significant Harm assessment for each EU Taxonomy environmental objective:
1. Adaptation to climate change – Galp has been working on improving the identification and quantification of climate related risks and opportunities, including acute and chronic physical risks, and transition risks, aligned with TCFD recommendations. Their impact in operations and value-at-risk has been quantified since 2021 for all business pillars and geographies.
2. Sustainable use and protection of water and marine resources – Galp identifies, assesses, and manages water-related risks based on their Risk Management Policy. Galp conducts an annual water risk assessment covering all operated sites, aiming for efficient and sustainable water use, especially in water-stressed areas. All Projects' environmental impacts, including water impacts, are monitored and assessed.
3. Transition to a circular economy – Galp is dedicated to promoting circularity in its value chain, emphasizing resource and material reuse and recycling. The company's focus on circularity in emerging value chains like the Lithium Battery Value Chain.
4. Pollution prevention and control – Galp adheres to all applicable norms and regulations, ensuring the responsible use and handling of chemicals to limit their impact.
5. Protection and restoration of biodiversity and ecosystems – Galp conducts environmental impact assessments and implements necessary mitigation and compensation measures. Galp performs annual biodiversity risk assessments at all operated sites, actively working to preserve biodiversity and natural areas. We are continuously working in assessing and monitoring the environmental impacts of our projects in areas where we operate, globally or nationally relevant for biodiversity, following the mitigation hierarchy. Adding to this and focusing on creating a positive impact, our renewables business is already taking action in new sites, particularly in PV solar assets, ensuring a renewable power plant fully integrated as part as the ecosystem.

Minimum safeguards compliance requirements met
Yes

Details of minimum safeguards compliance analysis
The compliance with the minimum safeguards is essential for economic activities to be considered Taxonomy-aligned. Galp complies with the minimum safeguards as set out by EU Taxonomy, in accordance with Article 18 of the regulation. These minimum safeguards are assessed according to different standards, such as: The OECD Guidelines for Multinational Enterprises; The UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work; The International Bill of Human Rights. To assess the compliance, we analysed our policies and procedures regarding human rights, bribery/ corruption, taxation, and fair competition, and concluded that they comply with the different minimum safeguards standards.

Economic activity
Electricity generation using solar photovoltaic technology

Taxonomy under which information is being reported
EU Taxonomy for Sustainable Activities

Taxonomy Alignment
Taxonomy-aligned

Financial metric(s)
Turnover
CAPEX
OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
90.4

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year
0.3

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year
0.3

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year
0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year
<Not Applicable>

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)
369900000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year
31

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year
31

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year
0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year
<Not Applicable>

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)
600000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year
0.2

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year
0.2

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year
0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year
<Not Applicable>

Type(s) of substantial contribution
Own performance
Activity enabling mitigation

Calculation methodology and supporting information
CAPEX: The Taxonomy-eligible and aligned Capex consists of investments related to generation of renewable photovoltaic and wind energy, biofuels, hydrogen, renewable energy technologies and electric mobility. This KPI is calculated considering the Capex derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the total Capex (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator cover additions to tangible, intangible assets and rightof-use during 2022, as presented in Notes 5, 6 and 7 of the consolidated financial statements. The denominator also covers additions to tangible and intangible assets resulting from business combinations.
Regarding the numerator, the Capex equals the part of the capital expenditure included in the denominator that is classified as Taxonomy-eligible economic activities.
Turnover: The Taxonomy-eligible and aligned turnover, includes revenues from goods and services related to generation of renewable photovoltaic and wind energy, renewable energy technologies, electric mobility and biofuels. This KPI is calculated considering the net turnover derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the net turnover (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator is based on our consolidated net turnover in accordance with IAS 1, presented with further detail in Note 24 of the consolidated financial statements.
OPEX: This KPI is calculated considering the Opex derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the total Opex (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator covers direct non-capitalised costs that relate to research and development, building renovation measures, short-term lease, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets of property, plant and equipment by the undertaking or third party to whom activities are outsourced that are necessary to ensure the continued and effective functioning of such assets. Regarding the numerator, the Opex equals the part of the operating expenditure included in the denominator that is classified as Taxonomy-eligible and aligned economic activities.

Technical screening criteria met
Yes

Details of technical screening criteria analysis
Following the identification of the eligible activities, Galp assessed their alignment with the technical screening criteria. The first step was to verify the compliance of the eligible activities with the substantial contribution to the mitigation of climate change criteria. Although, most of our eligible activities are applicable for both the climate change mitigation and climate change adaptation environmental objectives, we consider that in 2022 we contributed more significantly to the mitigation of climate change. In addition to the substantial contribution criteria, Galp also assess the compliance with the minimum requirements that need to be met to avoid significant harm to any of the relevant environmental objectives.

Do no significant harm requirements met
Yes

Details of do no significant harm analysis
Galp performed a Do No Significant Harm assessment for each EU Taxonomy environmental objective:

1. Adaptation to climate change – Galp has been working on improving the identification and quantification of climate related risks and opportunities, including acute and chronic physical risks, and transition risks, aligned with TCFD recommendations. Their impact in operations and value-at-risk has been quantified since 2021 for all business pillars and geographies.

2. Sustainable use and protection of water and marine resources – Galp identifies, assesses, and manages water-related risks based on their Risk Management Policy. Galp conducts an annual water risk assessment covering all operated sites, aiming for efficient and sustainable water use, especially in water-stressed areas. All Projects' environmental impacts, including water impacts, are monitored and assessed.

3. Transition to a circular economy – Galp is dedicated to promoting circularity in its value chain, emphasizing resource and material reuse and recycling. The company’s focus on circularity in emerging value chains like the Lithium Battery Value Chain.

4. Pollution prevention and control – Galp adheres to all applicable norms and regulations, ensuring the responsible use and handling of chemicals to limit their impact.

5. Protection and restoration of biodiversity and ecosystems – Galp conducts environmental impact assessments and implements necessary mitigation and compensation measures. Galp performs annual biodiversity risk assessments at all operated sites, actively working to preserve biodiversity and natural areas. We are continuously working in assessing and monitoring the environmental impacts of our projects in areas where we operate, globally or nationally relevant for biodiversity, following the mitigation hierarchy. Adding to this and focusing on creating a positive impact, our renewables business is already taking action in new sites, particularly in PV solar assets, ensuring a renewable power plant fully integrated as part as the ecosystem.

Minimum safeguards compliance requirements met
Yes

Details of minimum safeguards compliance analysis
The compliance with the minimum safeguards is essential for economic activities to be considered Taxonomy-aligned. Galp complies with the minimum safeguards as set out by EU Taxonomy, in accordance with Article 18 of the regulation. These minimum safeguards are assessed according to different standards, such as: The OECD Guidelines for Multinational Enterprises; The UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work; The International Bill of Human Rights. To assess the compliance, we analysed our policies and procedures regarding human rights, bribery/ corruption, taxation, and fair competition, and concluded that they comply with the different minimum safeguards standards.

Economic activity
Electricity generation from wind power

Taxonomy under which information is being reported
EU Taxonomy for Sustainable Activities

Taxonomy Alignment
Taxonomy-aligned

Financial metric(s)
Turnover
CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
1600000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year
0

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year
0

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year
0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year
<Not Applicable>

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)
6000000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year
0.5

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year
0.5

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year
0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year
<Not Applicable>

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year
<Not Applicable>

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year
<Not Applicable>

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year
<Not Applicable>

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year
<Not Applicable>

Type(s) of substantial contribution
Own performance
Activity enabling mitigation

Calculation methodology and supporting information
CAPEX:The Taxonomy-eligible and aligned Capex consists of investments related to generation of renewable photovoltaic and wind energy, biofuels, hydrogen, renewable energy technologies and electric mobility. This KPI is calculated considering the Capex derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the total Capex (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator cover additions to tangible, intangible assets and rightof-use during 2022, as presented in Notes 5, 6 and 7 of the consolidated financial statements. The denominator also covers additions to tangible and intangible assets resulting from business combinations.
Regarding the numerator, the Capex equals the part of the capital expenditure included in the denominator that is classified as Taxonomy-eligible economic activities.

Turnover: The Taxonomy-eligible and aligned turnover, includes revenues from goods and services related to generation of renewable photovoltaic and wind energy, renewable energy technologies, electric mobility and biofuels. This KPI is calculated considering the net turnover derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the net turnover (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator is based on our consolidated net turnover in accordance with IAS 1, presented with further detail in Note 24 of the consolidated financial statements.

Technical screening criteria met
Yes

Details of technical screening criteria analysis
Following the identification of the eligible activities, Galp assessed their alignment with the technical screening criteria. The first step was to verify the compliance of the eligible activities with the substantial contribution to the mitigation of climate change criteria. Although, most of our eligible activities are applicable for both the climate change mitigation and climate change adaptation environmental objectives, we consider that in 2022 we contributed more significantly to the mitigation of climate change. In addition to the substantial contribution criteria, Galp also assess the compliance with the minimum requirements that need to be met to avoid significant harm to any of the relevant environmental objectives.

Do no significant harm requirements met
Yes

Details of do no significant harm analysis
Galp performed a Do No Significant Harm assessment for each EU Taxonomy environmental objective:

1. Adaptation to climate change – Galp has been working on improving the identification and quantification of climate related risks and opportunities, including acute and chronic physical risks, and transition risks, aligned with TCFD recommendations. Their impact in operations and value-at-risk has been quantified since 2021 for all business pillars and geographies.

2. Sustainable use and protection of water and marine resources – Galp identifies, assesses, and manages water-related risks based on their Risk Management Policy. Galp conducts an annual water risk assessment covering all operated sites, aiming for efficient and sustainable water use, especially in water-stressed areas. All Projects' environmental impacts, including water impacts, are monitored and assessed.

3. Transition to a circular economy – Galp is dedicated to promoting circularity in its value chain, emphasizing resource and material reuse and recycling. The company’s focus on circularity in emerging value chains like the Lithium Battery Value Chain.

4. Pollution prevention and control – Galp adheres to all applicable norms and regulations, ensuring the responsible use and handling of chemicals to limit their impact.

5. Protection and restoration of biodiversity and ecosystems – Galp conducts environmental impact assessments and implements necessary mitigation and compensation measures. Galp performs annual biodiversity risk assessments at all operated sites, actively working to preserve biodiversity and natural areas. We are continuously working in assessing and monitoring the environmental impacts of our projects in areas where we operate, globally or nationally relevant for biodiversity, following the mitigation hierarchy. Adding to this and focusing on creating a positive impact, our renewables business is already taking action in new sites, particularly in PV solar assets, ensuring a renewable power plant fully integrated as part as the ecosystem.

Minimum safeguards compliance requirements met
Yes

Details of minimum safeguards compliance analysis
The compliance with the minimum safeguards is essential for economic activities to be considered Taxonomy-aligned. Galp complies with the minimum safeguards as set out by EU Taxonomy, in accordance with Article 18 of the regulation. These minimum safeguards are assessed according to different standards, such as: The OECD Guidelines for Multinational Enterprises; The UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work; The International Bill of Human Rights. To assess the compliance, we analysed our policies and procedures regarding human rights, bribery/ corruption, taxation, and fair competition, and concluded that they comply with the different minimum safeguards standards.

Economic activity
Manufacture of biogas and biofuels for use in transport and of bioliquids

Taxonomy under which information is being reported
EU Taxonomy for Sustainable Activities

Taxonomy Alignment
Taxonomy-aligned

Financial metric(s)
Turnover
CAPEX
OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
1000000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year
0

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year
0

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year
0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year
<Not Applicable>

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)
9500000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year
0.8

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year
0.8

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year
0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year
<Not Applicable>

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)
900000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year
0.2

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year
0.2

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year
0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year
<Not Applicable>

Type(s) of substantial contribution
Activity enabling mitigation

Calculation methodology and supporting information
Turnover: The Taxonomy-eligible and aligned turnover, includes revenues from goods and services related to generation of renewable photovoltaic and wind energy, renewable energy technologies, electric mobility and biofuels. This KPI is calculated considering the net turnover derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the net turnover (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator is based on our consolidated net turnover in accordance with IAS 1, presented with further detail in Note 24 of the consolidated financial statements.

CAPEX:The Taxonomy-eligible and aligned Capex consists of investments related to generation of renewable photovoltaic and wind energy, biofuels, hydrogen, renewable energy technologies and electric mobility. This KPI is calculated considering the Capex derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the total Capex (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator cover additions to tangible, intangible assets and rightof-use during 2022, as presented in Notes 5, 6 and 7 of the consolidated financial statements. The denominator also covers additions to tangible and intangible assets resulting from business combinations.
Regarding the numerator, the Capex equals the part of the capital expenditure included in the denominator that is classified as Taxonomy-eligible economic activities.

OPEX: This KPI is calculated considering the Opex derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the total Opex (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator covers direct non-capitalised costs that relate to research and development, building renovation measures, short-term lease, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets of property, plant and equipment by the undertaking or third party to whom activities are outsourced that are necessary to ensure the continued and effective functioning of such assets. Regarding the numerator, the Opex equals the part of the operating expenditure included in the denominator that is classified as Taxonomy-eligible and aligned economic activities.

Technical screening criteria met
Yes

Details of technical screening criteria analysis
Following the identification of the eligible activities, Galp assessed their alignment with the technical screening criteria. The first step was to verify the compliance of the eligible activities with the substantial contribution to the mitigation of climate change criteria. Although, most of our eligible activities are applicable for both the climate change mitigation and climate change adaptation environmental objectives, we consider that in 2022 we contributed more significantly to the mitigation of climate change. In addition to the substantial contribution criteria, Galp also assess the compliance with the minimum requirements that need to be met to avoid significant harm to any of the relevant environmental objectives.

Do no significant harm requirements met
Yes

Details of do no significant harm analysis
Galp performed a Do No Significant Harm assessment for each EU Taxonomy environmental objective:

1. Adaptation to climate change – Galp has been working on improving the identification and quantification of climate related risks and opportunities, including acute and chronic physical risks, and transition risks, aligned with TCFD recommendations. Their impact in operations and value-at-risk has been quantified since 2021 for all business pillars and geographies.

2. Sustainable use and protection of water and marine resources – Galp identifies, assesses, and manages water-related risks based on their Risk Management Policy. Galp conducts an annual water risk assessment covering all operated sites, aiming for efficient and sustainable water use, especially in water-stressed areas. All Projects' environmental impacts, including water impacts, are monitored and assessed.

3. Transition to a circular economy – Galp is dedicated to promoting circularity in its value chain, emphasizing resource and material reuse and recycling. The company's focus on circularity in emerging value chains like the Lithium Battery Value Chain.

4. Pollution prevention and control – Galp adheres to all applicable norms and regulations, ensuring the responsible use and handling of chemicals to limit their impact.

5. Protection and restoration of biodiversity and ecosystems – Galp conducts environmental impact assessments and implements necessary mitigation and compensation

measures. Galp performs annual biodiversity risk assessments at all operated sites, actively working to preserve biodiversity and natural areas. We are continuously working in assessing and monitoring the environmental impacts of our projects in areas where we operate, globally or nationally relevant for biodiversity, following the mitigation hierarchy. Adding to this and focusing on creating a positive impact, our renewables business is already taking action in new sites, particularly in PV solar assets, ensuring a renewable power plant fully integrated as part as the ecosystem.

Minimum safeguards compliance requirements met
Yes

Details of minimum safeguards compliance analysis
The compliance with the minimum safeguards is essential for economic activities to be considered Taxonomy-aligned. Galp complies with the minimum safeguards as set out by EU Taxonomy, in accordance with Article 18 of the regulation. These minimum safeguards are assessed according to different standards, such as: The OECD Guidelines for Multinational Enterprises; The UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work; The International Bill of Human Rights. To assess the compliance, we analysed our policies and procedures regarding human rights, bribery/ corruption, taxation, and fair competition, and concluded that they comply with the different minimum safeguards standards.

Economic activity
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)

Taxonomy under which information is being reported
EU Taxonomy for Sustainable Activities

Taxonomy Alignment
Taxonomy-aligned

Financial metric(s)
Turnover
CAPEX
OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
4800000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year
0.02

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year
0.02

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year
0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year
<Not Applicable>

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)
9300000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year
0.8

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year
0.8

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year
0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year
<Not Applicable>

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)
100000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year
0.03

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year
0.03

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year
0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year
<Not Applicable>

Type(s) of substantial contribution
Activity enabling mitigation

Calculation methodology and supporting information
Turnover: The Taxonomy-eligible and aligned turnover, includes revenues from goods and services related to generation of renewable photovoltaic and wind energy, renewable energy technologies, electric mobility and biofuels. This KPI is calculated considering the net turnover derived from products and services associated with

Taxonomy-eligible and aligned economic activities (numerator) divided by the net turnover (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator is based on our consolidated net turnover in accordance with IAS 1, presented with further detail in Note 24 of the consolidated financial statements.

CAPEX:The Taxonomy-eligible and aligned Capex consists of investments related to generation of renewable photovoltaic and wind energy, biofuels, hydrogen, renewable energy technologies and electric mobility. This KPI is calculated considering the Capex derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the total Capex (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator cover additions to tangible, intangible assets and rightof-use during 2022, as presented in Notes 5, 6 and 7 of the consolidated financial statements. The denominator also covers additions to tangible and intangible assets resulting from business combinations.
Regarding the numerator, the Capex equals the part of the capital expenditure included in the denominator that is classified as Taxonomy-eligible economic activities.

OPEX: This KPI is calculated considering the Opex derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the total Opex (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator covers direct non-capitalised costs that relate to research and development, building renovation measures, short-term lease, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets of property, plant and equipment by the undertaking or third party to whom activities are outsourced that are necessary to ensure the continued and effective functioning of such assets. Regarding the numerator, the Opex equals the part of the operating expenditure included in the denominator that is classified as Taxonomy-eligible and aligned economic activities.

Technical screening criteria met
Yes

Details of technical screening criteria analysis
Following the identification of the eligible activities, Galp assessed their alignment with the technical screening criteria. The first step was to verify the compliance of the eligible activities with the substantial contribution to the mitigation of climate change criteria. Although, most of our eligible activities are applicable for both the climate change mitigation and climate change adaptation environmental objectives, we consider that in 2022 we contributed more significantly to the mitigation of climate change. In addition to the substantial contribution criteria, Galp also assess the compliance with the minimum requirements that need to be met to avoid significant harm to any of the relevant environmental objectives.

Do no significant harm requirements met
Yes

Details of do no significant harm analysis
Galp performed a Do No Significant Harm assessment for each EU Taxonomy environmental objective:

1. Adaptation to climate change – Galp has been working on improving the identification and quantification of climate related risks and opportunities, including acute and chronic physical risks, and transition risks, aligned with TCFD recommendations. Their impact in operations and value-at-risk has been quantified since 2021 for all business pillars and geographies.

2. Sustainable use and protection of water and marine resources – Galp identifies, assesses, and manages water-related risks based on their Risk Management Policy. Galp conducts an annual water risk assessment covering all operated sites, aiming for efficient and sustainable water use, especially in water-stressed areas. All Projects' environmental impacts, including water impacts, are monitored and assessed.

3. Transition to a circular economy – Galp is dedicated to promoting circularity in its value chain, emphasizing resource and material reuse and recycling. The company’s focus on circularity in emerging value chains like the Lithium Battery Value Chain.

4. Pollution prevention and control – Galp adheres to all applicable norms and regulations, ensuring the responsible use and handling of chemicals to limit their impact.

5. Protection and restoration of biodiversity and ecosystems – Galp conducts environmental impact assessments and implements necessary mitigation and compensation measures. Galp performs annual biodiversity risk assessments at all operated sites, actively working to preserve biodiversity and natural areas. We are continuously working in assessing and monitoring the environmental impacts of our projects in areas where we operate, globally or nationally relevant for biodiversity, following the mitigation hierarchy. Adding to this and focusing on creating a positive impact, our renewables business is already taking action in new sites, particularly in PV solar assets, ensuring a renewable power plant fully integrated as part as the ecosystem.

Minimum safeguards compliance requirements met
Yes

Details of minimum safeguards compliance analysis
The compliance with the minimum safeguards is essential for economic activities to be considered Taxonomy-aligned. Galp complies with the minimum safeguards as set out by EU Taxonomy, in accordance with Article 18 of the regulation. These minimum safeguards are assessed according to different standards, such as: The OECD Guidelines for Multinational Enterprises; The UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work; The International Bill of Human Rights. To assess the compliance, we analysed our policies and procedures regarding human rights, bribery/ corruption, taxation, and fair competition, and concluded that they comply with the different minimum safeguards standards.

Economic activity
Installation, maintenance and repair of renewable energy technologies

Taxonomy under which information is being reported
EU Taxonomy for Sustainable Activities

Taxonomy Alignment
Taxonomy-aligned

Financial metric(s)
Turnover
CAPEX
OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
33100000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year
0.1

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

0.1

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year
0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year
<Not Applicable>

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)
3400000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year
0.3

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year
0.3

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year
0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year
<Not Applicable>

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)
100000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year
0.03

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year
0.03

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year
0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
<Not Applicable>

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year
<Not Applicable>

Type(s) of substantial contribution
Activity enabling mitigation

Calculation methodology and supporting information
Turnover: The Taxonomy-eligible and aligned turnover, includes revenues from goods and services related to generation of renewable photovoltaic and wind energy, renewable energy technologies, electric mobility and biofuels. This KPI is calculated considering the net turnover derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the net turnover (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator is based on our consolidated net turnover in accordance with IAS 1, presented with further detail in Note 24 of the consolidated financial statements.

CAPEX:The Taxonomy-eligible and aligned Capex consists of investments related to generation of renewable photovoltaic and wind energy, biofuels, hydrogen, renewable energy technologies and electric mobility. This KPI is calculated considering the Capex derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the total Capex (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator cover additions to tangible, intangible assets and rightof-use during 2022, as presented in Notes 5, 6 and 7 of the consolidated financial statements. The denominator also covers additions to tangible and intangible assets resulting from business combinations.
Regarding the numerator, the Capex equals the part of the capital expenditure included in the denominator that is classified as Taxonomy-eligible economic activities.

OPEX: This KPI is calculated considering the Opex derived from products and services associated with Taxonomy-eligible and aligned economic activities (numerator) divided by the total Opex (denominator), for the financial year from 1 January 2022 until 31 December 2022. The denominator covers direct non-capitalised costs that relate to research and development, building renovation measures, short-term lease, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets of property, plant and equipment by the undertaking or third party to whom activities are outsourced that are necessary to ensure the continued and effective functioning of such assets. Regarding the numerator, the Opex equals the part of the operating expenditure included in the denominator that is classified as Taxonomy-eligible and aligned economic activities.

Technical screening criteria met
Yes

Details of technical screening criteria analysis
Following the identification of the eligible activities, Galp assessed their alignment with the technical screening criteria. The first step was to verify the compliance of the eligible activities with the substantial contribution to the mitigation of climate change criteria. Although, most of our eligible activities are applicable for both the climate change mitigation and climate change adaptation environmental objectives, we consider that in 2022 we contributed more significantly to the mitigation of climate change. In addition to the substantial contribution criteria, Galp also assess the compliance with the minimum requirements that need to be met to avoid significant harm to any of the relevant environmental objectives.

Do no significant harm requirements met
Yes

Details of do no significant harm analysis
Galp performed a Do No Significant Harm assessment for each EU Taxonomy environmental objective:

1. Adaptation to climate change – Galp has been working on improving the identification and quantification of climate related risks and opportunities, including acute and chronic physical risks, and transition risks, aligned with TCFD recommendations. Their impact in operations and value-at-risk has been quantified since 2021 for all

business pillars and geographies.

2. Sustainable use and protection of water and marine resources – Galp identifies, assesses, and manages water-related risks based on their Risk Management Policy. Galp conducts an annual water risk assessment covering all operated sites, aiming for efficient and sustainable water use, especially in water-stressed areas. All Projects' environmental impacts, including water impacts, are monitored and assessed.

3. Transition to a circular economy – Galp is dedicated to promoting circularity in its value chain, emphasizing resource and material reuse and recycling. The company's focus on circularity in emerging value chains like the Lithium Battery Value Chain.

4. Pollution prevention and control – Galp adheres to all applicable norms and regulations, ensuring the responsible use and handling of chemicals to limit their impact.

5. Protection and restoration of biodiversity and ecosystems – Galp conducts environmental impact assessments and implements necessary mitigation and compensation measures. Galp performs annual biodiversity risk assessments at all operated sites, actively working to preserve biodiversity and natural areas. We are continuously working in assessing and monitoring the environmental impacts of our projects in areas where we operate, globally or nationally relevant for biodiversity, following the mitigation hierarchy. Adding to this and focusing on creating a positive impact, our renewables business is already taking action in new sites, particularly in PV solar assets, ensuring a renewable power plant fully integrated as part as the ecosystem.

Minimum safeguards compliance requirements met
Yes

Details of minimum safeguards compliance analysis
The compliance with the minimum safeguards is essential for economic activities to be considered Taxonomy-aligned. Galp complies with the minimum safeguards as set out by EU Taxonomy, in accordance with Article 18 of the regulation. These minimum safeguards are assessed according to different standards, such as: The OECD Guidelines for Multinational Enterprises; The UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work; The International Bill of Human Rights. To assess the compliance, we analysed our policies and procedures regarding human rights, bribery/ corruption, taxation, and fair competition, and concluded that they comply with the different minimum safeguards standards.

C3.5c

(C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

The Galp EU Taxonomy report is subject to an existence check by the statutory auditor in accordance with the Non-Financial Reporting Directive (NFRD) (EU) 2014/95. In the future, the CSRD will require auditors to verify and express an opinion on sustainability reporting's compliance with the requirements (including taxonomy reporting under the Disclosures Delegated Act).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?
Absolute target
Intensity target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Is this a science-based target?
No, but we anticipate setting one in the next two years

Target ambition
<Not Applicable>

Year target was set
2021

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year

2017

Base year Scope 1 emissions covered by target (metric tons CO2e)
3886891

Base year Scope 2 emissions covered by target (metric tons CO2e)
226658

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
4113550

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
94.5

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
5.5

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
40

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
2468130

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
3289035

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
9107

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
3298143

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
49.5561619525714

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Galp established a target of reducing 40% its scope 1 + 2 (market-based) GHG emissions by 2030, compared to 2017 base year, on an equity basis. Target is company wide and includes all operated emissions, as well as the ones from non-operated upstream assets, on an equity basis. The SBTi organization is currently developing its methodology for the Oil&Gas sector and therefore it is its policy to pause the validation of targets for companies from the fossil fuel sector while simultaneously pausing commitments from these companies. When the SBTi methodology for the sector is developed and approved, Galp will evaluate the possibility of submitting its current or more ambitious targets for validation. In 2022 Galp increased the absolute emissions from operations (scope 1 and 2 on an equity basis) of 7.7% when compared to 2021, although this indicator still showed a decrease of 20% in relation to the 2017 baseline. This increase was related with the ongoing conflict in the Ukraine and the ensuing energy crisis which posed a challenge for all energy companies. As a consequence of these events, decisions had to be made to ensure the continuing supply of fuels at affordable prices. This implied reducing the consumption of natural gas and using refining sub -products as fuel in the operations of the Sines refinery, leading to an increase in its absolute scope 1 emissions. Additionally, the commissioning phase of the Coral FLNG, in Mozambique, involved substantial flaring, leading to a temporary spike in scope 1 emissions during the second half of 2022. The unit will soon finish the commissioning phase and subsequent activities are actively energy optimized since project design with no routine flaring. According to the IEA's Net Zero scenario, global energy-related and industrial process CO2 emissions must be reduced in about 40% by 2030 to comply with a 1.5ºC compatible emissions budget. We therefore consider this target to be 1.5ºC aligned.

Plan for achieving target, and progress made to the end of the reporting year
This target has a variable rate of progress that might be affected by external events as was the case in 2022 with the Ukraine conflict and ensuing energy crisis. Galp plans to achieve this target by reconfiguring and rationalizing its industrial assets, implementing a series of energy efficiency and electrification projects in its Sines refinery, purchasing and integrating renewable energy (green hydrogen) in its industrial activities, acquiring renewable power for its operations in Portugal and installing solar panels on its retail fuel stations and refinery. The production and usage of green hydrogen in refining operations will allow for the saving of significant emissions associated with the production of grey hydrogen from natural gas on a steam methane reformer, and Galp has plans to deploy up to 700 MW of electrolysers for green hydrogen production by 2030. Example: In 2022, Galp invested in several energy efficiency projects which reduce energy consumption and reduce emissions, including replacing boilers in the FCC unit, upgrading exchangers to more efficient technologies and replacing reactors with models that allow higher yields and lower energy usage. When fully implemented, these projects will allow reductions of >90 kton CO2e/year.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 2

Is this a science-based target?
No, but we anticipate setting one in the next two years

Target ambition
<Not Applicable>

Year target was set
2019

Target coverage
Country/area/region

Scope(s)
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year
2017

Base year Scope 1 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e)
223763

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
228035

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
<Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
98

Target year
2021

Targeted reduction from base year (%)
100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
0

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
0

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
0

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
100

Target status in reporting year
Achieved

Please explain target coverage and identify any exclusions
Galp has made the commitment to gradually acquire, until 2021, 100% of the electricity purchased in Portugal from renewable sources. In 2021 this target was achieved as Galp purchased renewable electricity for its activities located in Portugal. From 2021 onwards the company will continue purchasing renewable electricity for its operations in Portugal where the most significant part (98%) of its electricity consumprion takles place. The remaining market based scope 2 values reported in 2022 (9138t CO2e) correspond to emissions from the production of electricity acquired for activities outside of Portugal. This objective was established in 2019, having as reference scope 2 GHG emissions of 2017 (base year). Therefore, from 2021 onwards, Galp will avoid the emission of more than 220 thousand tCO2 per year from purchased electricity. The SBTi organization is currently developing its methodology for the Oil&Gas sector and therefore it is its policy to pause the validation of targets for companies from the fossil fuel sector while simultaneously pausing commitments from these companies. When the SBTi methodology for the sector is developed and approved, Galp will evaluate the possibility of submitting its current or more ambitious targets for validation. In 2022 Galp reduced its equity scope 1+2 (market-based) GHG emissions 20% compared to the 2017 baseline, still on track to achieve its 2030 target of a -40% reduction. According to the IEA's Net Zero scenario, global energy-related and industrial process CO2 emissions must be reduced in about 40% by 2030 to comply with a 1.5ºC compatible emissions budget. We therefore consider this target to be 1.5ºC aligned.

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the emissions reduction initiatives which contributed most to achieving this target
This target was achieved by purchasing guarantees of origin for renewable electricity for its operations in Portugal, which represent 98% of Galp's electricity purchases.

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number
Int 1

Is this a science-based target?
No, but we anticipate setting one in the next two years

Target ambition
<Not Applicable>

Year target was set
2021

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2
Scope 3

Scope 2 accounting method
Market-based

Scope 3 category(ies)
Category 11: Use of sold products

Intensity metric
Other, please specify (grams of CO2e (scopes 1, 2 and 3) per megajoule (MJ) of energy produced upstream (oil, gas, electricity, biofuels, hydrogen, etc) by Galp on an equity basis)

Base year
2017

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)
93.42

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure
100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure
100

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure
18

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure
<Not Applicable>

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure
17

% of total base year emissions in all selected Scopes covered by this intensity figure

Target year
2030

Targeted reduction from base year (%)
40

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]
56.052

% change anticipated in absolute Scope 1+2 emissions
-40

% change anticipated in absolute Scope 3 emissions
-40

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)
80.2

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
35.3778634125455

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
This target materialises the reduction in the carbon intensity of the company's direct energy production. It includes operational scope 1 and 2 emissions from the Company's assets and scope 3 emissions from the use of hydrocarbons, biofuels, etc it produces. Its evolution will materialize the transition of Galp's Upstream energy production from an essentially fossil profile into a low carbon focused producer with renewable electricity, biofuels and renewable hydrogen progressively replacing oil and gas. The SBTi organization is currently developing its methodology for the Oil&Gas sector and therefore it is its policy to pause the validation of targets for companies from the fossil fuel sector while simultaneously pausing commitments from these companies. When the SBTi methodology for the sector is developed and approved, Galp will evaluate the possibility of submiting its current or more ambitious targets for validation. In 2022 Galp reduced 1.7% YoY its production carbon intensity compared to previous year (2021) to 80.2 gCO2/MJ.

Plan for achieving target, and progress made to the end of the reporting year
This target has a variable rate of progress that might be affected by external events as was the case in 2022 with the Ukraine conflict and ensuing energy crisis. The emissions intensity of the energy produced by Galp decreased 14% in relation to 2017, benefiting from the increase in renewable electricity and biofuels production. This target will be achieved by growing the renewable energy production, with important investments announced in renewable electricity production, targeting 12 GW installed capacity by 2030, in biofuels with the addition of an HVO plant at Sines with a 270 ktpa capacity and green hydrogen, starting with 100 MW electrolyser capacity and growing uo to 700 MW by 2030. Galp plans to simultaneously reduce operational scope 1+2 by reconfiguring and rationalizing its industrial assets, implementing a series of energy efficiency and electrification projects in its Sines refine, acquiring renewable power for its operations in Portugal and installing solar panels on its retail fuel stations and refinery. The production and usage of green hydrogen in refining operations will also allow for the saving of significant emissions associated with the production of grey hydrogen from natural gas on a steam methane reformer. During 2022, the company produced 1.9 TWh renewable electricity and > 126 kton biofuels, including c. 25.5 kton of second-generation FAME biodiesel produced by Enerfuel and c. 101 kton of HVO produced by c-processing in the Sines refinery.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Int 2

Is this a science-based target?
No, but we anticipate setting one in the next two years

Target ambition
<Not Applicable>

Year target was set
2021

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2
Scope 3

Scope 2 accounting method
Market-based

Scope 3 category(ies)
Category 1: Purchased goods and services
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Category 4: Upstream transportation and distribution
Category 9: Downstream transportation and distribution
Category 11: Use of sold products

Intensity metric
Other, please specify (grams of CO2e (scope 1, 2 and 3) per megajoule (MJ) of all products sold by Galp on an equity basis)

Base year
2017

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)
76.3

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure
<Not Applicable>

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure
100

Target year
2030

Targeted reduction from base year (%)
20

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]
61.04

% change anticipated in absolute Scope 1+2 emissions
-20

% change anticipated in absolute Scope 3 emissions
-20

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)
73.4

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]
19.0039318479685

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
The all-downstream sales carbon intensity includes all emission scopes (1, 2 and 3) associated with the value chains of all energy products sold by Galp (liquid fuels, gas, electricity, etc) on an equity basis and its future reduction will match the progressive decarbonization of our portfolio, as more renewable and low carbon solutions are made available and adopted by our customers. The scope and categories of emissions considered in the setting of this target are aligned with the draft SBTi methodology for the Oil & Gas sector, the points in the value chain for each energy product where energy and scope 3 emissions are calculated corresponds to the one where the largest volume of product is traded, according to SBTi and IPIECA recommendations. The SBTi organization is currently developing its methodology for the Oil&Gas sector and therefore it is its policy to pause the validation of targets for companies from the fossil fuel sector while simultaneously pausing commitments from these companies. When the SBTi methodology for the sector is developed and approved, Galp will evaluate the possibility of submitting its current or more ambitious targets for validation. In 2022 Galp reduced its sales carbon intensity 0.4% YoY compared to previous year (2021) to 73.4 gCO2/MJ, benefiting from increased renewable electricity and biofuels production and changes in refinery output.

Plan for achieving target, and progress made to the end of the reporting year
This target has a variable rate of progress that might be affected by external events as was the case in 2022 with the Ukraine conflict and ensuing energy crisis. The sales carbon intensity showed a decrease of 4% in relation to the baseline, reflecting the increases in biofuels and renewable electricity production and also changes in refinery output to lighter, less carbon intensive fuels.
Galp is planning to reduce its carbon intensity by growing its renewable energy production, with important investments announced in renewable electricity production, biofuels and green hydrogen, while other opportunities in the low carbon fuels domain are under analysis. Those same products will be made available for our customers, along with other conventional liquid fuels and natural gas, lowering the intensity of downstream sales. Emissions from our Industrial operations will fall along the next decade due to the reorganization and increase in efficiency of the industrial infrastructure and the acquisition and production of renewable energy to be used in industrial processes, including renewable electricity and hydrogen. Renewable electricity continued to be Galp's main focus on low-carbon technologies in 2022. The company increased and diversified its portfolio to 9 GW distributed between Iberia and Brazi, with 1.4 GW already in operation, aiming to achieve 4 GW in operation by 2025. Moreover Galp and TotalEnergies agreed to jointly explore potential offshore wind opportunities in Portugal, and work together to develop potential offshore wind projects on the Portuguese coast. The company aims to transform the Sines Refinery working towards a more efficient oil conversion and increasing the production of sustainable fuels, such as HVO through the deployment of a 270 ktpa dedicated plant, and green hydrogen replacing grey hydrogen used in refining operations by green H2, with up to 700 MW installed capacity by 2030.. The unit was designed to have the flexibility to produce both Renewable Diesel and Renewable Jet, also known as Sustainable Aviation Fuel (SAF),and other bio co-products.Our commercial offer will also be adapted to a lower carbon intensity portfolio, with a focus on developing our Electric Mobility offer and network with the goal of reaching 10000 charging points in operation by 2025.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to increase low-carbon energy consumption or production
Net-zero target(s)
Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number
Low 1

Year target was set
2019

Target coverage
Country/area/region

Target type: energy carrier
Electricity

Target type: activity
Consumption

Target type: energy source
Renewable energy source(s) only

Base year
2019

Consumption or production of selected energy carrier in base year (MWh)
440991.6

% share of low-carbon or renewable energy in base year
58.03

Target year
2021

% share of low-carbon or renewable energy in target year
100

% share of low-carbon or renewable energy in reporting year
100

% of target achieved relative to base year [auto-calculated]
100

Target status in reporting year
Achieved

Is this target part of an emissions target?
Yes, it aligns with target Abs1, Abs2, Int1 and Int2 and was vital to reduce the company's emissions scope 2 emissions (market based) to the reported value of 9138t CO2e in 2022 from the 228035 t CO2e reported in the baseline year of our targets (2017).

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions
Galp has made the commitment to gradually acquire, until 2021, 100% of the electricity purchased in Portugal from renewable sources. Therefore, Galp has established the target of reducing its scope 2 GHG emissions to zero until 2021 in Portugal. The objective was established in 2019, having as reference scope 2 GHG emissions of 2019 (base year). This commitment will enable Galp, from 2021 onwards, to avoid the emission of approximately 100 thousand tCO2 per year. In 2020 the percentage of renewable energy in the electricity acquired by Galp in Portugal was 80% and the associated scope 2 emissions were 36 875 t CO2e, a reduction of approximately 70% in relation to the base year. In 2021 the company acquired 100% renewable electricity for its operations in Portugal, effectively achieving this target and reporting only market based scope 2 emissions of 9149 t CO2e from power purchased for operations outside of Portugal. Galp continued to purchase renewable pwer for its operations in Portugal during 2022, resulting in market based scope 2 emissions of 9138 tCO2e corresponding to emissions related with purchased electricity outside of Portugal,

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the actions which contributed most to achieving this target
Galp acquired guarantees of origin of renewable electricity for the electricity it purchased for its operations in Portugal, where the largest share of its electricity consumption (c. 98%) takes place.

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2022

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Low-carbon vehicles	Percentage of battery electric vehicles in company fleet

Target denominator (intensity targets only)
<Not Applicable>

Base year
2021

Figure or percentage in base year
0.6

Target year
2028

Figure or percentage in target year
100

Figure or percentage in reporting year
1

% of target achieved relative to base year [auto-calculated]
0.402414486921529

Target status in reporting year
New

Is this target part of an emissions target?
No, this target is an independent target defined for Galp's light duty vehicle fleet

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions
The target only includes light duty vehicles in Galp's fleet driven by Galp employees and excludes technical and heavy duty vehicles used in operations

Plan for achieving target, and progress made to the end of the reporting year
As a company focused on providing mobility solutions and the operator of a large fleet of light vehicles (>1,200), Galp is committed to deliver electric mobility solutions and decarbonise its own fleet. With these goals in mind, the company defined in 2022 a roadmap for the electrification of its light duty vehicle fleet, with all new vehicles being plug in hybrid or electric from 2022 onwards and fully electric from 2025, with full electrification of the fleet estimated for 2028, avoiding c. 5 kton CO2e/year. This decision was preceded by a survey to evaluate the project's needs, any possible barriers and the deployment or access to charging solution both in office spaces and in private residences. In 2021 the company's fleet had only 1.6% electric (0.6%) and hybrid plug in (1%) vehicles. By 2022 almost 5% of the fleet consisted of plug in hybrid (3.8%) and electric (1%) vehicles.

List the actions which contributed most to achieving this target
<Not Applicable>

Target reference number
Oth 3

Year target was set
2022

Target coverage
Business division

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Other, please specify	Other, please specify (GW of installled renewable electricity capacity)

Target denominator (intensity targets only)
<Not Applicable>

Base year
2021

Figure or percentage in base year
0.9

Target year
2025

Figure or percentage in target year
4

Figure or percentage in reporting year
1.4

% of target achieved relative to base year [auto-calculated]
16.1290322580645

Target status in reporting year
New

Is this target part of an emissions target?
No, but reflects Galp´s ambition and commitment to the energy transition and the transformation to a lower carbon ntensity company by being actively involved in the ongoing electrification of the economy, where access to renewables power will be key to support both Galp's customers and its own decarbonization ambitions. As a key decarbonisation priority, Galp aims to further build up its renewables' portfolio to 4 GW of installed capacity by 2025, reinforcing its footprint in core geographies where it

has a larger historical presence whilst also exploring alternative geographies and technologies, adding size and optionality to its portfolio. Executing this ambition will be cornerstone to the deployment of integrated value chains across Galp's businesses, strongly anchored on the need for green electrons, fuelling its grey to green ambition.

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions
This target includes solar and wind renewable installed capacity Portugal, Spain and Brazil and other relevant geographies. This will support our industrial transformation, providing the green electrons for the necessary the energy transition. As a key decarbonisation priority, Galp aims to further build up its renewables' portfolio reach 4 GW of installed capacity by 2025. During 2022 Galp's gross renewable energy generation portfolio increased from c. 5 GW to 9.0 GW including projects under operation, construction and different stages of development, located in Portugal, Spain and Brazil with c. 1.4 GW already in operation.

Plan for achieving target, and progress made to the end of the reporting year
In 2022 Galp acquired 24.99% of Titan Solar, a joint venture that detains Galp´s main renewable portfolio in Spain. At the end of 2022, Titan´s portfolio included 1.2GW of solar photovoltaic plants in operation and several projects at different stages of development with about 1.6 GW of capacity expected to be online by 2025. Galp also agreed to acquire up to c. 5 GW diversified portfolio of early stage renewable energy projects in Brazil, doubling its funnel opportunities across Brazil, Spain and Portugal to 9GW.
Also during 2022 the Company saw the Start-up of 400 MW of renewable generation capacity during the year, raising gross operating capacity at year-end to 1.4 GW, contributing to almost double the generation achieved in 2021, to 1.9 TWh (on a 100% basis). This included the first renewable generation project to start operations in Portugal, a 144 MW solar plant in Algarve.
The company ambitions to continue growing its renewable electricity producing portfolio beyond 2025, reaching 12 GW installed capacity by 2030.

List the actions which contributed most to achieving this target
<Not Applicable>

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number
NZ1

Target coverage
Company-wide

Absolute/intensity emission target(s) linked to this net-zero target
Abs1
Abs2
Int1
Int2

Target year for achieving net zero
2050

Is this a science-based target?
No, but we anticipate setting one in the next two years

Please explain target coverage and identify any exclusions
In 2021 Galp established the ambition of becoming a Net zero company until 2050, in all emission scopes and geographies where it operates, aligning its position with the commitments of EU and Portuguese government. The SBTi organization is currently developing its methodology for the Oil&Gas sector and therefore it is its policy to pause the validation of targets for companies from the fossil fuel sector while simultaneously pausing commitments from these companies. When the SBTi methodology for the sector is developed and approved, Galp will evaluate the possibility of submitting its current or more ambitious targets for validation.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?
Yes

Planned milestones and/or near-term investments for neutralization at target year
Galp's current 2030 targets do not require any carbon removals to be achieved. However, the company is aware that there will possibly be residual/hard to abate emissions that will have to be abated by 2050 in order to achieve carbon neutrality in 2050, with the amount of emissions to be neutralised limited to the c. 5-10% of baseline emissions as recommended by globally recognised target setting standards such as the SBTi Net Zero standard.
Galp is currently evaluating which would be the technological (e.g. CCUS, DAC) and/or natural solutions (e.g. forestation, ecosystem restoration, etc) that would best fit its decarbonisation strategy and future portfolio.

Planned actions to mitigate emissions beyond your value chain (optional)
Galp recently started mitigating emissions beyond its value chain. In 2022 the Company purchased carbon credits to offset the emissions of the Rock in Rio festival, an event to which the company is the main sponsor. On the road to achieve carbon neutrality in 2050, Galp will consider the use of carbon offset credits to neutralize residual or hard-to-abate emissions. The company is also looking into mitigating beyond value chain emissions using carbon credits, and into giving its clients the option of offsetting their emissions.
Carbon offsets can be important for our customers, who are increasingly concerned about their impact on climate and therefore might be interested in, through Galp, offsetting the emissions from their fuel consumption until they are replaced by viable low carbon intensity alternatives. Addressing these needs, Galp is implementing solutions that integrate offsets on its commercial offer and building capabilities and standards to manage carbon offsets and credits, from project development to trading, according to the best available recommendations to guarantee project quality and process reliability. One of these solutions is the new propane gas bottle in which the emissions from the combustion of the gas contained are compensated through investment in 4 projects to reduce or capture CO2 emissions.
Finally, it is important to reinforce that carbon offsets and associated carbon removals are complementary, not an alternative, to cutting emissions. They are not part of Galp's strategy to reach its 2030 absolute emissions and carbon intensity decarbonization targets, which will rely on the execution of the company's strategy and are supported by the simultaneous growth of sales/production of low carbon/renewable energy, increase in operational efficiency and decarbonisation of industrial assets. Carbon offsets will likely play a limited role in attaining carbon neutrality, which will be in line with globally recognised net zero target setting standards that indicate a limited range of baseline emissions may be needed to be offset by 2050.

C-OG4.2d

(C-OG4.2d) Indicate which targets reported in C4.1a/b incorporate methane emissions, or if you do not have a methane-specific emissions reduction target for your oil and gas activities, please explain why not and forecast how your methane emissions will change over the next five years.

Galp is aware of the increased relevance and urgency of cutting methane emissions to limit global temperature increases. Although the Company's methane emissions have a relatively low weight in its operational emissions at 1% in 2022 and are mostly associated with non-routine flaring in non -operated Upstream assets, Galp is also looking into ways to reduce methane emissions from its operated assets (which represent 5% of total current CH 4 emissions)in line with industry expectations. Also Targets Abs2, Int1 and Int2 (reductions of absolute scope 1+2 emission reduction by 40%, production intensity of 40% and sales intensity of 20% by 2030 in relation to 2017) are set in relation to CO2e emissions which include methane in their calculation (CO2e = CO2+CH4+N2O).

To ensure that our operations and our products are more sustainable, Galp promotes the efficient use of energy and have implemented the Best Available Technologies (BAT) expressed in the reference documents applicable to the sector, to reduce atmospheric emissions, including methane emissions. In the Upstream segment, Galp ensures that its projects are developed in accordance with the principle to meet Zero Routine flaring or venting of hydrocarbons. Additionally, we assure the monitoring and management of methane emissions from operated assets from combustion and fugitive sources and that our performance is verified by an independent third-party.

In the refining segment, Sines refinery's fugitive emissions come from the following sources: product storage, process (including the drainage network) and effluent treatment. The refinery carries out annual fugitive monitoring annual campaigns, under its Leak Detection Repair programme (LDAR). This methodology assumes the continual assessment of the leaks through a phased and iterative process of detection/measurement of leaks in equipment, followed by repair by maintenance team, until the effective reduction of the emission. We also quantify diffuse emissions from the WWTP using the EPA programme Water9.

The majority of methane emissions from Galp's portfolio are currently related to non-operated Upstream assets. All of the operators and joint venture partners for non-operated Upstream assets (Petrobras, Equinor, ENI, Shell, TotalEnergies) have already subscribed to the OGCI's Aiming for Zero Methane Emissions Initiative, and most of them are also members of the the Oil and Gas Methane Partnership 2.0 (OGMP2.0) and the Methane Guiding Principles. The Company will continue to work with operators of participated assets to assist them in identifying and implementing methane emission reduction initiatives, in line with their current commitments, and it is possible that upstream flaring emissions will show a downwards trend from the currently producing assets up to 2030 as operators continue to implement efficiency measures in the assets (e.g. internal flares in certain FPSOs in the Santos basin) in pursuit of their targets and pledges to reduce methane emissions and methane intensity of their portfolio.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	3	88000
To be implemented*	0	0
Implementation commenced*	4	91000
Implemented*		
Not to be implemented		

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
50484

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
8400000

Investment required (unit currency – as specified in C0.4)
16900000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment

Project to increase the load temperature in HD (Dessulfurization Unit to reduce sulfur from light diesel) by sending hot kerosene and light diesel from atmospheric distillation column to HD. This project will allow the reduction of natural gas consumption and associated CO2 emissions by 34 kton CO2. This project is under execution and it is expected to be in operation in the fourth quarter of 2023. The payback period is approximately 2 years and monetary savings are estimated at 8.4 M€/year, based on internal price forecasts for Natural Gas and CO2.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
14000

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
3500000

Investment required (unit currency – as specified in C0.4)
7100000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
The project consists in the replacement of the boiler that recovers the waste heat from the FCC´s regenerator (FCC – Fluid Catalytic Cracker) to improve capacity and energy efficiency by saving in natural gas and reducing associated emissions. The project is under execution phase and is expected to be operational in fourth quarter of 2023. Its payback period is of approximately 2.1 years and monetary savings are estimated at 3.5 M€/year, based on internal price forecasts for Natural Gas and CO2.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
18000

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
5300000

Investment required (unit currency – as specified in C0.4)
4500000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
The project consists in upgrading several exchangers with twisted-tube bundles, which have greater efficiency, saving in natural gas and reducing associated emissions. The project has been partly implemented in 2022 with the first phase starting in Q1 2023 and second phase later in the year. Its payback period is of approximately 0.9 years and monetary savings are estimated at 5.3 M€/year, based on internal price forecasts for Natural Gas and CO2.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
6000

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1100000

Investment required (unit currency – as specified in C0.4)
18000000

Payback period
16-20 years

Estimated lifetime of the initiative
16-20 years

Comment
The project consists in replacing several reactors from the Platforming Unit to increase the operational efficiency and as an upside we gain also energy efficiency. The project is under execution phase and is expected to be fully operational in fourth quarter of 2023. Its payback period is of approximately 16.9 years and monetary savings are estimated at 3.8 M€/year, based on internal price forecasts for Natural Gas and CO2.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
18000

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
4000000

Investment required (unit currency – as specified in C0.4)
3200000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
The project consists in redirecting hot pre flash gas, reducing natural gas consumption and saving energy and associated combustion emissions. The project is on the planning phase and is expected to be fully operational in 2025. Its payback period is of approximately 1 year and monetary savings are estimated at 4 M€/year, based on internal price forecasts for Natural Gas and CO2.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
16000

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
3800000

Investment required (unit currency – as specified in C0.4)
8000000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
The project consists in the installation of a pre-heater in the Platforming unit to reduce fuel consumption, reducing natural gas consumption and saving energy and associated combustion emissions. The project is on the planning phase and is expected to be fully operational in 2025. Its payback period is of approximately 2 years and monetary savings are estimated at 3.8 M€/year, based on internal price forecasts for Natural Gas and CO2.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	One of the strategic goals of the Industrial Midstream business unit to focus on energy efficiency and process optimization of the refining system, guaranteeing cost and energy consumption and emissions reductions and the increase of return on capital employed. The Sines Refinery has a dedicated technology team that identifies, designs and implements energy efficiency projects with the ultimate goal of making that refinery one of the most efficient in Europe. In 2022 the team had identified several projects to be implemented by 2025, with an estimated investment of approximately €59 m which will materialize energy savings and avoid c. 107 ktonCO2e/year and almost €6m were invested in ongoing projects. To address the challenges of energy efficiency, Galp promotes a number of projects aiming to boost energy efficiency at our facilities and with our stakeholders (e.g. clients, community), namely: the refining infrastructure optimisation; Galp Solar will install solar PV panels in more than 100 service stations to reduce their grid electricity consumption and increase their efficiency and will also continue to supply our customers with decentralized power solutions that will reduce emissions from energy generation; Social projects (UP educational projects); among others.
Dedicated budget for low-carbon product R&D	Aware of the fast pace at which trends and opportunities arise, in 2021 Galp consolidated its commitment to innovation as a fundamental tool towards a low-carbon world, and reorganised its Innovation department in three centres (Production & Operations, Commercial and Renewables). Galp has invested approximately €80 m in ongoing projects, of which €29.7m in 2022. Activity highlights in 2022 for the three different innovation centres include: • Production and Operations Innovation centre: in 2022 we analysed several technological routes for sustainable fuel production to develop Galp's roadmap for low carbon aviation and marine fuels that can meet regulations and the sustainability targets of the company. We have been working closely with different collaborative laboratories including Net4CO2, Bioref and Hylab studying decarbonisation solutions in the CO2, biofuels and hydrogen space. • Commercial Innovation centre: Galp partnered with the startups Swobbee and Boost Logistics to launch the first micro-mobility battery-swapping service in Iberia, aiming to make fleet management operations more efficient and sustainable through a decentralized charging network. Five swapping stations were installed in Lisbon and Madrid, with 10 k batteries swapped in the first four months (more than 7.6 MWh of charged energy). The centre also launched Optimize, a project that aims to protect Galp's B2B clients from the volatility of energy markets, offering them innovative solutions to become more efficient and less dependent on the gas & power grids. • Renewables and Energy Management innovation centre: we developed a series of projects focused on digitalization, renewable energy storage and synergies between agriculture and solar power production in an Agrivoltaics partnership with Instituto Superior de Agronomia in Lisbon. Additionally, we continued engaging with startups through the Startup The Future program, to collaboratively accelerate the energy transition. It received more than 200 applications from four continents and 54 countries, and a €50 k prize was awarded to the winner, Koolboks.
Internal price on carbon	Galp considers a carbon price on GHG emissions in investment analysis and therefore incorporates CO2 and climate related issues in its decision-making process. The Company considers that carbon cost internalisation mechanisms such as carbon pricing are the most effective and efficient way to promote the decarbonisation of the economy on a global scale. A carbon price is considered when evaluating medium and long-term investments, to mitigate risks and maximize opportunities along the value chain. When evaluating investments in new project developments, expansions or upgrades of existing assets, Galp stress tests the impact of the related CO2 emissions in its metrics and targets before relevant investment decision. To ensure the resilience of its investments Galp considers a carbon price on investment analysis, even in geographies without emissions trading schemes in place, considering prices consistent with external long-term energy transition scenarios (>€90/tonne of CO2 by 2025, >€100/tonne of CO2 by 2030, >€150/tonne of CO2 by 2050). By using a dynamic carbon price, Galp demonstrates that it is aware of the future potential changes in regulation, consumer and technological patterns and the risks associated with long-term business plan analysis. Galp also considers different carbon prices in its scenario analysis, which are based on the international references and forecasts used in scenario modelling. This allows the Company to stress test its long-term strategy and perform sensitivity analysis on the carbon price variable (for more details about Galp's scenario analysis, please see Risk Management section).
Employee engagement	The company regularly communicates in its weekly newsletter "Energiser" its initiatives and products that will allow for emission reductions and increases in energy efficiency of the company, its customers and employees. The company has also recently committed to the full electrification of its light duty vehicle fleet up before 2030. This was accompanied by training, information sessions and informational materials on hybrid and electric vehicles for the employees changing from an internal combustion engine to a hybrid or electric vehicle. In 2022 Galp started updating and rebuilding its sustainability roadmap by working together with people across the Organisation, in a series of workshops and dedicated sessions with each business unit and corporate center, to define its key 2030 sustainability ambitions and an action plan for the 2023-25 period. A comprehensive sustainability diagnosis report supported these discussions - where Galp is today, results of a context and trends analysis, key insights of a benchmark analysis performed to our peers, results of the materiality assessment - where we used the different lenses to identify what are our main challenges, key ambitions and the initiatives that we have to commit to in order to improve our sustainability performance This roadmap includes one decarbonisation related pillar – focusing on climate related initiatives: Our journey to net zero 2050. Throughout the year we promoted several workshops for employees and executive and board members on various topics such as hydrogen, renewables, energy transition strategy and broader sustainability related regulation, among others. This shows the company's commitment to skill all employees, including board members and c-level, on topics related with the energy transition and sustainability, ensuring we are ready and properly prepared to address its upcoming challenges. For the second year in a row, we were a part of the World Bike Tour that took place in Lisbon, promoting low carbon energy and more sustainable forms of mobility. This event counted with more than 21 k participants, including 100 employees, in which Galp was able to make a difference, creating positive impact, providing Galp Ryde electric bicycles, and reinforcing the commitment of investing heavily in the areas of sustainable mobility.
Internal incentives/recognition programs	The corporate bodies' Remuneration Policy aims at reinforcing values, skills, abilities and behaviours, in view of the Company's long term interest, culture and strategy, and is, particularly, guided by 4 principles, being one of them to reward safety, environmental sustainability and energy efficiency in the activities material to the Company, through incentives related with the execution of objectives and targets, including within the context of the appropriate management of the company's emissions and carbon intensity. The company's commitment with decarbonisation and with driving the energy transition is reflected by its performance evaluation ESG indicators, linked to variable remuneration and applicable to all employees in all geographies. From 2022 onwards, hydrocarbon production related metrics are no longer featured as weighting factors in employees' incentives. The performance scorecard was reviewed in 2022 to give more empowerment to ESG related metrics, that now weight 25% of all annual performance indicators, covering safety (10%) and decarbonisation KPIs (15%). In addition, 35% of the employees' scorecard is allocated to the completion of strategic milestones that include, among others topics related to cybersecurity and low carbon projects like electrification and H2. For the Executive Committee, safety (10%) and decarbonisation (5%) KPIs are also included in the short-term incentive scorecard, with a combined weight of 15%. The Long Term Incentive remuneration for the CEO is materialized by the right to a set of Galp shares, attributable after 3 years. The number of shares attributed at the end of the 3-year period will be calculated by multiplying the number of provisional shares attributed by a performance factor, graded from 0 to 2.25, based on 3 categories, one of them being the reduction in the Sales Carbon Intensity of the company. Performance is evaluated, by reference to the CO2 emissions and intensity reduction goals in force. Also, Galp has sustainability related Objective Key Results (OKR) associated to each Business Unit (e.g. Be recognised as one of the most sustainable companies in the word in the Energy sector (includes emission reduction related issues); FID on low carbon projects such as biofuels and green hydrogen projects; etc).

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Power	Solar PV

Description of product(s) or service(s)

Renewable electricity continued to be Galp's main focus on low carbon technologies in 2022. The company increased and diversified its portfolio of renewable electricity projects both geographically and in terms of energy source, to 9 GW on a 100% basis, distributed between Iberia and Brazil, encompassing both solar and wind power, considering projects under operation, construction and/or development. From this portfolio, 1.4 GW are already in operation and generated c.1895 GWh during 2022. During 2022, Galp's gross renewable energy generation pipeline increased from 4.7 GW to 9.0 GW including projects under operation, construction and different stages of

development, located in Portugal, Spain and Brazil.
Galp is one of the largest producers of solar photovoltaic energy in Iberia. In 2020, Galp entered the solar power market in Spain, through an agreement with the ACS Group to establish Titan 2020 S.A. (Titan Solar), a JV aimed at developing a portfolio of solar PV projects in Spain. Galp owned a 75.01% stake in this JV and the stake was accounted for in Galp's financial statements using the equity method. In 2022, Galp acquired the remaining 24.99% of Titan Solar. Titan Solar portfolio includes c.1.2 GW of solar PV plants in operation and several projects at different stages of development with about 1.6 GW of additional capacity expected to be online by 2025, all located in Spain.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (Avoided emissions calculated in comparison to electricity consumed from the electric grid)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Not applicable

Functional unit used
Emissions per GWh of power consumed from a renewable source vs power from the electrical grid whose mix contains fossil fuels

Reference product/service or baseline scenario used
Spanish electrical grid emission factor for 2022 published by local regulator (RED) of 160 tCO2e/GWh (https://www.ree.es/es/datos/generacion/no-renovables-detalle-emisiones-CO2). This emission factor was chosen since most renewable electricity was produced in spain

Life cycle stage(s) covered for the reference product/service or baseline scenario
Not applicable

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
303000

Explain your calculation of avoided emissions, including any assumptions
Renewable energy was assumed to have zero emissions associated with its production. The emission factor for the electricity purchased from the spanish grid includes emissions from the use of fossil fuels used to produce electricity (natural gas, coal, solid urban waste).
From Galp´s portfolio, the 1.4 GW that were already in operation during 2022, generated c.1895 GWh during 2022, which translated into c. 303 ktCO2e of avoided emissions in comparison to the amount emitted by the production of an equivalent amount of electricity purchased from the Spanish grid which still includes a relevant share of fossil fuel generated electricity. A life cycle assessment for the renewable energy generated by these assets was not performed since the evolution of the electric grid and the amount of power generated are subject to many uncertainties.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.337

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Power	Onshore wind

Description of product(s) or service(s)
Renewable electricity continued to be Galp's main focus on low carbon technologies in 2022. The company increased and diversified its portfolio of renewable electricity projects both geographically and in terms of energy source, to 9 GW on a 100% basis, distributed between Iberia and Brazil, encompassing both solar and wind power, considering projects under operation, construction and/or development.. From this portfolio, 1.4 GW are already in operation and generated c.1930 GWh during 2022. During 2022, Galp's gross renewable energy generation pipeline increased from 4.7 GW to 9.0 GW including projects under operation, construction and different stages of development, located in Portugal, Spain and Brazil.

Galp's installed capacity for renewable generation in Portugal also includes 12 MW from a wind farm in operation which generated c. 35.5 GWh of electricity during 2022.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (Avoided emissions calculated in comparison to electricity consumed from the electric grid)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Not applicable

Functional unit used
emissions per GWh of power consumed from a renewable source vs power from the electrical grid whose mix contains fossil fuels

Reference product/service or baseline scenario used
Portuguese electrical grid emission factor for 2022 published by APREN of 160 tCO2e/GWh

Life cycle stage(s) covered for the reference product/service or baseline scenario
Not applicable

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
5700

Explain your calculation of avoided emissions, including any assumptions
Renewable energy was assumed to have zero emissions associated with its production. The emission factor for the electricity purchased from the portuguese grid includes emissions from the use of fossil fuels used to produce electricity (natural gas, coal, solid urban waste).
From Galp´s portfolio, the 1.4 GW that were already in operation in 2022, onshore wind projects generated c.35.5 GWh, which translated into c. 5.7 ktCO2e of avoided emissions in comparison to the amount emitted by the production of an equivalent amount of electricity purchased from the Portuguese grid which still has significant contributions from power generated from fossil fuels.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.006

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Power	Solar PV

Description of product(s) or service(s)
Galp developed a distributed renewable energy production solution, Galp Solar, based on smaller scale solar power generation systems and services aiming at maximising energy consumption and efficiency both to B2C and B2B customers. Galp Solar uses advanced technologies, such as satellite image analysis, artificial intelligence algorithms and big data, to optimise the acquisition and installation cost of distributed solar panels, offering the solution that is best suited to the customers' needs. During the 2022, Galp launched the Galp Solar brand in Spain, established important partnerships, and ramped up, building the basis for fast and profitable growth in the coming years.
In 2022, and with just 2 years of operation, the company had completed 10,715 installations in Portugal and Spain in a total of 32 MW of solar panels, almost tripling installed capacity and quadrupling revenues during 2022 in relation to the previous year. It also installed more than 1,500 batteries in its installations, which helped customers achieve on average >60% of selfsufficiency by combining power generation and storage. The total electricity production from the c. 32 MW of equipments installed since 2020 is estimated at c. 3.4 GWh and is thought to have avoided 0.5 ktCO2e in comparison to the same amount of electricity purchased from the grid. This activity can be considered as Installation, maintenance and repair of renewable energy technologies under the EU Taxonomy for Sustainable Investment.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (Avoided emissions calculated in comparison to electricity consumed from the electric grid)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Not applicable

Functional unit used
Emissions per GWh of power consumed from a renewable source vs power from the electrical grid whose mix contains fossil fuels

Reference product/service or baseline scenario used
Portuguese and Spanish location based electrical grid emission factor for 2022 published by local RED (Spain – 160 tCO2e/GWh) and APREN (Portugal 137 tCO2e/GWh) which still includes a relevant share of fossil fuel generated electricity. A life cycle assessment for the renewable energy generated by these assets was not performed since the evolution of the electric grid and the amount of power generated are subject to many uncertainties.

Life cycle stage(s) covered for the reference product/service or baseline scenario
Not applicable

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
502

Explain your calculation of avoided emissions, including any assumptions
Renewable energy was assumed to have zero emissions associated with its production. The emission factor for the electricity purchased from the portuguese grid includes emissions from the use of fossil fuels used to produce electricity (natural gas, coal, solid urban waste).

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.123

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Biofuels	Fatty acid methyl ester (FAME)

Description of product(s) or service(s)
Galp also owns Enerfuel, an industrial unit in Sines producing Fatty Acid Methyl Ester (FAME) biodiesel. This product is made 100% from the processing of animal fats and used cooking oils. Enerfuel produced approximately 25.4 kton of FAME biodiesel in 2022. In 2022, Galp complied with the European Union's Renewable Energy Directive (RED), incorporating 11.5% biofuels in its energy content in Portugal, and 10.5% in Spain In total, the Company produced over 126 kton of biofuels in Iberia , including more than 25 kton of second-generation biodiesel produced by Enerfuel and c. 101 kton of HVO produced by co-processing in the Sines refinery. Galp continues to pursue a biofuels strategy, encouraging the use of biofuels made from waste, which represented over 70% of the raw materials for this type of fuel in 2022. The total of biofuels deployed during the year, prevented the emission of over 887 kton of CO2 on a life cycle basis, when compared to traditional fossil fuels.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (Life cycle emissions for the produced FAME biodiesel were subtracted from the value obtained for an equivalent amount of mineral diesel)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Cradle-to-gate + end-of-life stage

Functional unit used
kgCOe2 /ton of product (diesel)

Reference product/service or baseline scenario used
Life cycle emissions of 100% mineral diesel of 3954.44 kg CO2e/ton (reference values from UK Government GHG Conversion Factors for Company Reporting 2022)

Life cycle stage(s) covered for the reference product/service or baseline scenario
Cradle-to-gate + end-of-life stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
85000

Explain your calculation of avoided emissions, including any assumptions
Avoided emissions were calculated comparing life-cycle emissions from FAME biodiesel in relation to a purely mineral diesel .The total of produced by Enerfuel during the year, prevented the emission of over 85 kton of CO2 on a life cycle basis, when compared to 100% fossil diesel.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.004

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Road	Other, please specify (Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings))

Description of product(s) or service(s)
During 2022, Galp Electric continued to expand its network of charging points which totalled more than 1950 charging stations in Portugal and Spain, 26% of which are fast and ultra-fast charging stations. Sales of electricity for mobility increased to 7.2 GWh and correspond to an estimated c. 5.5 ktons of avoided CO2 emissions when compared to the same energy used on an ICE vehicle, on a life cycle basis. Through Daloop, Galp offers a Software as Service (SaaS) platform for managing EV charging infrastructure, the fleets and people that use it. Daloop provides this platform to various entities such as charge point operators, mobility service providers, utilities, and facilities, offering them the necessary tools to securely expand and implement solutions for the fast-growing EV ecosystem. In 2022, Daloop provided strategic solutions to support Galp's Electric Mobility business unit, secured customers in the UK and Spain, and completed a strategic project in the US as part of the Biden administration's "Build Back Better" regional challenge. Galp continues to analyse the potential for business expansion to new geographies as well as strategic partners.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (Avoided emissions were calculated taking into account life cycle emissions from vehicle making and fuel usage)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Other, please specify (Life cycle emissions of car manufacture + fuel usage)

Functional unit used
gCO2e/kWh

Reference product/service or baseline scenario used
Average life cycle emissions from the light duty vehicles with diesel and gasoline internal combustion engines (234 gCO2e/km for diesel and 77.3 gCO2e/km for an electric vehicle). Source: https://www.transportenvironment.org/

Life cycle stage(s) covered for the reference product/service or baseline scenario
Other, please specify (Avoided emissions were calculated taking into account life cycle emissions from vehicle making and fuel usage)

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
5500

Explain your calculation of avoided emissions, including any assumptions
Life cycle emissions per km for internal combustion engine vehicles (avg 231.6 g CO2/km) and battery electric vehicles powered by renewable energy (77.3 g CO2e/km) sold at Galp charging points were compared for the same amount of energy sold. This resulted in a conservative estimate of c. 5500 t CO2e avoided by sales of electricity for electric mobility.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

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C-OG4.6

(C-OG4.6) Describe your organization's efforts to reduce methane emissions from your activities.

To ensure that our operations and our products are more sustainable, Galp promotes the efficient use of energy and have implemented the Best Available Technologies (BAT) expressed in the reference documents applicable to the sector, to reduce atmospheric emissions, including methane emissions. In the Upstream segment, Galp ensures that its projects are developed in accordance with the principle to meet Zero Routine flaring or venting of hydrocarbons. Additionally, we assure the monitoring and management of our methane emissions from combustion and fugitives sources and that our performance is verified by an independent third-party.

The company's methane emissions represent a small part of its total operational emissions, yet it is confident it's methane emissions will decrease significantly in the future as it collaborates with upstream partners, which are all signataries of the OGCI's "Aiming for zero methane emissions by 2030 initiative", to increase efficiency and reduce emissions from its assets. For example, although no routine flaring takes place in Galp's Upstream projects, some of the FPSO units in the Brazilian Pre Salt fields have already started commissioning a closed flare gas recovery system that will allow the recovery of gas that would otherwise be flared, avoiding methane emissions as well as combustion of any flare gas that would be emitted in exceptional situations (e.g. equipment maintenance, emergencies, etc).

In the Industrial and Midstream fugitive emissions come from the following sources: product storage, process (including the drainage network) and effluent treatment. Galp carries out fugitive monitoring annual campaigns, under its Leak Detection Repair programme (LDAR) following the UNE EN 15446 standard. This methodology assumes the continual assessment of the leaks through a phased and iterative process of detection/measurement of leaks in equipment, followed by repair by maintenance team, until the effective reduction of the emission. We also quantify diffuse emissions from the WWTP the EPA programme Water is being used.

C-OG4.7

(C-OG4.7) Does your organization conduct leak detection and repair (LDAR) or use other methods to find and fix fugitive methane emissions from oil and gas production activities?

Yes

C-OG4.7a

(C-OG4.7a) Describe the protocol through which methane leak detection and repair or other leak detection methods, are conducted for oil and gas production activities, including predominant frequency of inspections, estimates of assets covered, and methodologies employed.

Galp refineries' commitment to environmental sustainability it reflected in one more tool for monitoring emissions reduction: the LDAR programme (Leak Detection and Repair). As part of this programme, which includes the application of the Best Available Technologies expressed in the reference documents applicable to the sector, the refinery carries out yearly monitoring campaigns of the VOCs, which are measured in order to minimise leaks. The Hydrocracker unit is the only one subject to a biannual LDAR campaign.

The LDAR monitoring campaign follows the UNE EN 15446 standard. The methodology assumes the continual assessment of the leaks through a phased and iterative process of detection/measurement of leaks in equipment, followed by repair, until the effective reduction of the emission.

Therefore, in an initial phase, a thorough study of the Piping and Instrumentation Diagrams (P&IDs) is carried out and the parts liable to be included in the Leak Identification Programme are identified, drawing up a list of parts per plant. This equipment includes valves, exchangers, pumps, compressors, flanges, sampling points, vents, purges and other end-of-lines, and also an estimate of the VOC emissions that originate in the first phases of the wastewater treatment process at the WWTP, including the storm basins.

The Sines refinery has been carrying out annual monitoring of around 10,000 stock parts in the various plants of the Sines refinery and biannual monitoring of around 150 elements in some process units. Additional monitoring points can be added in response to the needs of specific process units. Components were identified, monitored and registered in the Database, which enables the whole process history to be recorded and filed, allowing the record of each piece of equipment under analysis and/or being repaired to be quickly checked.

The type of parts and the composition of the lines included in the LDAR programme meet the criteria established through method 21 of the EPA and the EN 15446 standard.

The next phase consists of labelling the monitoring points. The labels used, made from Teflon-coated aluminium, have a barcode so they can be optically read using a PDA. This code unequivocally identifies each piece of equipment, in the facility, the database and the P&ID.

After the labelling, the continual monitoring phase of VOC leaks begins in the equipment outlined in the leak identification programme. If any leaks are detected during the monitoring phase, a list of parts that will subsequently be repaired internally by the Sines refinery is created, following a defined maintenance plan. After the repair, VOCs are again measured in the equipment that was previously leaking, to check that the leak has been plugged. The monitoring, repair and post-repair monitoring phases will be repeated as many times as required until the leaks are eliminated.

The LDAR programme also includes an estimate of the diffuse emissions coming from the refinery's drainage system and the Wastewater Treatment Plant, through the inclusion of several variables in a graphical interface, using the WATER9 software, of US EPA.

C-OG4.8

(C-OG4.8) If flaring is relevant to your oil and gas production activities, describe your organization's efforts to reduce flaring, including any flaring reduction targets.

Although Galp no longer operates any oil and gas field, flaring is relevant in the fields where the company has participation. Galp ensures that the projects where it has participation are developed in accordance with the principle to meet Zero Routine Flaring or venting of hydrocarbons. We monitor the GHG emissions from gas flared in participated projects and our performance is verified by an independent third-party. The Company's current goal is to work with operators to reduce gas flaring (in normal operation), as it contributes to GHG emissions and other pollutants. Galp is governed by a responsible activity, focusing on a safe operation, and applying the reference standards in energy management and emissions. In this sense, we are committed to scaling new Upstream projects to zero flaring under normal operating conditions, by joining the Zero Routine Flaring by 2030 initiative. We joined, in 2015, the initiative Zero Routine Flaring by 2030, as a production and exploration operator. This objective extends until 2030 and the initiative relies on the cooperation of several institutions, governmental entities and companies within our sector. From 2022 Galp no longer operates any blocks in production but is still the operator in some exploration blocks (e.g. block 6 at São Tomé e Principe).

Newer projects, such as the Bacalhau field development, located in the Brazilian Santos basin will have an FPSO with a combined cycle gas turbine system to increase the efficiency of the power station. This, combined with an optimized gas system, allowed not only to greatly reduce emissions from power generation but also flaring, resulting in a world class lifetime emission intensity of 9 kg CO2e/bbl.

The Coral Sul FLNG, that started production in 2022 also was designed with energy optimisation focus, resulting in an energy efficient plant design and zero routine flaring. This was achieved by use of aero-derivative gas turbines for refrigerant compressors and power generation (equipped with waste heat recovery systems).

Current projects are being adapted to reduce emissions, and some of the FPSO units in the Brazilian Pre Salt fields have already started commissioning a closed flare gas recovery system that will allow the recovery of gas that would otherwise be flared, avoiding methane emissions as well as combustion of any flare gas that would be emitted in exceptional situations (e.g. equipment maintenance, emergencies, etc).

In addition, although there is no regulation in Brazil that requires the injection of gas, in the Upstream segment the consortiums in where Galp participates (blocks BM-S-11, BM-S-11a, Bacalhau field) have taken the initiative to separate and inject the gas from the production since the beginning, reducing the operation's ecological footprint and optimising the maintenance of the reservoir's pressure. This separation is carried out in the production unit through the selective permeation method, with the gas being injected back into the reservoir using the WAG method.

Additionally, the company expects that flaring, and consequentially methane emissions from its upstream operations will decrease significantly in the future as it collaborates with upstream partners, which are all signatories of the OGCI's "Aiming for zero methane emissions by 2030 initiative", to increase efficiency and reduce emissions from operated assets.

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

Name of organization(s) acquired, divested from, or merged with

<Not Applicable>

Details of structural change(s), including completion dates

<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
3978216

Comment
Base year set for Scope 1 GHG emissions calculated on an operational control basis. Scope 1+2 emissions values used in emission reduction targets calculated on an equity basis.

Scope 2 (location-based)

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
181000

Comment
Base year set for Scope 2 GHG calculated on an operational control basis. Scope 1+2 emissions values used in emission reduction targets calculated on an equity basis. Market based values are reported and used in intensity and emissions performance monitoring.

Scope 2 (market-based)

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
228035

Comment
Base year set for Scope 2 GHG calculated on an operational control basis. Scope 1+2 emissions values used in emission reduction targets calculated on an equity basis. Market based values are reported and used in intensity and emissions performance monitoring.

Scope 3 category 1: Purchased goods and services

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
In 2017 Galp did not calculate this scope 3 category. Estimates for the emissions associated with Purchased goods and services started with the revision of the company's carbon footprint in 2018.

Scope 3 category 2: Capital goods

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
Galp considers that emissions associated to capital goods are not material (less than 5% of total GHG emissions). As an integrated energy company, the emissions associated with Capital Goods are minimal compared with the ones generated by the production and use of the sold energy products. The Company decided not to report this category given its non-materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
In 2017 Galp did not calculate this scope 3 category. Estimates for the emissions associated with Fuel-and-energy-related activities started with the revision of the company's carbon footprint in 2018.

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
In 2017 Galp did not calculate this scope 3 category. Estimates for the emissions associated with Purchased goods and services started with the revision of the company's carbon footprint in 2018.

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
Galp considers that emissions associated to Waste generated in operations are not material (less than 5% of total GHG emissions). As an integrated energy company, the emissions associated with Waste generated in operations are minimal compared with the ones generated by the production and use of the sold energy products. Also, the company already reports fugitive emissions and operational emissions from the treatment of waste-water from its operations as its scope 1 and 2 emissions. The Company decided not to report this category given its non-materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Scope 3 category 6: Business travel

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
1396.3

Comment
GHG emissions associated to business travel by air and train. Passenger.km transported by train was calculated based on the locations of origin and destination of each journey and the distance of the rail service provided by the suppliers CP (Portugal) and RENFE (Spain). For trips made in other countries, were considered linear distances between points of origin and destination. For the accounting for indirect emissions associated with the production of the electricity consumed in trains in Portugal and Spain were used emission factors published by the suppliers RENFE and CP, respectively. The passenger.km transported by plane was quantified through the linear distances on the surface, calculated based on the locations of origin and destination of each. For consumption of jetfuel by plane, were recorded direct emissions resulting from fuel combustion, by applying emission factors representative of the international air traffic, considering occupancy rates and average aircrafts for each type of route (short, medium and long distance). In this case, the GHG emissions that occur on air (measured in CO2e) are affected by the Index Radiative Force.

Scope 3 category 7: Employee commuting

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
Galp considers that emissions associated to Employee commuting are not material (less than 5% of total GHG emissions). As an integrated energy company, the emissions associated with Employee commuting are minimal compared with the ones generated by the production and use of the sold energy products. Furthermore, the company already reports the emissions from its light duty vehicles fleet as scope 1 emissions. This fleet is used by a considerable amount of employees for their commuting. The Company decided not to report this category given its non-materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Scope 3 category 8: Upstream leased assets

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
This activity is not applicable to Galp as the company does not have leased assets from a third party which are operated. Note: Galp has leased assets, namely Floating Production Storage and Offloading (FPSO). However, Galp already reports the emissions from the operation of these assets (fuel combustion, flaring, etc) as Scope 1 emissions

Scope 3 category 9: Downstream transportation and distribution

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
In 2017 Galp did not calculate this scope 3 category. Estimates for the emissions associated with Purchased goods and services started with the revision of the company's carbon footprint in 2018.

Scope 3 category 10: Processing of sold products

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
1387504

Comment
Galp calculates the emissions from processing of the crude it sells to third parties for refining. In 2021 the methodology for the calculation of Category 10 – Processing of Sold product of Scope 3 was reviewed to solely reflect the processing of sold crude in refineries and calculated by applying an emission factor that materialized the global volume-weighted average emissions per barrel refined of 40.7 kg CO2e/boe by Jing et al. (Nature, 2020)

Scope 3 category 11: Use of sold products

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
57177083

Comment
Galp has calculated emissions for this category since 2017. In 2021 the calculation of Category 11: Use of Sold product was reviewed to include all the refined products to reflect the emissions from the part of the oil value chain where the largest volume of product is present. The emissions in this category now includes all products refined, even the ones exported and sold to other operators, and not just the sales to Galp clients. These updates are aligned with best practices for the sector, e.g. the GHG Protocol IPIECA guidelines, as well as the materiality analysis of the emission sources.

Scope 3 category 12: End of life treatment of sold products

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
Galp considers that emissions associated to End of life treatment of sold products are not material (less than 5% of total GHG emissions) since the end life of the large majority of the products it sells is combustion meaning these emissions are included in category 11 - Use of sold product. As an integrated energy company, the emissions associated with End of life treatment of sold products are minimal compared with the ones generated by the production and use of the sold energy products. The Company decided not to report this category given its non-materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Scope 3 category 13: Downstream leased assets

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
Galp has some service stations leased to third parties. However, through a materiality analysis Galp concluded that emissions associated with the leased service stations are not material (less than 5%) compared to other activities of scope 3 GHG emissions. As an integrated energy company, the emissions associated with Downstream leased assets are minimal compared with the ones generated by the production and use of the sold energy products. The Company reassessed the materiality of this category last year and decided not to report it given its non-materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Scope 3 category 14: Franchises

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
Galp has some service stations franchised. However, through a materiality analysis, Galp concluded that emissions associated with franchising are not material (less than 5%) compared to other activities of scope 3 GHG emissions. As an integrated energy company, the emissions associated with its franchises (service stations) are minimal compared with the ones generated by the production and use of the sold energy products. The Company reassessed the materiality of this category last year and decided not to report it given its nonmateriality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Scope 3 category 15: Investments

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)

Comment
In the past Galp disclosed its emissions from non operated upstream assets under this category. From 2021 onwards the reporting of emissions indicators was reviewed and these emissions have been included in the company's scope 1 and 2 emission reporting. In the past this category also included emissions from the company's participation in the Galp Gás Natural Distribuiçao (GGND) which was sold in 2021. Emissions from that gas distribution network were calculated using an emission factor that quantified fugitive emissions per network distance per year according to the API compendium. From 2021 onwards the company will report the emissions associated with the distribution of only the gas volumes it sells.

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
3442507

Start date
January 1 2022

End date
December 31 2022

Comment
Gross global Scope 1 emissions (metric tons CO2e) equals to 3,442,507. Broken down by business unit (metric tons CO2e): Upstream – including non non-operated assets (733,430), Industry&Midstream – including refining (2,665,723); Commercial (211); Others (43,142). In 2021 Galp reviewed its carbon footprint calculation methodology to better align it with the emissions values used in the calculation of the carbon intensity metrics. Therefore, the emissions from non-operated Upstream assets were included in the scope 1 and 2 emissions calculation (they were previously accounted in Scope 3 – Category 15 – Investments).

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
3198740

Start date
January 1 2021

End date
December 31 2021

Comment
Gross global Scope 1 emissions (metric tons CO2e) equals to 3,198,740. Broken down by business unit (metric tons CO2e): Upstream – including non non-operated assets (490,211), Industry&Energy Management – including refining (2,682,605); Commercial (21,244); Others (25,924). In 2021 Galp reviewed its carbon footprint calculation methodology to better align it with the emissions values used in the calculation of the carbon intensity metrics. Therefore, the emissions from non-operated Upstream assets were included in the scope 1 and 2 emissions calculation (they were previously accounted in Scope 3 – Category 15 – Investments).

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)
3591892

Start date
January 1 2020

End date
December 31 2020

Comment
Gross global Scope 1 emissions (metric tons CO2e) equals to 3,591,892. Broken down by business unit (metric tons CO2e): Upstream (496,361), Industrial & Midstream (3,073,958); Commercial (0); Others (21,573). In 2021 Galp reviewed its carbon footprint calculation methodology to better align it with the emissions values used in the calculation of the carbon intensity metrics. Therefore, the emissions from non-operated Upstream assets were included in the scope 1 and 2 emissions calculation (they were previously accounted in Scope 3 – Category 15 - Investments).

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)
3745540

Start date
January 1 2019

End date
December 31 2019

Comment
Gross global Scope 1 emissions (metric tons CO2e) equals to 3,745,540. Broken down by business unit (metric tons CO2e): Upstream (456,553), Industrial & Energy Management (3,265,510); Commercial (0); Others (23,477). In 2021 Galp reviewed its carbon footprint calculation methodology to better align it with the emissions values used in the calculation of the carbon intensity metrics. Therefore, the emissions from non-operated Upstream assets were included in the scope 1 and 2 emissions calculation (they were previously accounted in Scope 3 – Category 15 – Investments).

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment
From 2021 Galp started to calculate and report both location-based and market-based scope 2 figures. In some geographies the emission factors for location-based and market-based power production might be equivalent due to the absence of data regarding electricity providers.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
55507

Scope 2, market-based (if applicable)
9138

Start date
January 1 2022

End date
December 31 2022

Comment
Market based scope 2 emissions reflect the purchasing of renewable electricity for operations in Portugal in 2022 (emission factor of 0 gCO2e/kWh) and the remaining emissions (9,138 t CO2e) correspond to emissions from other geographies. As the majority of electricity purchased by Galp is consumed in its operations in Portugal (>90%), the emission factor of purchased electricity has a very high weight on scope 2 emissions. Location based emissions reflect the carbon intensity of the electricity producing systems of the different geographies where Galp operates and purchases electricity.

Past year 1

Scope 2, location-based
55808

Scope 2, market-based (if applicable)
9149

Start date
January 1 2021

End date
December 31 2021

Comment
Market based scope 2 emissions reflect the purchasing of renewable electricity for operations in Portugal in 2021 (emission factor of 0 gCO2e/kWh) and the remaining emissions (9,149 t CO2e) correspond to emissions from other geographies. As the majority of electricity purchased by Galp is consumed in its operations in Portugal (>90%), the emission factor of purchased electricity has a very high weight on scope 2 emissions. Location based emissions reflect the carbon intensity of the electricity producing systems of the different geographies where Galp operates and purchases electricity.

Past year 2

Scope 2, location-based
80286

Scope 2, market-based (if applicable)
42026

Start date
January 1 2020

End date
December 31 2020

Comment
Market based scope 2 emissions reflect the purchasing of 80% renewable electricity for operations in Portugal in 2020, resulting in an emission factor of 87.5 gCO2e/kWh and emissions from other geographies. As the majority of electricity purchased by Galp is consumed in it's operations in Portugal (> 90%), the emission factor of purchased electricity has a very high weight on scope 2 emissions. Location based emissions reflect the carbon intensity of the electricity producing systems of the different geographies where Galp operates and purchases electricity.

Past year 3

Scope 2, location-based
103343

Scope 2, market-based (if applicable)
112504

Start date
January 1 2019

End date
December 31 2019

Comment
Market based scope 2 emissions reflect the purchasing electricity for operations in Portugal. In 2019, the electricity purchased by Galp had a relatively high emission factor (251 gCO2e/kWh), when compared to the one of the Portuguese grid (233 gCO2e/kWh). As the majority of electricity purchased by Galp is consumed in its operations in Portugal (> 90%), the emission factor of purchased electricity has a very high weight on scope emissions. Location based emissions reflect the carbon intensity of the electricity producing systems of the different geographies where Galp operates and purchases electricity.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

4656334

Emissions calculation methodology

Average product method
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

GHG emissions resulting from the extraction, production, and transportation of goods and services purchased or acquired by Galp. The emission sources associated with purchases of crude oil, natural gas and petrochemical products used as raw material are considered, as well as liquid fuels, not processed by Galp, bought for sale to the final consumer are considered. The inventory was accounted considering the emissions produced upstream of their acquisition, based on theoretical emissions factors, representative of the average emissions associated with the transformation processes, and on the amount of goods and services acquired. The emissions resulting from liquid fuels acquired (Fueloil, Jetfuel, Gasoline, Diesel, LPG, biofuels) are calculated in a well-to-tank perspective. The GHG emissions from the natural gas lifecycle are accounted until the combustion (excluding the emissions resulting from combustion). In the case of the crude oil, the well-to-refinery perspective is considered. Calculated emissions include crude oil (1.2 MtCO2e), gasoline (0.00065 MtCO2e), diesel (1.7 MtCO2e), fuel oil (0.01 MtCO2e), LPG (0.093 MtCO2e), jetfuel (0.40 MtCO2e), biofuels (0.064 MtCO2e) and natural gas (1.2 MtCO2e). All CO2e emission calculations are done using the Global Warming Potential values of IPCC's AR4, 2007.

Capital goods

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Galp considers that emissions associated to capital goods are not material (less than 5% of total GHG emissions). As an integrated energy company, the emissions associated with Capital Goods are minimal compared with the ones generated by the production and use of the sold energy products. The Company decided not to report this category given its non-materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1024707

Emissions calculation methodology

Average product method
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

GHG emissions from the upstream activities to the electricity purchased by Galp for resale, including both the emissions from the lifecycle of the fuels associated to electricity purchased and the emissions resulted from the power generation. The amount of emissions is calculated based on the amount of power sold by Galp in Portugal and Spain and different emission factors for power generation and upstream production of fuels used in power generation for each geography. For the lifecycle emissions of fuels used in power generation a theoretical emission factor from DEFRA is used, while for the emissions calculated for the generation of sold power a market-based emission factor is used that should reflect the mix of different sources (fossil and renewable) of the electricity sold by the provider (Galp). All CO2e emission calculations are done using the Global Warming Potential values of IPCC's AR4, 2007.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
526380

Emissions calculation methodology
Average product method
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Galp calculates emissions from primary transportation of crude (to its refinery and from sales of produced crude), chemicals and other oil products using the marine mode of transport. The company gathers information from operations of its own marine fleet, transport made using time charter services and spot charter services, including ship type, distance travelled and and type of weight of cargo. Emission factors reflecting the emissions per tonne/km are then applied. Regarding these different modes of transport, Galp calculates the GHG based on data available for its own fleet 896 tCO2e) time-charter operations (130 480 tCO2e) and chartering-spot operations (395 890tCO2e). Galp is reporting for the first time emissions related with the transport of all sold crude, which is reflected by an increase in emissions in this category. All CO2e emission calculations are done using the Global Warming Potential values of IPCC's AR4, 2007.

Waste generated in operations

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Galp considers that emissions associated to Waste generated in operations are not material (less than 5% of total GHG emissions). As an integrated energy company, the emissions associated with Waste generated in operations are minimal compared with the ones generated by the production and use of the sold energy products. Also, the company already reports fugitive emissions and operational emissions from the treatment of wastewater from its operations as its scope 1 and 2 emissions. The Company decided not to report this category given its non-materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
2352

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Galp calculates the GHG emissions from business travel, namely air travel and rail travel using data and emission factors based on distance that change with travel class (economy, business) and travel range (domestic, short-haul, medium-haul and long-haul). In 2022 air travel accounted for 2,345 tCO2e (including short, medium and long distance flights), an increase from the previous year due to the post pandemic lifting of travel restrictions. Business travel done in the company's vehicle fleet is already included in the Scope 1 calculations.

Employee commuting

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Galp considers that emissions associated to Employee commuting are not material (less than 5% of total GHG emissions). As an integrated energy company, the emissions associated with Employee commuting are minimal compared with the ones generated by the production and use of the sold energy products. Furthermore, the company already reports the emissions from its light duty vehicles fleet, which fleet is used by a considerable amount of employees for their commuting, as scope 1 emissions and is currently on the process of electrifying this fleet, expecting it to become fully electric until 2030. . The Company decided not to report this category given its non-materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Not relevant/Not applicable. This activity is not applicable to Galp as the company does not have leased assets from a third party which are operated. Note: Galp has leased assets, namely Floating Production Storage and Offloading (FPSO). However, Galp already reports the emissions from the operation of these assets (fuel combustion, flaring, etc) as Scope 1 emissions.

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
88200

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
In 2022, Galp calculated the GHG emissions from the transport of intermediate and final products in Portugal, Spain and Africa by road (16,379 tCO2e) and rail (5,625 tCO2e). Emissions from and rail transport are calculated from an emission factor that has into consideration emissions per distance travelled for the different modes of transport. Galp estimated emissions associated with the leaks associated with sold gas distribution (66,195 tCO2e) using an emission factor that estimates leaks per amount of gas sold. All CO2e emission calculations are done using the Global Warming Potential values of IPCC's AR4, 2007.

Processing of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
1338233

Emissions calculation methodology
Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Galp calculates the GHG emissions from the processing of crude oil sold by Galp into downstream companies for refining. For this category we take into account an emission factor that materializes the global volume-weighted average emissions per barrel refined of 40.7 kg CO2e/boe calculated by Jing et al. (Nature, 2020). In this calculation we subtract the volumes of crude from Galp's production that are processed in Galp's own refineries.

Use of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
38609105

Emissions calculation methodology
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
In 2021 the calculation of Category 11: Use of Sold product was reviewed to include all the refined products to reflect the emissions from the part of the oil value chain where the largest volume of product is present. The emissions in this category now includes all products refined, even the ones exported and sold to other operators, and not just the sales to Galp clients. These updates are aligned with best practices for the sector, e.g. the GHG Protocol IPIECA guidelines, as well as the materiality analysis of the emission sources. Galp has determined GHG emissions associated with combustion of products refined (tank-to-wheel) using emission factors for each of the different fuels produced by the company: 38,609,105 tCO2e. The products considered were gasoline (7.2 MtCO2e), diesel (13.2 MtCO2e), fuel oil (7.05 MtCO2e), LPG (0.6 MtCO2e), jetfuel (3.6 MtCO2e) and sold and produced natural gas (6.8 MtCO2e). Increased emissions in those category are a consequence of an increase in the refined output. This category compromises the majority of the company's emissions (>80%). All CO2e emission calculations are done using the Global Warming Potential values of IPCC's AR4, 2007.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Galp considers that emissions associated to End of life treatment of sold products are not material (less than 5% of total GHG emissions) since the end life of the large majority of the products it sells is combustion, meaning these emissions are included in category 11 - Use of sold product. As an integrated energy company, the emissions associated with End of life treatment of sold products are minimal compared with the ones generated by the production and use of the sold energy products. The Company decided not to report this category given its non-materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Galp has some service stations leased to third parties. However, through a materiality analysis Galp concluded that emissions associated with the leased service stations are not material (less than 5%) compared to other activities of scope 3 GHG emissions. As an integrated energy company, the emissions associated with Downstream leased assets are minimal compared with the ones generated by the production and use of the sold energy products. The Company reassessed the materiality of this category last year and decided not to report it given its non-materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Galp has some service stations franchised. However, through a materiality analysis, Galp concluded that emissions associated with franchising are not material (less than 5%) compared to other activities of scope 3 GHG emissions. As an integrated energy company, the emissions associated with its franchises (service stations) are minimal compared with the ones generated by the production and use of the sold energy products. The Company reassessed the materiality of this category last year and decided not to report it given its non materiality and potential inaccuracies in the information needed to account for the emissions associated with this category, given the complexity of the process of gathering all information.

Investments

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
In the past Galp disclosed its emissions from non-operated upstream assets under this category. From 2021 onwards the reporting of emissions indicators was reviewed and these emissions have been included in the company's scope 1 and 2 emission reporting. In the past this category also included emissions from the company's participation in the Galp Gás Natural Distribuiçao (GGND), a natural gas distribution network in Portugal which was sold in 2021. From 2021 onward the company will report the emissions associated with the distribution of only the gas volumes it sells as scope 3, category 9.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Not relevant. No other categories have been identified.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Not relevant. No other categories have been identified.

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date
January 1 2021

End date
December 31 2021

Scope 3: Purchased goods and services (metric tons CO2e)
5581850

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
1116429

Scope 3: Upstream transportation and distribution (metric tons CO2e)
206795

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)
504

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)
88463

Scope 3: Processing of sold products (metric tons CO2e)
1447640

Scope 3: Use of sold products (metric tons CO2e)
37811953

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment
In 2021, the boundaries of emissions calculations were reviewed. In the past Galp disclosed its emissions from non-operated upstream assets under scope 3, category 15 - Investments. From 2021 onward the reporting of emissions indicators was reviewed and these upstream assets emissions have been included in the company's scope 1 and 2 emission reporting. In the past scope 3, category 15 - Investments category also included emissions from the company's participation in the Galp Gás Natural Distribuiçao (GGND), a natural gas distribution network in Portugal which was sold in 2021. From 2021 onward the company will report the emissions associated with the distribution of only the gas volumes it sells. The boundaries of the calculations for Scope 3, category 10 (emissions calculated for the processing of crude sold to third parties) and category 11 (emissions boundary changed to include to the entire volume of refined products in the calculation) were also reviewed in 2021 and apply to previous the previous and following years.

Past year 2

Start date
January 1 2020

End date
December 31 2020

Scope 3: Purchased goods and services (metric tons CO2e)
4605750

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
968125

Scope 3: Upstream transportation and distribution (metric tons CO2e)
255354

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)
1823

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)
39046

Scope 3: Processing of sold products (metric tons CO2e)
1518489

Scope 3: Use of sold products (metric tons CO2e)
39634309

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)
242400

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment
In 2021, the boundaries of emissions calculations were reviewed. In the past Galp disclosed its emissions from non-operated upstream assets under scope 3, category 15 - Investments. From 2021 onward the reporting of emissions indicators was reviewed and these upstream assets emissions have been included in the company's scope 1 and 2 emission reporting. In the past scope 3, category 15 - Investments category also included emissions from the company's participation in the Galp Gás Natural Distribuiçao (GGND), a natural gas distribution network in Portugal which was sold in 2021. From 2021 onward the company will report the emissions associated with the distribution of only the gas volumes it sells. The boundaries of the calculations for Scope 3, category 10 (emissions calculated for the processing of crude sold to third parties) and category 11 (emissions boundary changed to include to the entire volume of refined products in the calculation) were also reviewed in 2021 and apply to previous the previous and following years.
In 2020 the investments category of scope 3 includes emissions estimated for the gas distribution network of Galp Gás Natural Distribuiçao (GGND) a company partly owned by Galp. Emissions from that gas distribution network were calculated using an emission factor that quantified fugitive emissions per network distance per year according to the API compendium.

Past year 3

Start date
January 1 2019

End date
December 31 2019

Scope 3: Purchased goods and services (metric tons CO2e)
6466581

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
935716

Scope 3: Upstream transportation and distribution (metric tons CO2e)
669161

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)
6204

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)
64913

Scope 3: Processing of sold products (metric tons CO2e)
1604394

Scope 3: Use of sold products (metric tons CO2e)
48444791

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)
242400

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment
In 2021, the boundaries of emissions calculations were reviewed. In the past Galp disclosed its emissions from non-operated upstream assets under scope 3, category 15 - Investments. From 2021 onward the reporting of emissions indicators was reviewed and these upstream assets emissions have been included in the company's scope 1 and 2 emission reporting. In the past scope 3, category 15 - Investments category also included emissions from the company's participation in the Galp Gás Natural Distribuiçao (GGND), a natural gas distribution network in Portugal which was sold in 2021. From 2021 onward the company will report the emissions associated with the distribution of only the gas volumes it sells. The boundaries of the calculations for Scope 3, category 10 (emissions calculated for the processing of crude sold to third parties) and category 11 (emissions boundary changed to include to the entire volume of refined products in the calculation) were also reviewed in 2021 and apply to previous the previous and following years.
In 2019 the investments category of scope 3 includes emissions estimated for the gas distribution network of Galp Gás Natural Distribuiçao (GGND) a company partly owned by Galp. Emissions from that gas distribution network were calculated using an emission factor that quantified fugitive emissions per network distance per year according to the API compendium.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.000129

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
3451645

Metric denominator
unit total revenue

Metric denominator: Unit total
26840000000

Scope 2 figure used

Market-based

% change from previous year
36

Direction of change
Decreased

Reason(s) for change
Change in revenue

Please explain
In 2022, this performance metric decreased 36.0% compared to the previous year (from 0.000199 to 0.000128). Global scope 1+2 GHG emissions increased 8% (from 3,207,889 tCO2e in 2021 to 3,451,645 tCO2e in 2022) and total revenues increased 67% (from €16,117,000,000 in 2021 to €26,895,000,000). Thus, 3,451,645 /26,895,000,000=0.000128.
Despite the decrease in intensity, when compared with 2021, that decrease was impacted by a significant increase in the revenues, although there was an increase in emissions from operations in 2022 when compared to 2021. The increase in emissions can be justified by decisions made during 2022 to reduce the consumption of natural gas in order to ensure the continuing supply of fuels at affordable prices in the context of high commodity prices driven by the conflict in the Ukraine, which lead to the use of more carbon intensive fuels. This value was also impacted by the startup and commissioning of the Coral FLNG unit in Mozambique which is associated with higher flaring volumes. These were both temporary situations and these assets should resume their efficient operations and improve their emissions performance during 2023. The overall negative performance of our ecoefficiency indicators in 2022, when compared to 2021, mainly in air emissions indicators, can be also partially justified by the return to normal operating levels, post pandemic.
Several efficiency projects have been identified and approved for investment until 2025 which will result in an investment of 50m€ and emission reductions of approximately 100 kton CO2e. Additionally, dedicated teams are continuously working to reduce emissions and the efficiency of the operations identifying new opportunities and synergies on a regular basis.

Intensity figure
564.55

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
3451645

Metric denominator
full time equivalent (FTE) employee

Metric denominator: Unit total
6114

Scope 2 figure used
Market-based

% change from previous year
8.3

Direction of change
Increased

Reason(s) for change
Change in output

Please explain
In 2022, this performance metric increased 8.3% compared to what was calculated in the previous year (from 521.44 to 564.55). This is mostly due to the fact that in the previous year Scope 1+2 emissions reported were lower (3,207,889 tCO2e). The increase in emissions can be justified by decisions made during 2022 to reduce the consumption of natural gas in order to ensure the continuing supply of fuels at affordable prices in the context of high commodity prices driven by the conflict in the Ukraine, which lead to the use of more carbon intensive fuels. This value was also impacted by the startup and commissioning of the Coral FLNG unit in Mozambique which is associated with higher flaring volumes. These were both temporary situations and these assets should resume their efficient operations and improve their emissions performance during 2023. The overall negative performance of our emissions indicators in 2022, when compared to 2021, , can be also partially justified by the return to normal operating levels, post pandemic. Several efficiency projects have been identified and approved for investment until 2025 which will result in an investment of 50m€ and emission reductions of approximately 100 kton CO2e. Additionally, dedicated teams are continuously working to reduce emissions and the efficiency of the operations identifying new opportunities and synergies on a regular basis.

Intensity figure
0.26

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
3451645

Metric denominator
Other, please specify (Tonne of feedstock processed)

Metric denominator: Unit total
12419118

Scope 2 figure used
Market-based

% change from previous year
5

Direction of change
Decreased

Reason(s) for change
Change in output

Please explain
In 2022, this performance metric decreased 5% compared to the previous year (from 0.272 to 0.258) mainly due to an 12% increase in the feedstocks processed at the Sines refinery, , despite a simultaneous increase in emissions in the same installation. Both the increase in processed feedstock and emissions were influenced by the

post-pandemic return to normal operating levels,but also by the the conflict in the Ukraine and ensuing energy crisis that led to reduction of consumption of natural gas and use of fuels with higher carbon intensity in the refinery in order to ensure the continuing supply of fuels at affordable prices in the context of high commodity prices . The absolute scope 1+2 emissions value was also impacted by the startup and commissioning of the Coral FLNG unit in Mozambique which is associated with higher flaring volumes. These were both temporary situations and these assets should resume their efficient operations and improve their emissions performance during 2023.
The overall negative performance of our emissions indicators in 2022, when compared to 2021, , can be also partially justified by the return to normal operating levels, post pandemic. Several efficiency projects have been identified and approved for investment until 2025 which will result in an investment of 50m€ and emission reductions of approximately 100 kton CO2e. Additionally, dedicated teams are continuously working to reduce emissions and the efficiency of the operations identifying new opportunities and synergies on a regular basis.

C-OG6.12

(C-OG6.12) Provide the intensity figures for Scope 1 emissions (metric tons CO2e) per unit of hydrocarbon category.

Unit of hydrocarbon category (denominator)
Other, please specify (Million Barrels of Oil Equivalent - mmboe)

Metric tons CO2e from hydrocarbon category per unit specified
25760.5

% change from previous year
7

Direction of change
Increased

Reason for change
Scope 1 emissions (Upstream+Refining - including biofuels) had a 8% increase (from Global scope 1 GHG emissions 3,198,740 tCO2e to 3,442,507 tCO2e) and total Million Barrels of Oil Equivalent (mmboe) produced and refined had a 1% increase (from 132.83 mmboe to 134 mmboe). Thus, 3,442,507/134=25692. This value represents a 7% increase in relation to the previous year which is justified by an year-on-year increase in emissions. The increase in emissions can be justified by decisions made during 2022 to reduce the consumption of natural gas in order to ensure the continuing supply of fuels at affordable prices in the context of high commodity prices driven by the conflict in the Ukraine, which lead to the use of more carbon intensive fuels. This value was also impacted by the startup and commissioning of the Coral FLNG unit in Mozambique which is associated with higher flaring volumes. This unit will soon finish the commissioning phase and subsequent activities are actively energy optimized since project design with no routine flaring.
Several efficiency projects have been identified and approved for investment until 2025 which will result in an investment of 50m€ and emission reductions of approximately 100 kton CO2e. Additionally, dedicated teams are continuously working to reduce emissions and the efficiency of the operations identifying new opportunities and synergies on a regular basis.

Comment
The numerator 3,442,507 tCO2e includes scope 1 GHG emissions of operated and non operated Upstream assets and Refining (including biofuel production) segments. The denominator (134 mmboe) includes hydrocarbons produced at upstream oil and natural gas produced & refining intake (feedstock processed).

C-OG6.13

(C-OG6.13) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput.

Oil and gas business division
Upstream

Estimated total methane emitted expressed as % of natural gas production or throughput at given division
0.21

Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division
0.02

Details of methodology
Galp emitted approximately 1,400 t CH4 from its upstream and refining businesses. This corresponds to approximately 0.21% of total gas production in 2022 (approximately 13.3 kboepd) and 0.02 of total hydrocarbon production (127 kboepd, working interest). These values increased from the previous year, impacted by the commissioning of the Coral FLNG which involved higher than expected amount of flaring and led to an increase of methane emissions. This unit will soon finish the commissioning phase and subsequent activities are actively energy optimized since project design with no routine flaring.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	3408867	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	32932	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	486	IPCC Fourth Assessment Report (AR4 - 100 year)

C-OG7.1b

(C-OG7.1b) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type.

Emissions category
Fugitives

Value chain
Upstream
Downstream

Product
Oil

Gross Scope 1 CO2 emissions (metric tons CO2)
0

Gross Scope 1 methane emissions (metric tons CH4)
53.06

Total gross Scope 1 emissions (metric tons CO2e)
1326.44

Comment
CH4 fugitive emissions reported are related to fugitive emissions in the Sines refinery detected in the 2022 LDAR campaign.

Emissions category
Flaring

Value chain
Upstream

Product
Oil

Gross Scope 1 CO2 emissions (metric tons CO2)
265393

Gross Scope 1 methane emissions (metric tons CH4)
1264

Total gross Scope 1 emissions (metric tons CO2e)
296983

Comment
Galp's flaring emissions increased considerably from 182 ktonCO2e in 2021 to 297 ktonCO2e in 2022 due to the start-up and commissioning of the Coral FLNG unit in Mozambique in the last quarter of 2022. This was a temporary situation, and this asset should resume its efficient operation during 2023. The Coral Sul FLNG was designed with energy optimisation focus, resulting in an energy efficient plant design and lower GHG emissions than other units of the same type, and includes measures to assure zero routine flaring on normal operation conditions.

Emissions category
Combustion (excluding flaring)

Value chain
Upstream

Product
Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)
436374

Gross Scope 1 methane emissions (metric tons CH4)
0.76

Total gross Scope 1 emissions (metric tons CO2e)
436439

Comment
Combustion emissions from fuel consumption (fuelgas, diesel, fuel,etc) in Upstream business. Includes fuel consumption during exploration and appraisal activities.

Emissions category
Combustion (excluding flaring)

Value chain

Midstream
Downstream

Product
Oil

Gross Scope 1 CO2 emissions (metric tons CO2)
1561749

Gross Scope 1 methane emissions (metric tons CH4)
0.6

Total gross Scope 1 emissions (metric tons CO2e)
1561779.2

Comment
Emissions from stationary and mobile combustion (natural gas, fuelgas, fuel, diesel, etc) in the refineries, logistics platforms, biofuel plants and co-generation units.

Emissions category
Process (feedstock) emissions

Value chain
Downstream

Product
Oil

Gross Scope 1 CO2 emissions (metric tons CO2)
1015000

Gross Scope 1 methane emissions (metric tons CH4)

Total gross Scope 1 emissions (metric tons CO2e)

Comment
Process emissions from the Sines refinery mostly coming from hydrogen production in steam methane reformer and coke. This number was provided in CO2e and no disaggregation between CO2 and CH4 is possible.

Emissions category
Flaring

Value chain
Midstream
Downstream

Product
Oil

Gross Scope 1 CO2 emissions (metric tons CO2)
125181

Gross Scope 1 methane emissions (metric tons CH4)
0.6

Total gross Scope 1 emissions (metric tons CO2e)
125195

Comment
Emissions from flaring processes in the Sines Refinery

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Portugal	2706530.76
Brazil	396850.4
Angola	79198
Cabo Verde	1196.67
Guinea-Bissau	476.07
Mozambique	249411.47
Eswatini	0.76
Sao Tome and Principe	8095
Spain	528.26

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.
By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Upstream	733430
Industrial and Midstream	2703648
Commercial	211
Others (includes corporate centers and co-generation business outside refinery)	5217
Renewables and new businesses	0

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	733430	<Not Applicable>	Upstream activities includes exploration, development, and production of oil and gas in Brazil, Angola, São Tomé e Principe and Mozambique for operated and non-operated Blocks
Oil and gas production activities (midstream)	4504	<Not Applicable>	Midstream includes the transportation, storage, and distribution of crude oil and natural gas, namely Galp's logistics and storage parks and owned maritime fleet
Oil and gas production activities (downstream)	2665723	<Not Applicable>	Downstream includes refining, processing, distribution, and marketing of oil and gas products
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Portugal	49760	0
Spain	5430	8732
Brazil	6.3	6.3
Cabo Verde	239.4	239.4
Guinea-Bissau	38.1	38.1
Mozambique	18.3	18.3
Eswatini	103.5	103.5

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Upstream	0	0
Industrial and Midstream	47380	632
Commercial	7710	8476
Others	417	30
Renewables and new businesses	0	0

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	0	0	Upstream activities include exploration, development, and production of oil and gas in Brazil, Angola, São Tomé e Principe and Mozambique. They are all deep to ultradeep offshore and are not connected to the electricity grid.
Oil and gas production activities (midstream)	2190	632	Midstream includes the transportation, storage, and distribution of crude oil and natural gas, namely Galp's logistics and storage parks and owned maritime fleet
Oil and gas production activities (downstream)	52481.5	8476	Downstream includes refining, processing, distribution, and marketing of oil and gas products
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	9	Decreased	0	Market based scope 2 emissions reflect the purchasing of renewable electricity for operations in Portugal in 2022 (emission factor of 0 gCO2e/kWh) and the remaining emissions (9,138 t CO2e) correspond to emissions from other geographies. As the majority of electricity purchased by Galp is consumed in its operations in Portugal (>90%), the emission factor of purchased electricity has a very high weight on scope 2 emissions. Location based emissions reflect the carbon intensity of the electricity producing systems of the different geographies where Galp operates and purchases electricity. In 2021 that was already reflected on the marked based scope emissions, with a total of 9,149 t CO2e.
Other emissions reduction activities	72760	Decreased	0	In 2022 Galp invested 5.4M€ in several energy efficiency projects in its Sines refinery, that are under construction and that will lead to to reductions in its Scope 1 emissions of approximately 72760 tCO2e per year after starting full operation in end of 2023. During 2022 there was no operation efficiency project that started operation. These projects, already described in question C4.3 are: -Project to increase the load temperature in HD (Dessulfurization Unit to reduce sulfur from light diesel) by sending hot kerosene and light diesel from atmospheric distillation column to HD with estimated annual CO2e savings of 33982 metric tonnes CO2e -Project to replace the boiler that recovers the waste heat from the FCC´s regenerator with estimated annual CO2e savings of 14452 metric tonnes CO2e) -Project to upgrade several exchangers with twisted-tube bundles with estimated annual CO2e savings of 18339 metric tonnes CO2e -Project to replace several reactors from the Platforming Unit with estimated annual CO2e savings of 5989 metric tonnes CO2e
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other	243767	Increased	8	In 2022 The conflict in the Ukraine and the ensuing energy crisis posed a challenge for all energy companies. As a consequence of these events, decisions had to be made to ensure the continuing supply of fuels at affordable prices. This implied reducing the consumption of natural gas and using refining sub - products as fuel in the operations of the Sines refinery, leading to an increase in its absolute scope 1 emissions. These temporary constrains have already been removed and the Sines refinery should resume its efficient low GHG intensity performance. Additionally, the commissioning phase of the Coral FLNG, in Mozambique, involved substantial flaring, leading to a temporary spike in scope 1 emissions during the second half of 2022. The unit will soon finish the commissioning phase and subsequent activities are actively energy optimized since project design with no routine flaring .

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	12062620	12062620
Consumption of purchased or acquired electricity	<Not Applicable>	351694	33373	386131
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	351694	12095993	12447686

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
LHV

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Other biomass

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Coal

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Oil

Heating value
LHV

Total fuel MWh consumed by the organization
132387

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
15096

Comment
Gasoline, diesel and fueloil consumed in refinery, logistics platforms, upstream activities (FPSOs, drilling, etc), fuel transport and by the company's light duty vehicle fleet.

Gas

Heating value
LHV

Total fuel MWh consumed by the organization
10039489

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
2652216

Comment
Natural Gas and fuelgas consumption; only a part of natural gas is used for co-generation activities, other goes into the steam methane reformer to produce hydrogen. The electricity generated by co-generation is sold to the grid. Remaining fuelgas consumption takes place in the refineries, in the upstream offshore units (FPSOs) and small installations.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
HHV

Total fuel MWh consumed by the organization
1840465

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
In 2022, due to operational constrains and the energy crisis that resulted from the conflict in the Ukraine decisions had to be made to ensure the continuing supply of fuels at affordable prices. This implied reducing the consumption of natural gas and using refining sub -products, such as naphta, as fuel in the operations of the Sines refinery.

Total fuel

Heating value
LHV

Total fuel MWh consumed by the organization
12447686

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
2652216

Comment
Sum of gas and oil based fuels consumed by the organization. Oil includes gasoline, diesel and fueloil consumed in refinery, logistics platforms, upstream activities (FPSOs, drilling, etc), fuel transport and by the company's light duty vehicle fleet. Gas includes both natural gas and fuelgas consumption in the refineries, co-generation units and in the upstream offshore units (FPSOs).

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	2560000		1930000	
Heat				
Steam				
Cooling				

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption
Portugal

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (The energy mix for Galp's electricity consumption in 2022 was: 5.04% Hydro power, 24.89% Wind power and 170.07% other renewable power sources (solar, biomass, etc))

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
351694

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment
Galp purchased renewable energy from its electricity provider Galp Power with an energy mix of5.04% Hydro power, 24.89% Wind power and 170.07% other renewable power sources (solar, biomass, etc) . The mix is considered renewable due to the purchase of Guarantees of Origin which are validated by the local regulator, ERSE. Electricity consumed by Galp in Portugal (351 694 MWh) included 100% of renewable energy. This is a result of the target previously set to using only renewable energy in Galp operations in Portugal by 2021. By law, Galp is required to sell to the national grid all electricity produced by co-generation. In 2021 the co-generation of Sines generated 630 GWh of electricity. Galp's renewable electricity projects totalled 1.4 GW installed capacity in 2022 and generated approximately 1930 MW of renewable power from a portfolio of mostly solar PV projects, along with onw wind farm. all located in Iberia.

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
Portugal

Consumption of purchased electricity (MWh)
351694

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
2022216

Total non-fuel energy consumption (MWh) [Auto-calculated]
2373910

Country/area
Brazil

Consumption of purchased electricity (MWh)
146

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
146

Country/area
Cabo Verde

Consumption of purchased electricity (MWh)
432

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
432

Country/area
Guinea-Bissau

Consumption of purchased electricity (MWh)
54

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
54

Country/area
Mozambique

Consumption of purchased electricity (MWh)
432

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
432

Country/area
Eswatini

Consumption of purchased electricity (MWh)
93

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
93

Country/area
Spain

Consumption of purchased electricity (MWh)
33373

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
33373

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Other, please specify (emissions intensity CO2/CWT)

Metric value
32.2

Metric numerator
kg CO2e Scope 1 emissions from the Sines refinery

Metric denominator (intensity metric only)
CWT - Complexity-Weighted Tonne

% change from previous year
6.6

Direction of change
Increased

Please explain
CO2/CWT intensity is used to evaluate the efficiency of a refinery. This methodology was developed by Solomon and adopted by the EU as the unit for its refining benchmark used for the EU-ETS compliance. For a given refinery and a given time period, the CWT is calculated by first multiplying the throughput of each refinery process unit by a factor that is characteristic of the typical CO2 emissions for that unit. These products are then summed to give the overall CWT for the refinery. An additional term for ‘off-site’ operations is added to account for ancillary operations such as blending, storage and others. CWT accounts for all emissions that are related to the energy demand of the process units whether the energy is produced on-site or imported to the refinery in the form of heat or electricity. Galp's Sines refinery is continuously assessing and implementing projects to increase its efficiency and reduce its intensity. The CO2/CWT intensity figure for 2022, disclosed in our website, was revised to reflect the emissions verified under the EU-ETS and prevails over the figure published in the Integrated Annual Report of the same year. The higher intensity observed during 2022 is related with the significant disruptions in the European energy markets that took place during 2022 which led to the use of alternative fuels with higher carbon intensity to ensure the normal operations and the supply of products from this installation. It is expected that this installation resumes using lower carbon intensity fuels during 2023 and returns to its more efficient activity lowering GHG emissions.

C-OG9.2a

(C-OG9.2a) Disclose your net liquid and gas hydrocarbon production (total of subsidiaries and equity-accounted entities).

	In-year net production	Comment
Crude oil and condensate, million barrels	112	Galp produced 112 million barrels in 2022 (net entitlement)
Natural gas liquids, million barrels	0	Galp produced 0.005 million barrels in 2022 (net entitlement) of natural gas liquids, including but not limited to ethane, propane, butane, pentane and natural gasoline
Oil sands, million barrels (includes bitumen and synthetic crude)	0	Galp does not have any production from oil sands
Natural gas, billion cubic feet	27.4	Galp produced 27.4 billion cubic feet of natural gas in 2022 (net entitlement)

C-OG9.2b

(C-OG9.2b) Explain which listing requirements or other methodologies you use to report reserves data. If your organization cannot provide data due to legal restrictions on reporting reserves figures in certain countries/areas, please explain this.

Galp estimates of proved, probable and possible reserves presented have been prepared in accordance with the Petroleum Resources Management System (PRMS) approved in March 2007 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, and the Society of Petroleum Evaluation Engineers.

C-OG9.2c

(C-OG9.2c) Disclose your estimated total net reserves and resource base (million boe), including the total associated with subsidiaries and equity-accounted entities.

	Estimated total net proved + probable reserves (2P) (million BOE)	Estimated total net proved + probable + possible reserves (3P) (million BOE)	Estimated net total resource base (million BOE)	Comment
Row 1	689	926	5342	Estimated net total resources correspond to 3P reserves plus 3C contingent resources plus mean risked prospective resources. Galp's reserves and resources are subject to an independent assessment by DeGolyer and MacNaughton (DeMac).

C-OG9.2d

(C-OG9.2d) Provide an indicative percentage split for 2P, 3P reserves, and total resource base by hydrocarbon categories.

	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Crude oil/ condensate/ natural gas liquids	86	90	66	Reserves and Resources data. Net total resource includes reserves + 3C contingent resources. Galp's reserves and resources are subject to an independent assessment by DeGolyer and MacNaughton (DeMac).
Natural gas	14	10	34	Reserves and Resources data. Net total resource includes reserves + 3C contingent resources. Galp's reserves and resources are subject to an independent assessment by DeGolyer and MacNaughton (DeMac).
Oil sands (includes bitumen and synthetic crude)				

C-OG9.2e

(C-OG9.2e) Provide an indicative percentage split for production, 1P, 2P, 3P reserves, and total resource base by development types.

Development type
Deepwater

In-year net production (%)
3

Net proved reserves (1P) (%)
1

Net proved + probable reserves (2P) (%)
1

Net proved + probable + possible reserves (3P) (%)
1

Net total resource base (%)
14

Comment
Deepwater represents 2.5% of total O&G production in 2022. In-year net production (%): 2.5; Net proved reserves (1P) (%): 1.0%; Net proved + probable reserves (2P) (%): 0.7%; Net proved + probable + possible reserves (3P) (%): 0.7%; Net total resource base (%):14.1%. The net total resources increased considerably regarding previous year (in 2021 was 1.7%) because includes resources from PEL-83 in Namibia. Despite no commercial discovery made on that Block, the most recent discoveries in 2022 in neighbour blocks, generated an increase of prospective resources risked in Namibia in 2022.

Development type
Ultra-deepwater

In-year net production (%)
98

Net proved reserves (1P) (%)
99

Net proved + probable reserves (2P) (%)
99

Net proved + probable + possible reserves (3P) (%)
99

Net total resource base (%)
98

Comment
Ultra Deepwater represents 97.5% of total O&G production in 2022. In-year net production (%): 97.5%; Net proved reserves (1P) (%): 99.0%; Net proved + probable reserves (2P) (%): 99.3%; Net proved + probable + possible reserves (3P) (%): 99.3%; Net total resource base (%): 98.3%. The Ultra Deepwater resources includes the FLNG from Coral in Mozambique that started production of natural gas and condensate in 2022.

C-OG9.3a

(C-OG9.3a) Disclose your total refinery throughput capacity in the reporting year in thousand barrels per day.

	Total refinery throughput capacity (Thousand barrels per day)
Capacity	226

C-OG9.3b

(C-OG9.3b) Disclose feedstocks processed in the reporting year in million barrels per year.

	Throughput (Million barrels)	Comment
Oil	74.6	74.6 million barrels of crude oil
Other feedstocks	13.4	13.4 million barrels (other feedstocks)
Total	88	88 million barrels (total)

C-OG9.3c

(C-OG9.3c) Are you able to break down your refinery products and net production?
Yes

C-OG9.3d

(C-OG9.3d) Disclose your refinery products and net production in the reporting year in million barrels per year.

Product produced	Refinery net production (Million barrels) *not including products used/consumed on site
Liquified petroleum gas	2.5
Gasolines	19.9
Naphtha	5.7
Kerosenes	9.2
Diesel fuels	33.1
Fuel oils	14.7

C-OG9.5a/C-CO9.5a

(C-OG9.5a/C-CO9.5a) Break down, by fossil fuel expansion activity, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

	CAPEX in the reporting year for this expansion activity (unit currency as selected in C0.4)	CAPEX in the reporting year for this expansion activity as % of total CAPEX in the reporting year	CAPEX planned over the next 5 years for this expansion activity as % of total CAPEX planned over the next 5 years	Explain your CAPEX calculations, including any assumptions
Exploration of new oil fields	342	27	30	The expenditure regarding exploration of new fields accounts mainly the exploration well drilled in São Tomé e Principe in 2022 (with no commercial discovery) the investments associated with the execution of Bacalhau field in the Upstream Business Unit. The FID of Bacalhau field phase 1 started in 2021 and the FPSO construction, drilling and marine installation campaign started in 2022. In the next five years is also expect some expenditure drilling with an exploratory well in Namibia, due to the recent nearby oil discoveries have proven the presence of a working petroleum system in the Orange Basin and PEL83 is well situated immediately to the north of these discoveries. The organization total CAPEX considers cost from Upstream, Renewable and New Business, Industrial and Midstream and Commercial Business Units. In 2021 Galp also committed not to pursue any further oil and gas frontier exploration beyond the concessions/locations already it its exploration pipeline. In order to be accurate, the CAPEX planned over the next 5 years for the exploration of new fields as % of total CAPEX planned over the next 5 years is less than 30%.
Exploration of new natural gas fields	22	2	30	The expenditure associated with natural gas fields is due to Area 4 Mozambique costs, where in 2022 it was successfully delivered the first LNG cargo from the FLNG Coral. In order to be accurate, the CAPEX planned over the next 5 years for the exploration of new natural gas fields as % of total CAPEX planned over the next 5 years is less than 30%
Expansion of existing oil fields	0	0	30	The expenditure associated with expansion of oil fields consist in infill wells and implementing action to maximize existing resources in Tupi field in Brazil, as well as approve FID for additional FPSO in Sepia and Atapu. In order to be accurate, the CAPEX planned over the next 5 years for the expansion of existing oil fields as % of total CAPEX planned over the next 5 years is less than 30%.
Expansion of existing natural gas fields			0	
Development of new coal mines	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Expansion of existing coal mines	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	Galp has several investments in low carbon R&D. In 2022 the company invested 29.7M€ in innovation and R&D, including 8 clean R&D projects. Galp believes innovation is key to enabling the transition to a more sustainable and equitable energy system. The goal of the Innovation Team is to build a portfolio of opportunities to boost the energy transition and accelerate the path to decarbonisation. Also, the Company's strategy originates a value-driven investment case, which relies on a clear capital allocation framework, allocating around 70% of its net investments until 2025 period towards low-to-no-carbon activities to accelerate the decarbonization of our industrial assets and continue to grow our sizeable renewables platform.

C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)	Average % of total R&D investment planned over the next 5 years	Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
Other, please specify (Renewable Energy)	Applied research and development	70	0	1	Research and Development of Microchannel-Based Heat Sinks for High Concentration Photovoltaic Cells with Recovery of Rejected Heat for seawater desalination. The average % of total R&D investment over the last 3 years for this project was less or equal than 70%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 1%.
Other, please specify (Renewable Energy)	Applied research and development	30	0	0	Research and Development of a New Hybrid Power Plant Solution for Electricity Generation. This new hybrid power plant solution for electricity generation, uses the best solar photovoltaic technologies, combined with natural gas , or another viable source, as well as with energy storage solutions with source in lithium-ion an /or H2 batteries. The average % of total R&D investment over the last 3 years for this project was less or equal than 30%.
Other, please specify (Energy efficiency measures in the oil and gas value chain)	Applied research and development	90	0	1	Net4GTL promotes the Development of a Catalytic Reactor Prototype for Continuous Production of Liquid Hydrocarbons (HC) from synthesis gas (CO and H2) by the Fischer-Tropsch (FT) reaction, based on a new reactor production (NETmix). The average % of total R&D investment over the last 3 years for this project was less or equal than 90%.
Carbon capture, utilization, and storage (CCUS)	Applied research and development	10	0	1	The PilotStrategy project's goal is to characterize the Lusitanian basin storage complex to assess the safe and permanent storage of CO2. The average % of total R&D investment over the last 3 years for this project was less or equal than 10%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 1%.
Carbon capture, utilization, and storage (CCUS)	Applied research and development	80	0	3	The Cat4MetMix project aims the CO2 capture through the conversion of CO2 to Methanol Using Molecular Sieves installed in a NetMIX reactor. The average % of total R&D investment over the last 3 years for this project was less or equal than 80%.
Carbon capture, utilization, and storage (CCUS)	Pilot demonstration	10	0	1	RD&I activities in the domain of carbon capture and utilisation, with the development of an innovative catalytic concept for the Gas-to-Liquid (GtL) applications. The average % of total R&D investment over the last 3 years for this project was less or equal than 10%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 1%.
Carbon capture, utilization, and storage (CCUS)	Applied research and development	1	0	1	Through the Net4CO2 Colab, Galp develop RD&I activities in the domain of carbon capture and utilisation, with focus on the development of disruptive technologies, developing new processes and products that provide competitive solutions for CO2 capture and gas separations, and CO2 valorisation Might be part of the solution for Sines refinery decarbonisation. The average % of total R&D investment over the last 3 years for this project was less or equal than 1%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 1%.
Other, please specify (Enhanced Oil Recovery (EOR) techniques)	Applied research and development	15	0	0	Optimization of WAG and PAG Processes Aiming to Increase the Recovery Factor using Numerical Simulation and Experimental Validation (ORFEU). This project develops an enhanced oil recovery processes, injecting mixtures of polymers, surfactants, salt water and CO2, in different walter alternating gas and polymer alternating gas arrangements, both in laboratory rock cores and in numerical simulators to find the case with the greatest oil recovery. The average % of total R&D investment over the last 3 years for this project was less or equal than 15%.
Other, please specify (Enhanced Oil Recovery (EOR) techniques)	Applied research and development	25	0	1	The Digital CO2 Cycle project aims to develop an integrated platform for simulation, visualization and optimization of production, processing and reinjection of fluids rich in CO2, contributing to greater energy efficiency of the installations and reduction of emissions. The average % of total R&D investment over the last 3 years for this project was less or equal than 25%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 1%.
Hydrogen	Applied research and development	100	0	1	Pursue Green Hydrogen scientific and technological advancement throughout the entire value chain. HyLAB operates in the areas of science, research, innovation and social and economical development with Green H2. The average % of total R&D investment planned over the next 5 years for this project is less or equal than 1%.
Other, please specify (Advanced biofuels)	Applied research and development	5	0	1	Through Bio4Portugal, Galp aims to demonstrate the technological concept of the techno-economic and environmental viability of a Biorefinery for advanced biofuels exclusively from forest residues. The average % of total R&D investment over the last 3 years for this project was less or equal than 5%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 1%.
Other, please specify (Advanced biofuels)	Applied research and development	1	0	0	Through BIOREF - Collaborative Laboratory (CoLAB) for the Biorefineries - Galp collaborates in order to deploy highly qualified knowledge and innovation to the market, identifying industrial needs in biorefining technologies and promoting the bioeconomy and bioenergy. The strategic plan of BIOREF is composed by three main domains: (1) Bioenergy, (2) Renewable gases, and (3) Sustainable bioeconomy. The average % of total R&D investment over the last 3 years for this project was less or equal than 1%.
Energy efficiency in transport	Full/commercial-scale demonstration	20	0	20	Battery Swapping - Galp joined forces with the micro-mobility fleet management operator Boost Logistics and the green technology startup Swobbee to launch the first network of battery swapping stations for electric bicycles and scooters in Portugal. The pilot phase included 3 stations in Lisbon and 2 in Madrid. The service makes the charging logistics and fleet management operations of electric vehicles more efficient and sustainable, with a decentralized charging network, more accessible and closer to the micro-mobility vehicles. This proximity also allows the introduction of new ways of transport that help reduce the operation's carbon footprint. An example of this is the introduction of a "cargo bike" by the fleet management operator (Boost Logistics) in the Belém area, taking advantage of two strategically positioned stations to ensure the operation in the riverside area. The average % of total R&D investment over the last 3 years for this project was less or equal than 20%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 20%.
Other, please specify (Battery Storage)	Pilot demonstration	20	0	5	Second-life batteries - To test an energy storage system that reuses lithium-ion batteries from electric vehicles as a solution to reduce emissions associated with batteries and lower the operational costs of electric vehicle charging hubs. The average % of total R&D investment over the last 3 years for this project was less or equal than 20%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 5%.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)	Average % of total R&D investment planned over the next 5 years	Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
Other, please specify (Battery Storage)	Full/commercial-scale demonstration	20	0	10	Energy Storage: install first large-scale battery storage co-located with solar generation plant, to develop knowledge on operating and identification of constructing useful for future projects, but also enabling the market participation development and test new market possibilities, involving market regulators. The average % of total R&D investment over the last 3 years for this project was less or equal than 20%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 10%.
Other, please specify (Advanced biofuels)	Applied research and development	5	0	0	Strategical recommendation on which technologies Galp should pursue to produce sustainable aviation and marine fuels (SAF and SMF). The average % of total R&D investment over the last 3 years for this project was less or equal than 5%.
Other, please specify (Advanced biofuels)	Applied research and development	100	0	0	Feasibility Study for Biogas/Biomethane Production
Other, please specify (Electrical grid integration)	Pilot demonstration	20	0	1	Curtailment assessment: develop tool to model national electricity transport grid, with consumption and generation scenarios to predict grid constraints location sensitive and allow adjustments of Renewable portfolio planning with the outcomes. The average % of total R&D investment over the last 3 years for this project was less or equal than 20%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 1%.
Other, please specify (Energy efficiency in buildings)	Pilot demonstration	20	0	20	Optimize Buildings - Test innovative technologies to increase the energy efficiency of different type of buildings (hotels, offcie buildings, hospitals, shoppings, etc), by applying HVAC optimization, Electrification of heat and thermal storage. The average % of total R&D investment over the last 3 years for this project was less or equal than 20%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 20%.
Other, please specify (Energy efficiency in buildings)	Pilot demonstration	20	0	20	Optimize Pools&Sports - Test innovative technologies to increase the energy efficiency and unlock savings in swimming pools & sports facilities (eg. Electrification, thermal storage,etc). The average % of total R&D investment over the last 3 years for this project was less or equal than 20%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 20%.
Other, please specify (Enhanced Oil Recovery (EOR) techniques)	Applied research and development	60	0	2	The project 'Low Salinity Water Injection Alternating with Miscible CO2 Injection in Oil Reservoirs' investigates the combined effect of low salinity water injection alternated to miscible CO2 injection for oil recovery in carbonate and sandstone reservoirs. The average % of total R&D investment over the last 3 years for this project was less or equal than 60%.
Other, please specify (Smart energy systems)	Full/commercial-scale demonstration	20	0	20	Caxias Living Lab - Create a community of friendly users focused on DERs to support the development of new products and services for Galp Solar, including LECs, DSM, P2P, etc. The average % of total R&D investment over the last 3 years for this project was less or equal than 20%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 20%.
Other, please specify (Solar Energy)	Pilot demonstration	20	0	20	SerendiPV project in consortium with European partners to develop and test in real environment of technological solutions with the aim of increasing Solar PV Plants performance and production. The average % of total R&D investment over the last 3 years for this project was less or equal than 20%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 20%.
Other, please specify (Solar Energy)	Pilot demonstration	20	0	20	MV Cables joints monitoring: implement newly developed sensors and systems to enable the temperature monitoring of critical MV cabling joints to alert O&M of possible and probable failures and anticipate maintenance intervention and reduce downtime. The average % of total R&D investment over the last 3 years for this project was less or equal than 20%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 20%.
Other, please specify (Solar Energy)	Pilot demonstration	20	20		AgriPV solutions: study through the implementation of a pilot plant together with Instituto Superior de Agronomia the impact of PV on Agriculture and vice-versa in an integrated solution. Basis to sustain the design of a sustainable Business Model. The average % of total R&D investment over the last 3 years for this project was less or equal than 20%, while the average % of total R&D investment planned over the next 5 years for this project is less or equal than 20%.

C-OG9.7

(C-OG9.7) Disclose the breakeven price (US$/BOE) required for cash neutrality during the reporting year, i.e. where cash flow from operations covers CAPEX and dividends paid/ share buybacks.

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C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
Galp SFDR - Principal Adverse Impacts 2022.pdf
GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf

Page/ section reference
Information about scope 1 GHG emissions is reported in the page 100 of the Galp Integrated Report 2022 and the Independent Assurance Report (that covers scope 1 GHG emissions) is published in page 458. Also, GRI Content Index 2022 is included in the integrated Report 2022 and the information about scope 1 GHG emissions can be found in page 405. The SFRD principal adverse impacts reports scope 1 GHG emissions as an adverse sustainability indicator in page 3.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
Galp SFDR - Principal Adverse Impacts 2022.pdf
GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf

Page/ section reference
Information about scope 2 GHG emissions is reported in the page 100 of the Galp Integrated Report 2022 and the Independent Assurance Report (that covers scope 2 GHG emissions) is published in page 458. Also, GRI Content Index 2022 is included in the integrated Report 2022 and the information about scope 2 GHG emissions can be found in page 406. The SFRD principal adverse impacts reports scope 1 GHG emissions as an adverse sustainability indicator in page 3.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Galp SFDR - Principal Adverse Impacts 2022.pdf
GALP_2022 IMR - Integrated Management Report.pdf

Page/section reference
Information about scope 3 GHG emissions is reported in the page 100 of the Galp Integrated Report 2022 and the Independent Assurance Report (that covers scope 3 GHG emissions) is published in page 458. Also, GRI Content Index 2022 is included in the integrated Report 2022 and the information about scope 3 GHG emissions can be found in page 406. The SFRD principal adverse impacts reports scope 1 GHG emissions as an adverse sustainability indicator in page 3.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf

Page/section reference
Information about scope 3 GHG emissions is reported in the page 100 of the Galp Integrated Report 2022 and the Independent Assurance Report (that covers scope 3 GHG emissions) is published in page 458. Also, GRI Content Index 2022 is included in the integrated Report 2022 and the information about scope 3 GHG emissions can be found in page 406.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Business travel

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf

Page/section reference
Information about scope 3 GHG emissions is reported in the page 100 of the Galp Integrated Report 2022 and the Independent Assurance Report (that covers scope 3 GHG emissions) is published in page 458. Also, GRI Content Index 2022 is included in the integrated Report 2022 and the iformation about scope 3 GHG emissions can be found in page 406.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Upstream transportation and distribution

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf

Page/section reference
Information about scope 3 GHG emissions is reported in the page 100 of the Galp Integrated Report 2022 and the Independent Assurance Report (that covers scope 3 GHG emissions) is published in page 458. Also, GRI Content Index 2022 is included in the integrated Report 2022 and the information about scope 3 GHG emissions can be found in page 406.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Downstream transportation and distribution

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf

Page/section reference
Information about scope 3 GHG emissions is reported in the page 100 of the Galp Integrated Report 2022 and the Independent Assurance Report (that covers scope 3 GHG emissions) is published in page 458. Also, GRI Content Index 2022 is included in the integrated Report 2022 and the information about scope 3 GHG emissions can be found in page 406.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Processing of sold products

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf

Page/section reference
Information about scope 3 GHG emissions is reported in the page 100 of the Galp Integrated Report 2022 and the Independent Assurance Report (that covers scope 3 GHG emissions) is published in page 458. Also, GRI Content Index 2022 is included in the integrated Report 2022 and the information about scope 3 GHG emissions can be found in page 406.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Use of sold products

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf

Page/section reference
Information about scope 3 GHG emissions is reported in the page 100 of the Galp Integrated Report 2022 and the Independent Assurance Report (that covers scope 3 GHG emissions) is published in page 458. Also, GRI Content Index 2022 is included in the integrated Report 2022 and the information about scope 3 GHG emissions can be found in page 406.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Investments

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf

Page/section reference
Information about scope 3 GHG emissions is reported in the page 100 of the Galp Integrated Report 2022 and the Independent Assurance Report (that covers scope 3 GHG emissions) is published in page 458. Also, GRI Content Index 2022 is included in the integrated Report 2022 and the information about scope 3 GHG emissions can be found in page 406.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	ISAE 3000	Year-on-year change in emissions (Scope 1 and 2) is verified by third party (Integrated Report).
C6. Emissions data	Year on year change in emissions (Scope 3)	ISAE 3000	Year-on-year change in emissions (Scope 3) is verified by third party (Integrated Report).
C6. Emissions data	Year on year emissions intensity figure	ISAE 3000	Progress made on carbon intensity metrics (gCO2e/MJ) is verified every year. These metrics covers the whole Galp Group. Progress made on other intensity figures are also verified, such as: - Progress made on intensity figure CWT (complexity weighted tonne) is verified every year for the Downstream segment (R&D). Specific emissions expressed in kg CO2/complexity weighted tonne (CWT) (benchmark recognised by the European Commission for the refining industry). - Progress made on other intensity figure for the Upstream segment (E&P) (CO2e/boe) is also verified every year.
C4. Targets and performance	Emissions reduction activities	ISAE 3000	Emission reduction initiatives reported in the Galp Integrated Report are verified, under the GRI Indicators GRI 302-4, GRI 302-5 and GRI 305-5. The GRI Content Index 2022 is included in the Galp integrated Report 2022.
C8. Energy	Energy consumption	ISAE 3000	Energy consumption reported in the Galp Integrated Report and GRI Content Index is verified, under the GRI Indicators GRI 302-1. GRI Content Index 2022 is included in the Galp integrated Report 2022. Values in the IMR refer to only operated assets while energy consumption values in this questionnaire also include energy consumption from non-operated upstream assets.

GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.
EU ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS
77

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
1507212

Allowances purchased
1157184

Verified Scope 1 emissions in metric tons CO2e
2664396

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment
For 2022 (period January 1, 2022 to December 31, 2022) Galp's Sines refinery was awarded with 1 507 212 free emissions allowances under the carbon leakage protection scheme of phase IV of the EU-ETS. In that same period, Galp purchased 1 157 184 allowances. The final verified emissions for 2022, under the EU-ETS, in metric tons of CO2 were 2 664 396. 2022 was a challenging year for integrated energy companies given the disruption of markets caused by the ongoing war. As a result, decisions were taken that resulted in the used of higher carbon intensity fuels in the Sines refinery leading in an increase of absolute emissions. As markets stabilize, it is expected that the refinery resumes its efficient activities and its emissions decrease accordingly. Galp continuously works to improve the efficiency and reduce the emissions from its assets under the EU-ETS. In 2022, we invested in several energy efficiency projects which reduce energy consumption and reduce emissions, including replacing boilers in the FCC unit, upgrading exchangers to more efficient technologies and replacing reactors with models that allow higher yields and lower energy usage. Several efficiency projects have been identified and approved for investment until 2025 which will result in an investment of 50m€ and emission reductions of approximately 100 kton CO2e/year

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Galp has an internal regulatory standard (NR-024 GHG Emissions Management - ETS) on GHG emission management, regarding ETS. This standard defines the responsibilities in managing GHG emissions and data, to ensure compliance with applicable legal requirements and guarantee a fully informed and timely decision-making process, anticipating risk situations and opportunities and supporting decision making. As an example, this internal standard requires that managers of facilities covered by the ETS to periodically report current and projected emissions, estimating deficits and surpluses that will allow minimising the risks and maximising the opportunities associated. This reporting is done quarterly and reported to the Executive Committee. The responsible for the management of allowances accounts of each installation covered by the ETS were appointed by the Executive Committee, through deliberation.

Galp also has dedicated legal and external relations teams that monitor all relevant climate related regulatory issues and a specific information system that tracks all regulatory changes, including those related to the ETS, in order to be constantly updated about all legislation in force and its impact on Galp activities. Galp was already under the ETS during the 2013-2020 period and will still be involved in the current phase IV of the ETS (2021-2030).

Moreover, Galp as a member of Fuels Europe and CONCAWE participates in their ETS-related taskforces and has direct engagements with these associations to discuss the ongoing revision of this directive and its implications for the refining industry, guaranteeing a permanent update about the ETS topics and enabling the anticipation of potential risks that may arise. At the operational level, Galp is focused on two main aspects: the reduction of absolute emissions, directly impacting the dependence on the purchase of allowances, and improving the sectorial benchmark (CO2/CWT) in order to maintain or increase the number of long-term free allowances provided.

The increased ambition in emissions reduction announced by the EU commission recently with the European Climate law and accompanying Fit for 55 legislative package will put increased pressure on CO2 prices which are likely to rise, as well as in the allocation of free emission allowances, which will likely decrease, especially if refined products are included in the CBAM mechanism in the future.

Therefore, the costs arising from EU-ETS and the expected associated increase are included in the company's 10-year Business Plan and yearly budget.

Additionally, we continually implement energy efficiency projects in our refineries in order to reduce emissions, energy consumption and expenses related with the purchasing of emission allowances. Our teams are continuously working to identify and implement new efficiency and emissions reduction projects and currently have identified several projects to be implemented by 2025, with an estimated investment of €50 m which will reduce emissions in approximately 100 kton CO2e/year, consequentially reducing the amount of purchased emission allowances by the same amount.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?
Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits canceled by your organization in the reporting year.

Project type
Clean cookstove distribution

Type of mitigation activity
Emissions reduction

Project description
The project involves manufacturing and distribution of efficient charcoal cookstoves that would replace the inefficient cookstoves currently being used in the host country of Nigeria. The project will help thousands of families, small and medium commercial entities in Nigeria and will reduce the Green House Gas emissions from production, transport and combustion of charcoal/wood by using more efficient stoves. Simultaneously, the project provide co-benefits to users and families in the form of relief from high fuel costs, reduced exposure to health-damaging airborne pollutants, faster cooking (resulting in time-savings), and increased cleanliness and convenience. Finally, they curb deforestation by decreasing demand for charcoal.

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)
3911

Purpose of cancellation
Other, please specify (Beyond value chain mitigation)

In 2022 Galp decided to compensate the emissions from the main events it sponsored. This included the emissions from the Rock in Rio Lisboa festival 2022. This action constitutes beyond value chain mitigation to reduce greenhouse gas emissions and support society to reach net zero emissions by 2050. The emissions associated with this event were calculated by an independent 3rd party and Galp purchased and retired the equivalent amount of carbon credits to compensate these emissions.

Are you able to report the vintage of the credits at cancellation?
Yes

Vintage of credits at cancellation
2020

Were these credits issued to or purchased by your organization?
Purchased

Credits issued by which carbon-crediting program
Gold Standard

Method(s) the program uses to assess additionality for this project
Other, please specify (Gold standard for the global goals community services activity requirements)

Approach(es) by which the selected program requires this project to address reversal risk
No requirements

Potential sources of leakage the selected program requires this project to have assessed
Other, please specify (Gold Standard methodology)

In accordance with the methodology, leakage risks deemed very low can be ignored. At this point no leakage is identified in the project but future offset calculations will be adjusted accordingly if significant sources are later identified

Provide details of other issues the selected program requires projects to address
Contribute to following additional SDGs, beyond SDG 13 (Climate action): SDG 7 Affordable clean energy, SDG 1: no poverty,
While these stoves will significantly reduce greenhouse gas emissions, they simultaneously provide co-benefits to users and families in the form of relief from high fuel costs, reduced exposure to health-damaging airborne pollutants, faster cooking (resulting in time-savings), and increased cleanliness and convenience. Finally, they curb deforestation by decreasing demand for charcoal.

Comment
In 2022 Galp decided to compensate the emissions from the main events it sponsored. This included the emissions from the Rock in Rio Lisboa festival 2022. The emissions were calculated by an indepent 3rd party and Galp purchased and retired the equivalent amount of carbon credits to compensate these emissions.

Project type
Community projects

Type of mitigation activity
Emissions reduction

Project description
The project rehabilitates, installs and maintains boreholes to ensure communities have safe access to water, as well as building local capacity to ensure water points are managed in the future. The project will support the provision of safe water to hundreds of households in Manica, Sofala and Tete provinces.
By providing safe water, the project will ensure that households consume less firewood during the water purification process and, as a result, there will be a reduction in carbon dioxide emissions from the combustion process.

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)
200

Purpose of cancellation
Other, please specify (Beyond value chain mitigation)

In 2022 Galp decided to compensate the emissions from the main events it sponsored. This included the emissions from the Rock in Rio Lisboa festival 2022. This action constitutes beyond value chain mitigation to reduce greenhouse gas emissions and support society to reach net zero emissions by 2050. The emissions associated with this event were calculated by an independent 3rd party and Galp purchased and retired the equivalent amount of carbon credits to compensate these emissions.

Are you able to report the vintage of the credits at cancellation?
Yes

Vintage of credits at cancellation
2020

Were these credits issued to or purchased by your organization?
Purchased

Credits issued by which carbon-crediting program
Gold Standard

Method(s) the program uses to assess additionality for this project
Other, please specify (Gold Standard methodology)

Approach(es) by which the selected program requires this project to address reversal risk
No requirements

Potential sources of leakage the selected program requires this project to have assessed
Other, please specify (increase in fuel consumption by the non-project households attributable to the project activity)

Provide details of other issues the selected program requires projects to address
Contribute to following additional SDGs, beyond SDG 13 Climate action: SDG 3 Good Health and Wellbeing, SDG 5 Gender equality, SDG 6: Clean Water and Sanitation.
By rehabilitating and installing critical water infrastructure within communities and committing to ensure that it is maintained and tested for water quality over the project lifetime, the project reduces the risk of water borne illnesses and the need to boil water for purification, which exposes households to hazardous air pollution. This saves thousands of tonnes of firewood per year and reduces CO2 emissions. By implementing a WASH campaign and training, the project also improves hygiene and sanitation practices within the communities.

Comment
In 2022 Galp decided to compensate the emissions from the main events it sponsored. This included the emissions from the participation of the Portuguese Federation in World Cup 2022, including air travel and travel between the training centre and the various stadiums where the matches will take place. The calculation of the estimated emissions was carried out by an independent entity, consulting firm PricewaterhouseCoopers. With the completion of the event, PwC will make the necessary adjustments to the estimated calculations and will report to Galp the final calculation of the carbon footprint and respective assumptions considered to be offset.

C11.3

(C11.3) Does your organization use an internal price on carbon?
Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price
Shadow price

How the price is determined
Alignment with the price of allowances under an Emissions Trading Scheme

Objective(s) for implementing this internal carbon price
Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations
Stakeholder expectations
Stress test investments

Scope(s) covered
Scope 1
Scope 2

Pricing approach used – spatial variance
Uniform

Pricing approach used – temporal variance
Evolutionary

Indicate how you expect the price to change over time
Galp considers that carbon cost internalization mechanisms, such as carbon pricing, as one of the most effective ways to promote the investment to lower carbon emitting solutions, while securing technological neutrality. Anchored on this belief, Galp includes a global carbon price when evaluating investments in new projects or changes in existing ones. To ensure the resilience of its investments, the Company considers a carbon price on investment analysis, even in geographies without emissions trading schemes in place, considering prices consistent with external long-term energy transition scenarios (>€90/tonne of CO2 by 2025, >€100/tonne of CO2 by 2030, >€150/tonne of CO2 by 2050).

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)
85

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

Business decision-making processes this internal carbon price is applied to
Capital expenditure
Operations
Risk management
Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes
Yes, for some decision-making processes, please specify (Carbon price analysis is used as an investment criterion in investment analysis when businesses have significant associated emissions, as is the case of Upstream and Refining and Midstream, but also some new businesses such as Lithium processing.)

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan
The company considers a carbon price on GHG emissions in investment analysis and therefore incorporates CO2 and climate related issues in its decision-making process. The Company considers that carbon cost internalisation mechanisms such as carbon pricing are the most effective and efficient way to promote the decarbonisation of the economy on a global scale. A carbon price is considered when evaluating medium and long-term investments, to mitigate risks and maximize opportunities along the value chain. When evaluating investments in new project developments, expansions or upgrades of existing assets, Galp stress tests the impact of the related CO2 emissions in its metrics and targets before any investment decision. These mechanisms can, simultaneously, cover all the different alternatives with potential to drive an effective reduction of the greenhouse gases emissions and promote a comparable impact assessment of the full lifecycle of different technologies, based on a well-to-wheel approach, while securing technology neutrality. This is also the process that best guarantees an alignment between all industries, products, services and geographies in view of the commitment to decarbonisation. Anchored on this belief, Galp includes a global carbon price when evaluating investments in new projects or changes in existing ones. To ensure the resilience of its investments, the Company considers a carbon price on investment analysis, even in geographies without emissions trading schemes in place, considering prices consistent with external long-term energy transition scenarios (>€90/tonne of CO2 by 2025, >€100/tonne of CO2 by 2030, >€150/tonne of CO2 by 2050).ensuring the incorporation of a potential global carbon price and its temporal evolution. By using a dynamic carbon price, Galp demonstrates that it is aware of the future potential changes in regulation, consumer and technological patterns and the risks associated with long-term business plan analysis. Investment decisions are subject to a strict evaluation, from screening to approval, and stress tests are performed to ensure its resilience against adverse macro conditions, which can include carbon prices.
Recognising carbon pricing as an essential and strategic tool to minimize the economy's carbon intensity, Galp submitted its commitment to the We Mean Business Platform.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our customers/clients
Yes, other partners in the value chain

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

87

% of customer - related Scope 3 emissions as reported in C6.5

7

Please explain the rationale for selecting this group of customers and scope of engagement

Galp is a leader in the distribution and sale of fuels in Portugal and an important player in Spain, with over >500k forecourt visits a day, and as such remains focused on selling additive-enhanced fuel and committed to the excellence of the products and services provided, differentiating strategy in the marketing of oil products. With this in mind, Galp has launched specialized fuel offer for Iberian clients. These fuels have high-performance additives, which allow greater fuel savings, extended engine life and more efficiency, with lower GHG emissions associated, consequently benefiting the environment. Galp concentrates its marketing activity in Iberia (downstream), where it is a relevant player. We have a vast distribution network with 1273 service stations and we are one of the leading operators in the region where the specialized Evologic fuels are marketed. These fuels are sold at most Galp service stations. Since this initiative was launched, Galp has carried out several strong engagement campaigns with this group of customers (Iberian Clients) with the aim of promoting this type of fuels and the environmental benefits associated. Additionally, the customers can be clarified about the advantages and the impact of using Evologic fuel and even can perform a simulation on our website to know how much customers can save in consumption and CO2 emissions. Success is measured through the level of sales of these new fuels, which have increased compared to last year, as customers are being engaged and accept the Evologic fuels. In 2022 Evologic fuels represented 23.4% of the total of diesel and gasoline sales for the Iberian Peninsula a 4% YoY increase from 2021

Impact of engagement, including measures of success

Galp remains focused on selling additive-enhanced fuel and committed to the excellence of the products and services provided, differentiating strategy in the marketing of oil products. With this in mind, Galp has launched a specialized fuel offering for Iberian clients. These fuels have high performance additives, which allow for greater fuel savings extended engine life and greater efficiency, with lower GHG emissions associated, consequently benefiting the environment. Galp concentrates its marketing activity in iberia (downstream), where it is a relevant player. We have a wide distribution network and we are one of the leading operators in the region where the specialized Evologic fuels are marketed, moreover these fuels are sold at most of Galp's 1273 Iberian service stations, which accumulate >500k forecourt visits per day. Since this initiative was launched, Galp has carried out several strong engagement campaigns with this group of customers (Iberian Clients) with the aim of promoting this type of fuels and the environmental benefits associated. Success is measured through the level of sales of these new fuels, which have increased compared to last year, as customers are being engaged and accept the Evologic fuels. . In 2022 Evologic fuels represented 23.4% of the total of diesel and gasoline sales for the Iberian Peninsula a 4% YoY increase from 2021

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

87

% of customer - related Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

Galp is a leader in the distribution and sale of fuels in Portugal and an important player in Spain, with over >500k forecourt visits a day, and as such Galp is adapting and diversifying its offer quickly to anticipate evolving customer needs and expectations, by offering energy efficiency solutions, and Low Carbon Products, as well as technical services aimed at optimising and reducing energy consumption to our customers in Iberia. Galp's offer is, therefore, increasingly integrated and sustainable solutions, with businesses such as EV charging points and decentralized solar energy. Galp is pursuing a marketing strategy focused on transforming its fuel stations network under new hub concepts, combining multi-energy supply and greater customer convenience. This transformation will translate into an increased contribution from low carbon sales and the expansion in our charging points network in Iberia. Through the Galp Electric card commercial offer, we provide energy, mobility solutions and services on the road and at home to our customers.In 2022 Galp had c. 2500 electrical vehicle charging pojnts (including fast and ultra fast charging points) distributed between its service stations and other locations, and issued more than 14000 Galp electric cards for customers, supplying 8.9 GWh of renewable electricity for electric mobility, a 162% increase year on year. In 2022 the Innovation team launched Optimize, a project that aims to protect Galp's B2B clients from the volatility of energy markets, offering them innovative solutions to become more efficient and less dependent on the gas & power grids. The project targets high energy consuming customers in industry, buildings, pools and sports facilities, with proof of concept already ongoing during 2022.
Galp developed a decentralised renewable energy production solution, Galp Solar, based on smaller scale solar power generation systems and services aiming at maximising energy consumption and efficiency both to B2B and B2C segments. At the end of 2022, Galp Solar was considered the fastest growing distributed energy player in Iberia, having already had carried out >10000 installations, corresponding to an installed capacity of c.32 MW, covering more than 4,000 clients in Iberia.

Impact of engagement, including measures of success

In 2022 renewable electricity sold for mobility more than doubled to 8.9 GWh (162% YoY increase), solidifying the Company's leading position in Portugal with an electricity volume market share of around 26%. Through the Galp Electric card commercial offer, we provide energy, mobility solutions and services on the road and at home. During 2022, more than 14,000 cards were issued.
During the same year, Galp more than doubled the number of operating charging points, surpassing 2,000 points in Iberia. Currently, the Company owns the largest electric mobility charger network in Portugal with more than 2000 points, of which c. 500 are Fast and Ultra-Fast Charging Points. During 2023, the Company will continue to focus on expanding its network of points network in Iberia. This will involve establishing new partnerships with renowned automobile brands like Nissan and BMW, as well as collaborating with IKEA. In addition, Galp plans to continue installations on its own service station network but also identify additional locations in both public and private placements. The Company expects to have more than 10,000 operating charging points installed in Iberia by the end of 2025, with this business playing a relevant role in Galp's transition to a lower-carbon portfolio.Galp developed a decentralised renewable energy production solution, Galp Solar, based on smaller scale solar power generation systems and services aiming at maximising energy consumption and efficiency both to B2B and B2C segments. At the end of 2022,
Galp Solar was considered the fastest growing distributed energy player in Iberia, having already had carried out >10000 installations, corresponding to an installed capacity of c.32 MW, covering more than 4,000 clients in Iberia.
The total electricity production from the c. 32 MW of equipment's installed since 2020 is estimated at c. 3.4 GWh and is thought to have avoided 0.5 ktCO 2e in comparison to the same amount of electricity purchased from the grid. Galp Solar is also working with the Innovation team on shared self-generation and consumption and plans to deliver 10 'Solar Buildings' in Spain and to start 5 Solar Communities in Portugal during 2023.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number
31

% of customer - related Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
Galp supplies natural gas and electricity to more than 365 k B2C customers in Iberia. The Company is one of the key players in the region, with a market share of 23% in natural gas and 5% in the electricity market in Portugal. The company has been working to increase its low carbon products offer in and effort to help customers decarbonize their activities and has since 2020 offered its individual and corporate customers in Portugal plans for green electricity produced from 100% renewable sources, such as hydro, wind or solar energy etc. Additionally, all the electricity sold by Galp to new B2C customers during since 2020 was of renewable origin.

Impact of engagement, including measures of success
In 2022 renewable electricity sales corresponded to c. 44% of total electricity sales by Galp in Portugal and avoided c. 190 kton CO2e in relation to electricity purchased from the grid using a location based emission factor for the Portuguese grid.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number
0.1

% of customer - related Scope 3 emissions as reported in C6.5
23

Please explain the rationale for selecting this group of customers and scope of engagement
During 2022 Galp continued expanding its low carbon fuel offer to other modes of transport, engaging with and assisting its B2B customers to decarbonize their activities by accessing Galp's commercial low carbon products offer for maritime and aviation transport.
In 2022, the company signed a strategic partnership with TAP and ANA, key aviation players in Portugal, for the development and supply of sustainable fuels. The first Portuguese flight fuelled by Sustainable Aviation Fuel (SAF) took off in July, connecting the Portuguese islands of Azores to Lisbon, achieving a 35% reduction in total CO2 emissions of the flight. Galp also established a partnership with Douro Azul, one of the main national players in waterborne tourism, for the supply of sustainable fuels (HVO biodiesel) to three cruisers, which enables an 80% carbon footprint reduction when compared to fossil fuels.

Impact of engagement, including measures of success
The company became a first mover in both air and water borne transport by providing low carbon fuels for the first Sustainable Aviation Fuel (SAF) powered flights from Portugal in summer 2022 and by supplying Douro Azul with 100% renewable HVO diesel produced from residual feedstocks that allowed for an 80% life-cycle emissions from the operation of 3 ships in comparison to a fossil equivalent.
Although the number B2B customers purchasing low carbon fuels is still very low, Galpis aware that these are the first crucial steps into diversifying its low carbon portfolio and assist customers in reducing emissions from their activities and expects the number of clients and sales to increase in throughout the decade as decarbonisation gathers pace and regulatory conditions stimulate the adoption of low carbon fuels for aviation and maritime transport (e,g, RED II, FuelEU Maritime, ReFUEL EU Aviation, etc).

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number
86

% of customer - related Scope 3 emissions as reported in C6.5
2

Please explain the rationale for selecting this group of customers and scope of engagement
Galp's bottled LPG business involves the production and sale of various types of gases that are packaged in portable containers or tanks for use in a variety of applications such as heating, cooking, and vehicle fuel. During 2022 Galp launched Pluma a new, lighter and intelligent LPG bottle that allows customers to know its gas level on a real time basis and track consumptions allowing for a more efficient use. The emissions from the combustion of the gas contained in the bottle will also be compensated by the retirement of carbon credits using emission reduction and capture projects.

Impact of engagement, including measures of success
The new Pluma LPG bottle was on offer in every Galp outlet and its launch involved radio and TV advertising campaigns. Given that its launch was in late 2022, it is too early to measure impacts but the new LPG bottle is estimated to replace all previous Pluma LPG bottle models.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Galp's Upcoming Energies platform aims to accelerate the innovation ecosystem and redefine the energy business. It opens a door to the R&D+I community, based on targets, collaborative programmes, materialised by projects with startups, suppliers, universities, etc that integrate the energy innovation ecosystem. Overall since 2022, 36 open calls have taken place, with 486 startups/projects, with a total of 4118 participants. In 2022 there were engagements with academia (e.g. IST Golden Partner, Portuguese Católica University, etc), others that positioned Galp within the Innovation ecosystem (MOU with Portugal Ventures; sponsoring the European Innovation Academy, partnering with Lisbon Unicorn Factory) and participation in startup engagement programs (e.g. AWS Clean Energy Accelerator; European Greenhouse Gas Program).

In Spain, Galp and BMW created a network of 25 ultrafast charging centers for EVs in key corridors. This includes the installation >100 ultra-fast charging points powered by solar panels located in the canopy. Galp and BMW will also collaborate in the development of open innovation initiatives.

Galp partnered with the organisers of relevant events it sponsors and offset emissions from these events, in the absence of low carbon products that might cut emissions, to mitigate their overall impact. In 2022 Galp purchased 4111 credits to offset emissions from the Rock in Rio Lisboa festival and the Portuguese Football Federation's participation in World Cup 2022

We believe that applying our Sustainable Procurement Policy will improve the our ESG footprint. In 2022 a supplier survey was conducted, to determine the supply chain alignment with our policy, as well as to obtain a perception of the best market practices. A total of 502 tier 1 supplier, (86% of billing) were invited to answer, with a 46% response rate. All suppliers scored >75% in this survey, which provided a positive assessment of our supply chain.

Galp promotes social dialogue and engagement with key stakeholders, recognising that we all have a role to play in a just energy transition. In 2022, we participated in several events in sustainability, mobility, energy transition and climate-related topics, such as: Galp Electric Summit; World Bike Tour, Web Summit - under the motto "The Energies of the Future", impacting > 200k people

Future UP, Galp's energy educational project, aims to increase knowledge on the energy transition and associated challenges impacted 5129 students+teachers, in 117 schools in Portugal, in >126 energy classes in 2022. In Alcoutim, where Galp operates a solar PV plant, the community investment plan was codesigned with local stakeholders, aiming to implement a local electric mobility system and a social program that promotes active aging and supports the elderly population.

Several other initiatives were developed in 2022 in the sustainable energy and mobility spaces:Upcoming Energies partnered with GirlMOVE Academy's Changemaker LAB, to develop energy access projects in Mozambique that aim to support schools (1204 students+13 teachers) and 478 households in the local community; the 3rd edition of the EnergyUp award, in partnership with GalpSolar, sponsored a school with PV panels for decentralized production, impacting 850 students; and finally, at Instituto da Imaculada, an organization working with people with disabilities, the installation of solar panels for power production and heating water, led to 69% energy self-sufficiency.

In 2022 Galp joined the EFRAG, as a member of the Community Sector Group for the development of the EU Sustainability Reporting Standards – Oil&Gas Sector standards, within the Corporate Sustainability Reporting Directive, through workshops with peers. Also, Galp recently joined Taskforce on Nature-related Financial Disclosures Forum, a multi-disciplinary consultative group who share the mission and principles of the TNFD and are available to contribute to its work.

Updated information is necessary to tackle the energy transition challenge and other issues, to influence the business strategy, adopt best practices and define ambitious targets towards continuous improvement. Therefore, we maintain an active network of cooperation, sharing, and knowledge development, participating in various industry associations in different business segments. These engagements are crucial in areas where technology and regulation are evolving fast such as renewable power generation, improvement of asset efficiency, development of low carbon fuels, CCS.

Galp is a member of WBCSD and the Portuguese division of BCSD and is present on several climate related working groups focused on achieving carbon neutrality by 2050 on both these associations. The company is also a member of several other climate related associations and forums such as UNGC, WEF, Energy Impact Partners, The Climate Board, etc, where it can share knowledge, discuss and influence on topics related to energy transition, climate and sustainability

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

Galp signed BCSD Portugal manifesto where companies committed to support the goals of the Paris Agreement, paving the way for robust policies to be adopted towards the COP26. Our ambition is public and can be found in our TCFD 2022 report, Integrated Report 2022 and Galp's Participation in Industry Association: Climate Change Report.

Participation in Industry Associations - Climate Change - 2022.pdf

Manifesto _Rumo à COP26_ • BCSD Portugal.pdf

GALP_2022 IMR - Integrated Management Report.pdf

GALP_NFI_TCFD 2022.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Galp collaborates with various stakeholders, including governments, EU institutions, trade associations, partners, suppliers, investors, and energy users. These collaborations create learning opportunities and shared value, fostering partnerships and trust and ultimately pave the way for a more inclusive and informed decision-making process. Galp actively participates in the climate debate, focusing on sustainability and the development of clean, affordable energy solutions to drive the energy transition and mitigate climate change. The company participates in several trade associations and technical working groups focused on promoting the implementation of ambitious strategies aligned with the international community's goals, mainly those regarding the energy transition and carbon neutrality, aligned with the Paris Agreement, European and National Climate Laws, and SDGs.

Trade Associations play a crucial role in society as collaborative platforms for best practices in different sectors. Galp benefits from cooperation and knowledge-sharing through these associations, enabling the development of high-performance standards and relevant debates within and beyond the organization. Galp and Trade Associations jointly support strategies aligned with international goals, particularly concerning the energy transition and carbon neutrality. Future memberships are selected based on criteria in line with the Paris Agreement and European Climate Law, consistent with Galp's 2030 strategy.

Galp conducts an annual evaluation of industry associations to identify those aligned with their purpose, mission, and values related to sustainable development and climate commitments. Transparency about industry association participation promotes commitment and engagement in addressing climate challenges. The evaluation checks if associations support a) the goals of the Paris Agreement; b) the EU's climate neutrality target, energy efficiency, emission reduction initiatives, renewable energy uptake, sustainable mobility, and transparent climate-related communication and reporting, including the use of decarbonization technologies; and c) Galp's purpose, mission and values. The monitoring report, updated annually, classifies associations as aligned, partly aligned, or misaligned. In 2022, out of 20 evaluated organizations representing 80% of Galp's contribution to trade associations, only one was partly aligned, while the remaining 19 were classified as aligned.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers
Renewable Energy Directive

Category of policy, law, or regulation that may impact the climate
Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate
Climate-related targets
Low-carbon, non-renewable energy generation
Renewable energy generation

Policy, law, or regulation geographic coverage
Regional

Country/area/region the policy, law, or regulation applies to
EU27

Your organization's position on the policy, law, or regulation
Support with minor exceptions

Description of engagement with policy makers
Met directly with policymakers from the European Commission to communicate Galp's concerns regarding mandates, and connection with other pieces of legislation from the Fit for 55 package.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
Galp supports the deployment and uptake of renewable energy sources in the EU, and therefore the revised RED targets and rationale behind that revision, but there is still room for improvement in order to guarantee the successful achievement of the targets and several key issues that to be addressed need in its Delegated Acts.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?
<Not Applicable>

Specify the policy, law, or regulation on which your organization is engaging with policy makers
Critical Raw Materials Act

Category of policy, law, or regulation that may impact the climate
Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate
Renewable energy generation
Other, please specify (Access to a secure and sustainable supply of critical raw materials, enabling Europe to meet its 2030 climate and digital objectives)

Policy, law, or regulation geographic coverage
Regional

Country/area/region the policy, law, or regulation applies to
EU27

Your organization's position on the policy, law, or regulation
Support with minor exceptions

Description of engagement with policy makers
Participation in a EU Commission's Public Consultation

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
Galp supports the Critical Raw Materials Act rational overall, but we believe that there can be improvements on some topics covered in this legislation, namely the protection to the raw materials extracted within EU territories.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?
<Not Applicable>

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (Overall - summary of trade associations in which Galp participat)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
We influence the trade associations where we participate to adopt best practices and to define ambitious targets aligned with the Paris Agreement. Galp is aiming to be a key player in the future of energy, integrating the energy transition across all business units. In order to tackle this challenge and other material issues identified, we maintain an active network of cooperation, knowledge sharing and development, participating in various industry associations in different business segments.

Transparency, together with other Galp values and principles, serves as a cornerstone for good professional conduct and the relationship with our stakeholders. For this reason, Galp publicly informs on its main associations. In 2022, and with the rapid transition to a paradigm in favour of sustainable development implying that companies reflect on the commitments they sign up to, and also on the associations they join and participate in, we analysed the alignment of the main associations in which Galp participates in relation to its positioning with the climate. This evaluation had the main goals of identifying the sector associations that are aligned with Galp's Purpose, Vision, Mission and Values, with respect to sustainable development and thus to the Paris Agreement and the European Climate Law. We selected 20 organizations that represent about 80% of Galp's contribution to associations in 2022. Of the 20 associations analysed, we concluded that, according to our criteria (Paris Agreement, the European Climate Law
and Galp's Purpose, Vision, Mission and Values) 19 are aligned, 1 are partially aligned, and none are misaligned.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
1700000

Describe the aim of your organization's funding
Trade Associations play a crucial role in society as collaborative platforms for best practices in different sectors. Galp benefits from cooperation and knowledge-sharing through these associations, enabling the development of high-performance standards and relevant debates within and beyond the organization. Galp and the Trade Associations it is a member of jointly support strategies aligned with international goals, particularly concerning the energy transition and carbon neutrality.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
FuelsEurope

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
FuelsEurope supports the Green Deal's ambition for climate neutrality in 2050 and will work with the EU institutions, Member States, and stakeholders, to help create the essential enabling policy framework. It recognises that there is no business as usual and is ready to play a full role by developing low-carbon liquid fuels (including net-zero carbon fuels), as well as other products and services needed to achieve this the climate neutrality objective. Moving towards a low carbon economy, we actively and transparently participate in trade associations with global initiatives on climate change, namely: EPRA (European Petroleum Refiners Association – fusion of CONCAWE and Fuels Europe) – which promotes economically and environmentally sustainable refining, supply and use of petroleum products in the EU, by providing input and expert advice to the EU Institutions, Member State Governments and the wider community, thus contributing in a constructive and pro-active way to the development and implementation of EU policies and regulations. Their policy priorities are climate & energy; environmental and quality air, low carbon fuels, among others. Galp is a member of the Energy and Climate Issue Group and the Emission Trading System and is participates in the Vision 2050 project, among the energy and climate issues, in the European industry association FuelsEurope. Participation in this association allows us to have an overview of trends, context and policies on energy and climate in Europe, through this participation we understand and support EU initiatives and leadership, recognising the need to address both climate change and security and access to affordable energy supply. Besides, Galp believes that the emissions trading scheme is the most important and functional instrument to ensure the CO2 emissions reduction in the most cost-effective way. However, Galp does not support artificial market interventions. Galp also believes in a level playing field between energy sources and competing economies and in technologically neutral policies. Besides, Galp calls for transparency within the EC calculations which determine the amount of allowances in the market each year.
FuelsEurope/EPRA supports the ambition of the European Union to be climate neutral by 2050 and the goals of the Paris Agreement and is therefore aligned with the objectives of the Paris Agreement and the European Climate Law, as well as with Galp's Purpose, Vision, Mission and Values.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
219000

Describe the aim of your organization's funding
Membership fee to participate in the association and have access to their views and materials on the evolving regulation and energy system.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (WBCSD)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
The global network of the World Business Council for Sustainable Development (WBCSD) is the largest international business organization working in the sustainable development domain. A core component of the WBCSD's Climate Policy activities is to foster strong policy signals and economic incentives promoting a race-to-the-top where sustainable solutions can succeed. WBCSD actively calls for policies that are consistent with ambitious action on climate and enable business-led solutions to scale and speed implementation of the Paris Agreement. WBCSD's policy and advocacy work aims to support members in bringing the collective voice of progressive businesses into global policy events to help shape the international agenda so that it becomes more relevant to business and leads to business success by increasing their sustainability and alignment with the Paris Agreement and 1.5ºC scenarios. Businesses have an opportunity to bring solutions to important agenda-setting and decision making mechanisms in among others, the energy, food and nature spaces globally by demonstrating insight, sharing knowledge and expertise, and providing solutions. Galp is also a member of BCSD Portugal is part of the global network of the World Business Council for Sustainable Development (WBCSD), WBCSD and BCSD Portugal are fully aligned with the objectives of the Paris Agreement and the European Climate Law, as well as with Galp's Purpose, Vision, Mission and Values. For more information please consult Galp's participation in Industry Associations: Climate Change report.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
167000

Describe the aim of your organization's funding
Annual membership fee to participate in the association and working groups and have access to updated information and views on decarbonization of the economy and evolution of low carbon businesses. Galp in 2022 participated in the following working groups/ projects: • WBCSD Policy, Advocacy & Mobilization, Reporting Matters • Carbon Capture, Storage and Removal • Mobility decarbonisation • SOS 1.5 • Energy transformation • Hydrogen workstream

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
SolarPower Europe

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
SolarPower Europe aims to make solar the core of a smart, sustainable, secure and inclusive energy system in order to reach climate neutrality in the EU before 2050 by: - successfully advocating solar energy solutions to European policymakers and influencing at national level helping deliver the enabling environment to maximise solar power growth in Europe; - producing thought-leading energy market analyses to support our members' business objectives and promote solar power to policymakers and the wider energy sector; - actively engaging the finance community to ensuring solar-based energy solutions have the right access to financing and funding across Europe; Effectively and consistently communicating the benefits of solar power across Europe, and globally, through all relevant communication channels to make sure our key arguments gain traction with our stakeholders and the media; and - Efficiently coordinating business opportunities for our members by facilitating their attendance at the best networking and business development platforms in Europe and beyond. SolarPowerEurope is fully aligned with the objectives of the Paris Agreement and the European Climate Law, as well as with Galp's Purpose, Vision, Mission and Values.
For more information please consult Galp's participation in Industry Associations: Climate Change report.
SolarPower Europe is fully aligned with the objectives of the Paris Agreement , the European Climante law and Galp's purpose, mission and values.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
12000

Describe the aim of your organization's funding
Annual membership fee to participate in the association and working groups and have access to updated information and views on the role of solar electricity in the energy transition and related regulation.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (World Economic Forum (WEF))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly opposed their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
WEF, the World Economic Forum, is an organisation for public-private cooperation, involves leading business, political, cultural, and other leaders in society to shape today's political and economic challenges. The World Economic Forum is committed to supporting global efforts in the private and public sectors to limit global temperature rise to m1.5 degrees celcius and stave off disaster by working with leaders to increase climate commitments, collaborating with partners to develop private initiatives, and providing a platform for innovators to realize their ambition and contribute solutions..
WEF is fully aligned with the objectives of the Paris Agreement , the European Climate law and Galp's purpose, mission and values.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
182000

Describe the aim of your organization's funding
Annual membership fee to participate in the association and working groups and have access to updated information and views on the energy transition.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (Hydrogen Europe)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
Hydrogen Europe brings together several industry players, large companies, and SMEs, who support the delivery of hydrogen and fuel cells technologies. Their main goal is to enable the adoption of abundant and reliable energy which efficiently fuels Europe's low carbon economy. The objectives of the Hydrogen Strategy should translate into clear policies removing barriers to hydrogen investment, enabling the development of clean hydrogen technologies, and scaling their deployment to deliver net zero by 2050.
Hydrogen Europe is fully aligned with the objectives of the Paris Agreement , the European Climante law and Galp's purpose, mission and values.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
25000

Describe the aim of your organization's funding
Annual membership fee to participate in the association and working groups and have access to updated information and views on the role of hydrogen in the energy transition and associated regulation.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (Hydrogen Council)

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
The Hydrogen Council HC is a global CEO-led initiative of leading energy, transport and industry companies with a united vision and long-term ambition for hydrogen as part of the solution to foster the energy transition. The Council was created by well-known, global companies present in the hydrogen value chain, from fuel producers to vehicle manufacturers to help limit global warming to 2°C, in accordance with the target set by the Paris Climate Agreement in 2015, and to share their vision and goals regarding the use of hydrogen as an accelerator of the energy transition. The council is presently made up of nearly 150 Steering Members, Supporting Members and Investor Group Members.
The Hydrogen Council is fully aligned with the objectives of the Paris Agreement, the European Climante law and Galp's purpose, mission and values.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)
20000

Describe the aim of your organization's funding
Annual membership fee to participate in the association and working groups and have access to updated information and views on the role of hydrogen in the energy transition and associated regulation.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports, incorporating the TCFD recommendations

Status
Complete

Attach the document
GALP_2022 IMR - Integrated Management Report.pdf
GALP_NFI_TCFD 2022.pdf
AIRGalp2022EN2Book2SustainabilityJourney.pdf

Page/Section reference
Please consult IMR 2022 (whole report). Some direct references to TCFD, climate change and GHG emissions can be found in pages: 11, 25-27, 31, 34, 40, 42, 50, 56, 59, 98-103, 110, 176, 256-257. Please also consult complimentary pieces, pages 389-429 (GRI Standards 2022), pages 430-435 (SASB standards) and pages 436-438 (WEF santandards) which are appendix to the IMR 2022. Alsp see the Task Force on Climate-related Financial Disclosures (TCFD) 2022, which is a separate report (all pages).

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment
Galp is committed to improve and increase the disclosure of its ESG governance, strategy, climate related risks and opportunities and emissions and other ESG metrics. As such it reports on these topics on its annual Integrated Management Report, including information disclosure according to the GRI and SASB standards, as well as a separate TCDF report

Publication
In voluntary communications

Status
Complete

Attach the document
GALP_NFI_TCFD 2022.pdf

Page/Section reference
Entire document

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment
Galp is committed to improve and increase the disclosure of its ESG governance, strategy, climate related risks and opportunities and emissions and other ESG metrics. As such, Galp has been publishing a voluntary dedicated TCFD report since 2018, and seeks to progressivelyimprove disclosures according to this standards

recommendations

Publication
In mainstream reports, incorporating the TCFD recommendations

Status
Complete

Attach the document
GALP_2022 IMR - Integrated Management Report.pdf

Page/Section reference
Please also consult the appendix of the IMR 2022, namely for the reporting of indicators according to: GRI Standards 2022 (pages 389-429, more specifically GRI standards 201-2, 302, 305), SASB standards (pages 430-435 more specifically SASB code EM-EP-110a.1, EM-MD-110a.1, EM-RM-110a.1, EM-EP-110a.2, EM-EP-110a.3)) and WEF standards (pages 436-438).

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment
Galp is committed to improve and increase the disclosure of its ESG governance, strategy, climate related risks and opportunities and emissions and other ESG metrics. As such it reports on these topics on its annual Integrated Management Report, including in appendix relevant GRI, SASB and WEF standards.

Publication
In voluntary communications

Status
Complete

Attach the document
C12.4 - Webpage_2.pdf
C12.4 - Webpage_1.pdf

Page/Section reference
Please consult all sections of our webpage “Accelerate decarbonisation across our ecosystem” and “Carbon metrics” attached as a pdf as this contains information that Galp has published in its Integrated Management Report as well as come complementary breakdowns.

Content elements
Governance
Strategy
Emissions figures
Emission targets
Other metrics

Comment
Galp is committed to improve and increase the disclosure of its ESG governance, strategy, climate related risks and opportunities and emissions and other ESG metrics. As such it reports on these topics on its annual Integrated Management Report, as well as a separate TCDF report and in its website, in a dedicated area. Please consult Galp’s webpage attached to this reply as a pdf.
https://www.galp.com/corp/en/sustainability/our-foundations/our-journey-to-net-zero-by-2050/accelerate-decarbonisation-across-our-ecosystem
https://www.galp.com/corp/en/about-us/galp/strategy
Please also consult all sections of our webpage “Carbon metrics” attached as a pdf as this refers to what Galp has published in its Integrated Management Report and to and to the historical data of its carbon footprint since 2019.
https://www.galp.com/corp/en/sustainability/our-commitments/energy-and-climate/carbon-footprint

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization’s role within each framework, initiative and/or commitment
Row 1	Task Force on Climate-related Financial Disclosures (TCFD) UN Global Compact World Business Council for Sustainable Development (WBCSD)	Galp is a supporter of the TCFD and believes the TCFD recommendations provide a useful framework to increase transparency on climate-related risks and opportunities within financial markets. The company has been publishing a dedicated TCFD report since 2018 and integrating the Task Force’s recommendations into its Governance, Risk Management, Strategy and climate related metrics disclosure. Galp supports the Global Compact and its ten principles and participates in the following engagements: Carbon Pricing Champions; Climate Ambition Accelerator; Responsible Climate Policy Engagement; Target Gender Equality. The company also communicates to the Global Compact on its yearly progress by disclosing relevant information available in its reports and Global compact website. Galp is also a member of WBCSD and of its Portuguese division (BCSD - Portugal) and is present on several climate related working groups during 2022 focused on working towards carbon neutrality by 2050, namely the Carbon Neutrality, Biodiversity and Sustainable Finance working groups in BCSD Portugal and SOS 1.5 project and Hydrogen, Policy, Advocacy & Mobilization, Mobility decarbonisation, Carbon Capture, Storage and Removals and Energy Transformation working groups of the WBCSD

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, board-level oversight	Galp acknowledges the significance of Biodiversity-related risks and opportunities in its operations and revenues, and their materiality to society, investors, and stakeholders. The company emphasizes responsible leadership and robust governance, integrating climate and energy transition challenges, including biodiversity, into its strategy. The Board of Directors (BoD) oversees the Company's strategic formulation process and investment planning, along with the Executive Committee (EC), where the CEO is the designated member responsible for climate strategy. The EC is appointed by the BoD and is directly responsible for developing and implementing the company's strategic objectives and guidelines. The Sustainability Committee is the board level committee responsible for assisting the BoD in integrating sustainability principles (inc biodiversity related topics) into the decision-making process into the Galp Group management process, promoting industry best practices in all of its activities, with a view to long-term value creation. In 2022, the Sustainability Committee held four formal and two informal meetings, addressing various topics, including Galp's sustainability roadmap for 2023-2025, regulatory context and ESG trends, sustainability strategy, and reporting practices,. sustainability performance (ncluding the results obtained in relevant sustainability indexes and respective performance gaps, namely the Sustainalytics, MSCI, CDP and S&S DJSI), energy transition strategy, external audit results, water and biodiversity risk assessments, decarbonization progress against targets, overview of the process for the assessment of physical and transition climate-related risks, COP 27 outcomes, non-financial information disclosure, among others At its meeting of 10 February 2023, the Board of Directors was informed of the work done by the Sustainability Committee during 2022.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to No Net Loss Adoption of the mitigation hierarchy approach Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Commitment to no conversion of High Conservation Value areas Commitment to secure Free, Prior and Informed Consent (FPIC) of Indigenous Peoples Commitment to no trade of CITES listed species	SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment
No, but we plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
No, but we plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?
Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Portugal

Name of the biodiversity-sensitive area
Ponta de São Lourenço, Corvo e Flores, Terceira, Sado estuary, Vilamoura, Estrela Mountains, Ria de Aveiro, Tejo estuary, Cabo Raso

Proximity
Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area
The sites located in or near the listed biodiversity-sensitive area are four Storage Facilities&Terminal and five Service Stations.
The main frequent and/or periodic activities in the Storage facility are: combustible receipt by truck; combustible storage in tanks; handling combustible (internal product transfer, load truck); waste handling and storage (before being sent to disposed/treated/recycled); maintenance and Inspection activities (tanks, pipelines, pumps, equipment lubrification, electric system, emergency system etc); and circulation of vehicles.
The main frequent and/or periodic activities in the Service Stations that can potential impact biodiversity are: combustible receipt by truck; combustible storage in underground tanks; vehicles combustible supply; waste handling and storage (before being sent to disposed/treated/recycled) and circulation of vehicles and staff.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area
Site selection
Project design
Physical controls
Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
The four Storage Facilities&Terminal and five Service Stations respect our Biodiversity Commitments – it is not located in UNESCO World Natural Heritage Are and IUCN Protected Areas Category I-IV.
The referred sites are subject to Environmental Impact Assessments or other specific environmental studies (environmental aspects and impacts assessment) to identify, access and define the proper actions to minimize the risks, in case of a significant biodiversity impact occurs. Measures are defined since the project design, construction, operation (current phase) and decommission phase.
In case of the Storage Facilities some examples of measures on operation phase are tank leak detection systems, self-sealing hose connections, instrumentation for preventing overfilling, independent level alarms, waste management, water management, limit speed to vehicles circulation, among others. For service stations, some examples are waste management, tanks with double wall, impermeable soil, among others.

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Spain

Name of the biodiversity-sensitive area
Alcázar de San Juan-Quero endorreic lagoons,Talamanca-Camarma,Montagut and Montmell mountains,Mountain ranges of Ronda Bermeja and Crestellina,Marina mountain ranges,Northern slope of Guadarrama mountain range, Cáceres and Trujillo-Aldea del Cano,Albufera de Valencia marshes,Campo Charro y Tierras de Ledesma,La Safor and North Alicante mountain ranges,Plataforma Marina del Delta del Ebro–Columbretes,Mountain range and saltpans at Cabo de Gata,among others

Proximity
Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area
The sites located in or near the listed biodiversity-sensitive area are three Renewable Energy Production (Solar) and sixty-seven Service Stations.
The main activities that can potential impact biodiversity on Renewable Energy Production (Solar) are maintenance operations (i.e cleaning the panels, equipment repairs and/or replacement, etc).
The main frequent and/or periodic activities in the Service Stations that can potential impact biodiversity are: combustible receipt by truck; combustible storage in underground tanks; vehicles combustible supply; waste handling and storage (before being sent to disposed/treated/recycled) and circulation of vehicles and staff.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area
Site selection
Project design
Physical controls
Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Despite the project has a low environmental impact, it is subject to an Environmental Impact Assessment to identify, access and define the proper actions to minimize the risks, in case of a significant biodiversity impact occurs. Measures are defined since the project design, construction, operation (current phase) and decommission phase. Preventive measures are defined in the project design, choosing the most suitable option to protect the environment. In case of the Renewable Energy Production site fences were built with height that allows the circulation of the local fauna. For service stations, tanks with double wall, impermeable soil were implemented. On the operation phase, several measures are implemented, such as air lines with anti-electocution technology to protect the birds, Environmental Monitoring Program specific for fauna (Renewable Energy Production), waste management, tanks with double wall, impermeable soil (Service Stations), among others.

Classification of biodiversity -sensitive area
Natura 2000 network of protected areas

Country/area
Spain

Name of the biodiversity-sensitive area
Complejo Lagunar de La Salada de Chiprana

Proximity
Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area
The site located in or near the listed biodiversity-sensitive area is one Renewable Energy Production (Solar).
The main activities that can potential impact biodiversity on Electric Energy Production (Solar) are maintenance operations (i.e cleaning the panels, equipment repairs and/or replacement, etc)

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area
Site selection
Project design
Physical controls
Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
Despite the project has a low environmental impact, it is subject to an Environmental Impact Assessment to identify, access and define the proper actions to minimize the risks, in case of a significant biodiversity impact occurs. Measures are defined since the project design, construction, operation (current phase) and decommission phase. Preventive measures are defined in the project design, choosing the most suitable option to protect the environment (i.e build fences with height that allows the circulation of the local fauna). On the operation phase, several measures are implemented, such as air lines with anti-electrocution technology to protect the birds, Environmental Monitoring Program specific for fauna, among others.

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Cabo Verde

Name of the biodiversity-sensitive area
Raso / São Nicolau – marine, Volcano area, Ilha do Fogo - Marine

Proximity
Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area
The sites located in or near the listed biodiversity-sensitive area are two Service Stations.
The main frequent and/or periodic activities in the Service Stations that can potential impact biodiversity are: combustible receipt by truck; combustible storage in underground tanks; vehicles combustible supply; waste handling and storage (before being sent to disposed/treated/recycled) and circulation of vehicles and staff.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area
Site selection
Project design
Physical controls
Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
The two Service Stations respect our Biodiversity Commitments – it is not located in UNESCO World Natural Heritage Are and IUCN Protected Areas Category I-IV.
The referred sites are subject environmental aspects and impact assessment to identify, access and define the proper actions to minimize the risks, in case of a significant biodiversity impact occurs. Measures are defined since the project design, construction, operation (current phase) and decommission phase. For service stations, some examples are waste management, tanks with double wall, impermeable soil, among others.

Classification of biodiversity -sensitive area
Key Biodiversity Area (KBAs)

Country/area
Guinea-Bissau

Name of the biodiversity-sensitive area
Rio Mansôa and Gêba estuary, Arquipélago dos Bijagós – marine, Rio Mansôa and Gêba estuary, Cantanhez forests

Proximity
Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area
The sites located in or near the listed biodiversity-sensitive area are one Facility&Terminal and six Service Stations.
The main frequent and/or periodic activities in the Storage facility are: combustible receipt by ship and truck; combustible storage in tanks; handling combustible (internal product transfer, load truck); waste handling and storage (before being sent to disposed/treated/recycled); oil/water separator management; maintenance and Inspection activities (tanks, pipelines, pumps, equipment lubrification, electric system, emergency system etc); and circulation of vehicles and staff.
The main frequent and/or periodic activities in the Service Stations that can potential impact biodiversity are: combustible receipt by truck; combustible storage in underground tanks; vehicles combustible supply; waste handling and storage (before being sent to disposed/treated/recycled) and circulation of vehicles and staff.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area
Site selection
Project design
Physical controls
Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
The referred sites are subject to Environmental Impact Assessments or other specific environmental studies (environmental aspects and impacts assessment) to identify, access and define the proper actions to minimize the risks, in case of a significant biodiversity impact occurs. Measures are defined since the project design, construction, operation (current phase) and decommission phase.
In case of the Storage Facilities some examples of measures on operation phase are retention basins, water management, among others. For service stations, some examples are tanks with double wall, oil/water separator, among others.

Classification of biodiversity -sensitive area
Natura 2000 network of protected areas

Country/area
Spain

Name of the biodiversity-sensitive area
Zona de Importancia Comunitaria ZIC (ZEPA/ZEC), Zona de Especial Proteccion de los Valores Naturales

Proximity
Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area
The sites located in or near the listed biodiversity-sensitive area are nine Service Stations.
The main frequent and/or periodic activities in the Service Stations that can potential impact biodiversity are: combustible receipt by truck; combustible storage in underground tanks; vehicles combustible supply; waste handling and storage (before being sent to disposed/treated/recycled) and circulation of vehicles and staff.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area
Site selection
Project design
Physical controls
Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
The referred sites are subject environmental aspects and impact assessment to identify, access and define the proper actions to minimize the risks, in case of a significant biodiversity impact occurs. Measures are defined since the project design, construction, operation (current phase) and decommission phase. Some examples are waste management, tanks with double wall, impermeable soil, among others.

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Law & policy

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Response indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Details on biodiversity indicators Risks and opportunities Biodiversity strategy	IMR 2022 – Sustainability Journey (page 13-16) AIRGalp2022EN2Book2SustainabilityJourney.pdf
Other, please specify (Company Policies)	Other, please specify (Integrate Safety, Health and the Environment in the company's strategy)	HSE Policy P-002 Rev03 Safety, Health and Environment Policy.pdf
In voluntary sustainability report or other voluntary communications	Risks and opportunities	Biodiversity Risk Assessment BiodiversityRisks_ScreeningReport_Galp2022.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Director of Strategy and Sustainability	Chief Sustainability Officer (CSO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

Galp is an integrated energy operator with activities that span from exploration and production of oil and natural gas to refining and marketing oil products and biofuels, distributes and supplies natural gas and generates and markets electricity.

In 2021, Galp updated its strategy towards a resilient investment case in an accelerated energy transition. Galp aims to reshape its portfolio and become a dynamic, digitally enabled customer-oriented company, with a material position in renewables and new energies, and industrial operations being progressively decarbonised and transformed towards a green energy hub.

This strategy is based on a clear allocation of capital. Having committed in 2021 to allocate about half of our net investment in low or zero carbon opportunities by 2025, this strategy was updated and now means an allocation of over 70% of our net investment over the 2023-25 period, accelerating the transformation of our portfolio while ensuring financial discipline and focus on investment returns.

By 2030, we aim to have a more electrified, diversified and decarbonized global portfolio, offering a combination of long-term growth and value opportunities in the energy sector.

Our mission is to create value for all our stakeholders (customers, employees, shareholders, suppliers and business partners), approaching energy markets with ambition, innovation and competitiveness, and simultaneously promoting respect for the principles of ethics and sustainability. Our activities are expanding worldwide but are currently concentrated in Portugal, Spain, Brazil and Africa. Our activities are based on 4 key business pillars: Upstream, Commercial, Industrial & Midstream and Renewables & New Businesses.

The Upstream business comprises a portfolio of c.20 projects (after the sale of Angolan portfolio) in different phases, such as exploration, development and production and located entirely in deep waters. The most relevant projects include two of the largest oil and natural gas discoveries of the last decades, located, respectively, in the pre-salt of the Santos basin (Bacalhau), in Brazil, and the Rovuma basin, in Mozambique (Coral FLNG), and promising exploration assets in Namibia and São Tomé and Príncipe.

The Industrial & Midstream business unit incorporates the refining and logistics business as well as the Group's oil, gas and power supply and trading activities, Cogeneration and Biofuels. Galp operates an integrated refining system comprising Sines refinery in Portugal (Matosinhos Refinery closed in 2021) with a total processing capacity of 226 thousand barrels of oil per day (kbpd), and continues to focus on maximising value creation in this segment, increasing the efficiency of its operations, and adapting its portfolio to future demand patterns and to the progressive decarbonisation of its operations.

For further information about GALP please visit our corporate website, at: www.galp.com/corp and our Annual Integrated Report 2022, at: https://www.galp.com/corp/Portals/0/Recursos/Investidores/SharedResources/Relatorios/en/2022/AIRGalp2022EN0Full.pdf

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	26840000000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Customer base is too large and diverse to accurately track emissions to the customer level	It is challenging to access individual costumer data and to track emissions across the value chain to attribute to a certain client. This is especially true for refined products since crude oil refining results in a range of products and by products that are produced by different units complicating the attribution of refinery inputs and associated emissions to final fuel products.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

The Company plans to increase the granularity of emissions reporting from the fuels it produces by performing life cycle assessments for them in an attempt to increase transparency and provide costumers with more detailed emissions related data on the products it sells. By doing this, Galp also hopes to antecipate upcoming regulation such as the possible inclusion of refied products on CBAM or more detaled labeling requirements regarding emissions of the products it sells.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
No, I am not providing data

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below
I have read and accept the applicable Terms