

C0. Introduction

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C0.1

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

Repsol is a global multi-energy provider that over the past 20 years, has built a leadership position in relation to climate change in the global oil and gas industry. It was the first company to support the Kyoto Protocol and to set the ambitious goal and a strategy of becoming a **net zero emissions company by 2050**, in line with the objective of limiting global warming to 1.5°C above pre-industrial levels.

The company is present throughout the entire energy value chain cycle and market a wide range of products in 100 countries worldwide. Repsol has an integrated business model that ranges from oil and gas exploration and production, to low-carbon electricity generation and the production and marketing of energy solutions for the home, industry, and mobility.

We develop our activity through four main business lines:

- **Upstream:** our Upstream business encompasses the company's oil and gas exploration and production activities, which include the business's entire value chain, from exploration to the commercial use of resources.
- **Industrial:** we are leaders in Europe due to our high competitiveness and the quality of our assets in the industrial business. We have one of the most efficient refining systems on the continent, which transforms crude oil and various alternative raw materials into value-added products. In the field of Chemicals, we are committed to more efficient industrial processes geared towards the circular economy.
- **Customer:** for Repsol, the customer is at the center of our strategy, which is why our objective is to meet all consumer energy needs, at home or on the move. We are increasing the presence of low-emission energies in our product and service portfolio, while relying on digitalization for the development of new commercial products and channels that will help us build a more personalized relationship with our customers.
- **Low-emissions businesses:** The low-emissions generation business is one of the pillars of our strategy to be a net-zero emissions company by 2050. We have hydropower plants, combined gas cycles, solar photovoltaic generation and wind farms; and we are developing other renewable projects to increase the installed capacity. We plan to continue our international expansion to become a global operator, with the objective to increase our installed capacity to 6 GW by 2025 and to 20 GW by 2030.

At Repsol we believe that access to energy is a universal right. Everyone is entitled to economic and sustainable energy sources. Therefore, our obligation is to guarantee a safe and competitive supply while preserving the environment and ensuring a better planet for future generations. We work on solutions that allow society to enjoy a sustainable future with low emissions of greenhouse gases.

We develop our activities to become an even more sustainable and competitive company, with a responsible commitment to the environment and to the areas in which we operate. We are decidedly and continuously committed to sustainability as a key factor for creating value, now and in the future.

This is always done by using processes that respond to the strict controls on safety and respect for the environment.

We are committed to technological innovation as the key to building a more efficient, secure, competitive and sustainable energy model. This commitment is assigned to the Repsol Technology Center: a leading European center where we promote R&D+i with high investments every year.

C0.2

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**(C0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2021	December 31 2021	Yes	1 year

C0.3

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**(C0.3) Select the countries/areas in which you operate.**

- Bolivia (Plurinational State of)
- Canada
- Ecuador
- Malaysia
- Norway
- Peru
- Portugal
- Spain
- United States of America

**C0.4**

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

USD

**C0.5**

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**(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.**

Operational control

**C-CH0.7**

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**(C-CH0.7) Which part of the chemicals value chain does your organization operate in?**

**Row 1**

**Bulk organic chemicals**

Please select

**Bulk inorganic chemicals**

Please select

**Other chemicals**

**C-OG0.7**

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**(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
- Downstream
- Chemicals

**Other divisions**

- Biofuels
- Grid electricity supply from gas
- Grid electricity supply from renewables
- Carbon capture and storage/utilization

**C0.8**

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**(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	ES0173516115

**C1. Governance**

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**C1.1**

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**(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(s)	Please explain
Chief Executive Officer (CEO)	Position in the corporate structure and responsibility towards climate change issues: The CEO is the highest executive of the Company and is responsible for the management of the business and the direction of the Company and has been delegated all the functions of the Board of Directors, except for those that cannot be delegated by law or by the Company's bylaws. The CEO and Repsol's Executive Committee are the highest executive level within the company for taking strategic decisions and setting lines of action regarding climate change. Specifically, their responsibilities in this regard are the following: • They oversee and propose to the Board of Directors the medium- and long-term energy transition strategy, including lines of action for the business units, capital expenditures and potential acquisitions and sales of assets • They approve the objectives, budgets and annual investment plans related to the low carbon economy transition plan proposed by the corporate and business areas. • They evaluate investments to be undertaken to achieve the target of becoming a net zero emissions company by 2050: performance in terms of greenhouse gas (GHG) emissions, Carbon Intensity Indicator (CII) and other climate change mitigation targets. • They oversee the risk management policies and the emerging risks and climate change map periodically presented by the Audit, Control and Risk Department. The Executive Committee is integrated by the CEO and the Senior C-level Management and, together with the Sustainability Committee and the Audit and Control Committee of the Board, hold quarterly meetings to review the implementation of the climate change strategy, as well as progress regarding compliance with the energy transition targets. EXAMPLE of climate-related decision: In October 2021, the CEO lead the Low Carbon Day, an event dedicated to the energy transition and aimed at analysts and investors. Repsol CEO announced an increase in the company's intermediate decarbonization targets: the reduction in the Carbon Intensity Indicator will now be 15% in 2025, 28% in 2030, and 55% in 2040.
Other, please specify (Board of Directors)	Position in the corporate structure and responsibility towards climate change issues: The Board of Directors approves the decarbonisation strategy and climate change policy, as well as the remuneration policy of the Board and Senior Management linked to the achievement of energy and climate change objectives. At the proposal of the Compensation Committee, the Board establishes the weighting of the objectives and metrics associated with the long-term variable remuneration, considering Repsol's strategy, its needs, and the situation of the business. EXAMPLE of climate-related decision: In 2021, the Board of Directors reviewed the objectives of the Strategic Plan in order to increase the targets for renewable generation and emission reductions, as well as investments in low-carbon solutions to accelerate the Company's transformation until 2030. In this way, an additional 1,000 million euros will be allocated to increase renewable electricity generation and the production of emission-free hydrogen, as well as to promote other low-carbon initiatives. Also, the ambition for renewable generation is increased by 60% and the intermediate decarbonisation targets have been enhanced, so the reduction in the Carbon Intensity Indicator now aims to be 15% in 2025, 28% in 2030 and 55% in 2040.
Board-level committee	Position in the corporate structure and responsibility towards climate change issues: The Sustainability Committee supervises and periodically monitors the decarbonisation roadmap and compliance with related plans and targets, as well as emerging risks relating to energy transition and climate change. The Chair of the Committee reports to the Board of Directors on the development of its actions on a regular basis. Furthermore, at least once a year, the Committee assesses its functioning and the quality and effectiveness of its work, reporting the outcome of this assessment to the plenary session of the Board. EXAMPLE of climate-related decision: In 2021, the committee held 4 meetings and reviewed, among other issues, the emerging risks and climate change risk map (2021-2050), the procedure of assessing investments to ensure they are in line with the energy transition as well as the metrics and objectives of Repsol's decarbonisation pathway.
Board-level committee	Position in the corporate structure and responsibility towards climate change issues: The Audit and Control Committee supports the Board of Directors in its supervisory duties, by regularly reviewing the preparation of financial and non-financial reporting and the efficacy of internal controls, as well as verifying compliance with all the legal provisions and internal regulations applicable to the Company. The Audit and Control Committee also supervises the effectiveness of the risk management system at the Company as a whole. It annually supervises emerging and climate change risks, as part of the review of Repsol's risk map. EXAMPLE of climate-related decision: In 2021 the Committee held 11 meetings and carried out, among others, the following activities related to climate change: • Review of the climate change risks • Supervision and evaluation of financial and non-financial information (including climate change): integrated management report and other documents • Monitoring of the information and internal risk control systems (including climate change)
Board-level committee	Position in the corporate structure and responsibility towards climate change issues: The Compensation Committee's duties include, among others, submitting proposals and reporting to the Board of Directors on the remuneration policy for Directors and Senior Management and its application. EXAMPLE of climate-related decision: In 2021 the Committee defined and proposed to the Board the objectives for the Long-Term variable remuneration program 2021-2024, proposing to link 40% of the long-term variable remuneration of its executives and leaders, including the CEO and members of senior management, to targets that will enable the Company to comply with the Paris Agreement and, therefore, with gradual decarbonisation, with an ambition of zero net emissions by 2050. The Committee also proposed the targets and maximum annual variable remuneration for the CEO for 2021, linking 1025% of the annual variable remuneration of the CEO to decarbonisation and sustainability targets.

**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	<p>Reviewing and guiding strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding business plans</p> <p>Setting performance objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Overseeing major capital expenditures, acquisitions and divestitures</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<Not Applicable>	<p>These issues are reviewed and monitored frequently by the company’s Board and its Committees: *The Board of Directors approves the decarbonisation strategy and climate change policy. *The CEO and the Executive Committee are responsible for proposing the climate change strategy and objectives.They also supervise the implementation of the strategy and periodically review GHG emissions and the carbon intensity indicator and the fulfilment of climate change mitigation targets.*The Sustainability Committee supervises and periodically monitors the decarbonisation roadmap and compliance with related plans, as well as emerging risks relating to energy transition and climate change.*The Audit and Control Committee supervises the effectiveness of the risk management system and internal control at the Company as a whole. It annually supervises emerging and climate change risks, as part of the review of Repsol’s risk map.*The Compensation Committee proposes CEO and Senior Management remuneration linked to the attainment of energy and climate change targets. The Board and its Committees are regularly briefed by the management areas with responsibilities in climate change: *EMD of Energy Transition, Technology, Institutional Affairs &amp; Deputy CEO coordinates and develops with all business and corporate functions the climate change strategy, the proposal of targets and the monitoring of action plans.*EMD Chief Financial Officer (CFO) periodically monitors the fulfilment of the climate change objectives set out in the Strategic Plan. *The Technology and Corporate Venturing Division steers the process of prospecting decarbonisation technologies that will help fulfil the Company’s energy transition strategy and carries out related R&amp;D activities.*The Sustainability Division is responsible of analysing future climate scenarios for pursuing the decarbonisation strategy and provides technical support to the businesses to ensure the sound deployment of the strategy. It is also responsible of developing and monitoring short-, medium- and long-term targets and goals linked to the decarbonisation strategy. *The Audit, Control and Risks Division is tasked with governing and coordinating the process of identifying and assessing the climate change risks to which the Company is exposed in the short, medium and long term, by lending its support to the Board’s Audit and Control Committee on matters that fall within its remit. *The Strategy and Business Performance Division draws up the strategy for steering the Company through the energy transition.*The Businesses are responsible for implementing the climate change strategy. Example: In 2021, the committee held 4 meetings and reviewed, among other issues, the emerging risks and climate change risk map (2021-2050), the procedure of assessing investments to ensure they are in line with the energy transition as well as the metrics and objectives of Repsol’s decarbonisation pathway.</p>

**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	<p>Repsol has a governance structure for managing matters related to climate change, led by the Board of Directors. The Board approves the decarbonization strategy that is part of the Company’s strategy and oversees its compliance by monitoring sustainability and energy transition targets and KPIs. This includes monitoring performance metrics, emissions reduction and low carbon energy generation targets, investment plans, technological developments and applications, as well as the compatibility of investment proposals with energy transition targets. In addition, within the active dialogue on ESG issues that the Company maintains with its stakeholders, the Board has submitted in 2022 to the advisory vote of the Annual General Meeting the Energy Transition Strategy. Regarding the assessment of Board members competence on climate change, the Company takes into consideration their specific professional experience (executive positions related to energy and energy transition), and knowledge on this matter (articles published, lectures given or membership in organizations dedicated to climate change related issues, among others) and additionally, all Board members receive ongoing training on climate-related issues. Furthermore, the assessment process of the Board and its Committees carried out in 2021 included in its Action Plan, among other initiatives, to foster Directors’ training in energy transition matters through sessions and monographic reports. Additionally, In 2021, specific training sessions were carried out focused on Hydrogen Strategy; CCUS; Electric mobility: technology and business vision; Macro market vision: energy transition dynamics after Covid; Technologies for the energy transition; Emerging and climate change risks; and Greenhouse Gas Emissions. In 2022, to this date, there have been specific training focused on critical minerals for the energy transition; macro scenarios of the International Energy Agency –SDS and NZE–; reporting of non-financial information and climate change issues; UN Sustainable Development Goals; investment qualification methodology for alignment with the Energy Transition; and Sustainability Risks, among others. Concerning the specific experience of the Board members on climate change-related issues, please see <a href="https://www.repsol.com/en/shareholders-and-investors/corporate-governance/board-of-directors/index.cshtml">https://www.repsol.com/en/shareholders-and-investors/corporate-governance/board-of-directors/index.cshtml</a></p>	<Not Applicable>	<Not Applicable>

C1.2

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

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable >	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Chief Sustainability Officer (CSO) <i>The CSO corresponds to the position of the EMD Energy Transition, Technology, Institutional Affairs &amp; Deputy CEO</i>	<Not Applicable >	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Sustainability committee	<Not Applicable >	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Chief Risks Officer (CRO)	<Not Applicable >	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Half-yearly

C1.2a

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

The Chief Executive Officer (CEO) is the highest executive position of the Company and is a member of the Board of Directors and the Executive Committee.

The Executive Committee is the highest management Committee, being responsible for proposing and implementing the global strategy and basic policies established by the Board of Directors, including decarbonization and energy transition strategy. It is comprised of the CEO, the CFO, the Executive Managing Director (EMD) of Energy Transition, Technology, Institutional Affairs & Deputy CEO, the EMD Client & Low Carbon Generation, the EMD of E&P, the Executive Director of Industrial Transformation & Circular Economy, the General Counsel, the Corporate Director of People & Organization, and the Corporate Director of Digitalization & Global Services.

The CEO and the Executive Committee are directly responsible for managing matters related to climate change, making strategic decisions, and plotting courses of action. Their responsibilities include proposing the climate change strategy (which is integrated into the company's strategy) and goals, as well as supervising the implementation of the strategy. The CEO and Executive Committee periodically monitor GHG emissions and the fulfilment of climate change mitigation goals (GHG emissions reduction and the carbon intensity indicator). The Executive Committee approves annual greenhouse gas (GHG) emission reduction targets and, together with the Sustainability Committee, periodically review information on the implementation of the Climate Change Strategy and the management of and trend in GHG emissions.

The EMD of Energy Transition, Technology, Institutional Affairs & Deputy CEO acts as Chief Sustainability Officer (CSO) and reports directly to the CEO. He coordinates the climate change strategy and the development of this strategy with all business and corporate units involved. In addition, he manages and develops the proposal of targets and the monitoring of action plans to reduce Repsol's GHG emissions and ensures its deployment.

The Sustainability Director reports directly to EMD of Energy Transition, Technology, Institutional Affairs & Deputy CEO. The Sustainability Division analyzes future climate scenarios for pursuing the decarbonization strategy and provides technical support to the business units to ensure the sound deployment of the strategy. Linked to this strategy, it also develops and monitors short-, medium- and long-term targets and goals.

The Chief Risks Officer and the Audit, Control and Risks Division report and lie under the EMD of Energy Transition, Technology, Institutional Affairs & Deputy CEO. This Division is tasked with governing and coordinating the process of identifying and assessing the climate change risks to which the Company is exposed in the short-, medium- and long- term. In addition, it also lends support to the Board's Audit and Control Committee in carrying out its functions.

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	

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	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	Decarbonisation targets entailed, in 2021, up to 25% of the CEO's annual variable remuneration and up to 40% of the 2021-2024 Long-Term variable remuneration Program (30 % linked to the reduction of the Carbon Intensity Indicator and 10% linked to the development of renewable generation capacity). The Long-term variable remuneration is applicable to the Company executives and leaders, including the CEO and members of Senior Management. The linking of the 40% of the long-term variable remuneration of the Company's executives and leaders, to objectives aimed at aligning the Company with the Paris Agreement and, therefore, to the gradual decarbonisation of Repsol, shows the Company's strong commitment to sustainability and energy transition.
Corporate executive team	Monetary reward	Emissions reduction target	Decarbonisation targets entailed, in 2021 up to 40% of the 2021-2024 Long-Term variable remuneration Program (30 % linked to the reduction of the Carbon Intensity Indicator and 10% linked to the development of renewable generation capacity). The Long-term variable remuneration is applicable to the Company executives and leaders, including the CEO and members of Senior Management. The linking of the 40% of the long-term variable remuneration of the Company's executives and leaders, to objectives aimed at aligning the Company with the Paris Agreement and, therefore, to the gradual decarbonisation of Repsol, shows the Company's strong commitment to sustainability and energy transition.
Chief Financial Officer (CFO)	Monetary reward	Emissions reduction target	Decarbonisation targets entailed, in 2021 up to 40% of the 2021-2024 Long-Term variable remuneration Program (30 % linked to the reduction of the Carbon Intensity Indicator and 10% linked to the development of renewable generation capacity). The Long-term variable remuneration is applicable to the Company executives and leaders, including the CEO and members of Senior Management. The linking of the 40% of the long-term variable remuneration of the Company's executives and leaders, to objectives aimed at aligning the Company with the Paris Agreement and, therefore, to the gradual decarbonisation of Repsol, shows the Company's strong commitment to sustainability and energy transition.
Chief Sustainability Officer (CSO)	Monetary reward	Emissions reduction target	Decarbonisation targets entailed, in 2021 up to 40% of the 2021-2024 Long-Term variable remuneration Program (30 % linked to the reduction of the Carbon Intensity Indicator and 10% linked to the development of renewable generation capacity). The Long-term variable remuneration is applicable to the Company executives and leaders, including the CEO and members of Senior Management. The linking of the 40% of the long-term variable remuneration of the Company's executives and leaders, to objectives aimed at aligning the Company with the Paris Agreement and, therefore, to the gradual decarbonisation of Repsol, shows the Company's strong commitment to sustainability and energy transition.
Management group	Monetary reward	Emissions reduction target	Decarbonisation targets entailed, in 2021 up to 40% of the 2021-2024 Long-Term variable remuneration Program (30 % linked to the reduction of the Carbon Intensity Indicator and 10% linked to the development of renewable generation capacity). The Long-term variable remuneration is applicable to the Company executives and leaders, including the CEO and members of Senior Management. The linking of the 40% of the long-term variable remuneration of the Company's executives and leaders, to objectives aimed at aligning the Company with the Paris Agreement and, therefore, to the gradual decarbonisation of Repsol, shows the Company's strong commitment to sustainability and energy transition.
Business unit manager	Monetary reward	Emissions reduction target	Decarbonisation targets entailed, in 2021 up to 40% of the 2021-2024 Long-Term variable remuneration Program (30 % linked to the reduction of the Carbon Intensity Indicator and 10% linked to the development of renewable generation capacity). The Long-term variable remuneration is applicable to the Company executives and leaders, including the CEO and members of Senior Management. The linking of the 40% of the long-term variable remuneration of the Company's executives and leaders, to objectives aimed at aligning the Company with the Paris Agreement and, therefore, to the gradual decarbonisation of Repsol, shows the Company's strong commitment to sustainability and energy transition.
Energy manager	Monetary reward	Emissions reduction target	Decarbonisation targets entailed, in 2021 up to 40% of the 2021-2024 Long-Term variable remuneration Program (30 % linked to the reduction of the Carbon Intensity Indicator and 10% linked to the development of renewable generation capacity). The Long-term variable remuneration is applicable to the Company executives and leaders, including the CEO and members of Senior Management. The linking of the 40% of the long-term variable remuneration of the Company's executives and leaders, to objectives aimed at aligning the Company with the Paris Agreement and, therefore, to the gradual decarbonisation of Repsol, shows the Company's strong commitment to sustainability and energy transition.
Environment/Sustainability manager	Monetary reward	Emissions reduction target	Decarbonisation targets entailed, in 2021 up to 40% of the 2021-2024 Long-Term variable remuneration Program (30 % linked to the reduction of the Carbon Intensity Indicator and 10% linked to the development of renewable generation capacity). The Long-term variable remuneration is applicable to the Company executives and leaders, including the CEO and members of Senior Management. The linking of the 40% of the long-term variable remuneration of the Company's executives and leaders, to objectives aimed at aligning the Company with the Paris Agreement and, therefore, to the gradual decarbonisation of Repsol, shows the Company's strong commitment to sustainability and energy transition.
Facilities manager	Monetary reward	Emissions reduction target	Decarbonisation targets entailed, in 2021 up to 40% of the 2021-2024 Long-Term variable remuneration Program (30 % linked to the reduction of the Carbon Intensity Indicator and 10% linked to the development of renewable generation capacity). The Long-term variable remuneration is applicable to the Company executives and leaders, including the CEO and members of Senior Management. The linking of the 40% of the long-term variable remuneration of the Company's executives and leaders, to objectives aimed at aligning the Company with the Paris Agreement and, therefore, to the gradual decarbonisation of Repsol, shows the Company's strong commitment to sustainability and energy transition.
Process operation manager	Monetary reward	Emissions reduction target	Decarbonisation targets entailed, in 2021 up to 40% of the 2021-2024 Long-Term variable remuneration Program (30 % linked to the reduction of the Carbon Intensity Indicator and 10% linked to the development of renewable generation capacity). The Long-term variable remuneration is applicable to the Company executives and leaders, including the CEO and members of Senior Management. The linking of the 40% of the long-term variable remuneration of the Company's executives and leaders, to objectives aimed at aligning the Company with the Paris Agreement and, therefore, to the gradual decarbonisation of Repsol, shows the Company's strong commitment to sustainability and energy transition.

**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	1	This is the time horizon of the budget
Medium-term	1	5	This is the time horizon of the Strategic Plan
Long-term	5	30	The long-term time horizon varies depending on the nature and purpose of the prospect. 2030, 2040 and 2050 are the indicative time horizons of risk assessments, which are based on anticipated global and sectoral trends relevant for Repsol. These time horizons are consistent with those of the International Energy Agency and with the decarbonization roadmap of Repsol and its commitment to be a Net Zero Emissions company by 2050

## C2.1b

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

Repsol identifies and evaluates risks in three "time horizons": short, medium and long term. The short & medium term risk map is the result of a bottom-up process where multiple individual risks are analyzed and then aggregated in order to estimate the overall risk profile. The long term risk map, considering its higher level of uncertainty, is the result of a top-down process where the overall exposure is quantified and then broken down in order to estimate the contribution of the individual risk factors.

**In the short & medium term risk map**, Repsol uses a quantitative indicator to rate its risks, which is called severity. This metric is defined as the impact of the 5% probability scenario of any given risk. This impact is a weighted average of the P&L (Profit & Loss) impact (EBITDA loss in most cases), the impact on the company's reputation, and the impact on people. Repsol identifies the group's Business Units and Corporate Areas material risks in order to ensure the integrity and consistency of the risk profile. The number of risks that are quantitatively analyzed in each Business Unit is linked to their capital employed. This figure is subsequently adjusted based on the marginal severity of the smallest risk in current risk profile. By capping the overall number of risks to be assessed at around 400 risks per year (out of around 1.600 identified risks), the marginal severity tends to converge to a rating of around 1 (severity can range between 0,0 and 16,7), and therefore, the number of risks to be quantitatively analyzed are those whose severity is greater than 1, so substantive strategic impacts are those rated above 1 severity. This severity corresponds to a P&L deviation of around \$8 millions in the next 5 years with 5% probability. Once each risk has been analyzed and become part of the company-wide risk profile, the highest visibility is given to those that lie in the first quartile in terms of severity so, in order to report them, substantive financial impacts are those rated above 5,4 severity (boundary between first and second quartiles). **Given that this severity corresponds to a P&L deviation of around \$428 million in the next 5 years period with 5% probability, so substantive financial impact could be considered as any risk above \$428 million.**

**In the long term risk map** (where climate change risks account for most of the exposure), as it is based on a top-down assessment, due to the higher level of uncertainty, no materiality threshold has been set up. Instead, the overall exposure at each potential scenario (including as a reference the IEA's CP, SP and SD scenarios) is broken down according to the relative contribution of each risk, which is consequently rated in terms of P&L deviation and severity at each reference year: 2030, 2040 and 2050. The substantive strategic impacts are those derived from the reflection process of a panel of experts and contemplated in the taxonomy, and the substantive financial impacts are those risks which are prioritized and weighted by this panel of experts.

## C2.2

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## (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

Climate-related risk management is integrated into our multi-disciplinary company-wide risk management process in the short & medium term. The objective of this process is to identify, assess and control risks anticipating their potential impacts in order to manage them according to the decided policy and taking advantage of the opportunities for the positive business development of the organization and to help in the decision making process and also to perform an effective risk reporting, in compliance with laws and regulations. To build the short&medium term Risk Map, we use a bottom-up approach, which comprises next year and the whole period of the next 5 years as well. We use a top-down approach for the long term Risk Map. In this case, we do a specific climate related risk management process. This second analysis is considered as a complement of the first one, for this reason we have selected the integrated into multi-disciplinary company-wide risk management process option and short, medium and long term as a time horizon covered. Enterprise Risk Management is carried out at least once per year, as a general rule, but considering the current level of volatility is continuously monitored by the business. Our Risk Map process includes many perspectives of risks at the stages of the value chain, direct operations, upstream and downstream taking into account risks about: geopolitics, macroeconomy and competition, regulation, partners, suppliers and contractors, operational excellence, customers, products and services, distribution channels, deviations in investment/divestment process, etc. Next we summarize the stages we follow in order to build the short&medium term Risk Map. All risks and opportunities are identified and assessed on a business unit/corporate area level using expertise from these areas/countries. The process starts with, business and corporate units that manage risk-exposing assets or activities examining changes in the context since the last revision, and assessing how these changes have modified their identified risks (and opportunities), including climate-related. Then they prioritize a number of them to be assessed in accordance with capital employed and marginal severity threshold criteria, as described in CDP section CC2.1.b. Once the risks have been identified and the substantive strategic ones prioritized, a risk analysis methodology is applied combining both quantitative techniques for the analysis of frequency and economic loss, and qualitative techniques for the analysis of impacts on reputation and people. After this analysis we obtain a severity value for each risk, this let us prepare a ranking, and also we can compare estimated losses one each other and with expected EBITDA in most cases (with 5% of probability for the next 5 years). In this way, we get information to determine which risks could have a substantive strategic and financial impact on each business. Once each business or corporate unit has produced its risk map, it's reported to its managers, so that they can assess their level of risk and treatments plans in place and make decisions on the controls to be implemented or improved and allocate resources accordingly, taking the risk appetite statements as a reference. The next milestone is the aggregation of the risks contained in the individual risk maps (asset level), in terms of severity and loss, to produce the Company-wide Risk Map (company level), as well as several intermediate consolidated reports. A specific report of sustainability risks is prepared as well, with a chapter of climate change risks where the relative contribution of these risks to the overall risk profile of the company is examined in terms of P&L-deviation and severity. The short&medium term Company-wide Risk Map, is reported along with a summary of the long-term Risk Map to the ExCom and to the Audit and Control Committee (a delegate committee of the Board of Directors), in order to facilitate key decision-making processes such as the development of the Strategic Plan and budget. The process followed to produce the long-term Risk Map starts with the selection of the International Energy Agency (IEA) scenarios as references of the expected evolution of climate parameters and the potential outcomes of climate policies. Each of these scenarios involves a specific evolution of the key variables to which the P&L is sensitive. A probabilistic assessment of the potential scenarios is then performed by a panel of experts and, as a result, a probability distribution is adjusted to simulate the P&L behavior at any possible climate policy scenario (IEA, by 2030, 2040 and 2050). Once the overall long-term effect of climate policy on the P&L has been estimated, an in depth assessment with an experts panel is performed so as to ascertain the individual contribution of the relevant risks. The experts panel was gathered in order to: a) review the climate risk taxonomy, Repsol has developed a specific taxonomy, aligned with TCFD, which includes market, regulatory, physical (acute and chronic), technology, financial and reputational risks, directly related to global warming and climate policy scenarios, b) discuss about and agree on the relevant risks, using the Delphi technique to reach a consensus, and c) rate the risks in terms of their relative contribution to the overall P&L effect of global warming and climate policies, differentiating between the earlier and the latter years of the assessment period 2030-2050. In addition, contribution has been estimated also by business and by geographic area. Additionally, in order to mitigate long term physical and transitional risks, Repsol has recently disclosed an update of its decarbonization roadmap, as part of its Strategic Plan 2021-2025, and aligned with the announced commitment to achieve net zero emissions by 2050. Thanks to this long term strategy, with its identified levers and ongoing initiatives, our risk models show that, from today to 2030, the company is fairly well prepared to respond to most plausible transition scenarios.

## 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	As an energy company, we are subject to many regulatory requirements relating to climate change. Repsol assesses the potential effects of current regulation in countries and markets where the company has business interests. These risks are quantified and included in the business unit Risks Map when they are considered substantive strategic impacts according to the criteria described in section 2.1 b. An example of this risk is the potential deviation in the cost of procurement of the EUAs (European Union Allowances) which have been needed for compliance purposes in 2021 under Phase IV of the EU-ETS (2021-2025)). Deviations could occur due to the volatility of CO2 prices and the possibility of including a sectoral correction factor (CSCF) of free allowances. In order to mitigate it, scope 1 and 2 greenhouse gas emissions are being reduced according to the 21-25 Emissions Reduction Plan (1.5 MtCO2). Sustainability linked bonds have been issued to fund the outstanding investments, such as energy efficiency enhancements, that shall enable the company to achieve this objective.
Emerging regulation	Relevant, always included	Repsol continually monitor, review, and assess proposed and incoming regulatory changes as part of our ERM framework to mitigate and manage potential impacts on our business. These risks are quantified and included in the business unit Risks Map when they are considered substantive strategic impacts according to the criteria described in section 2.1 b. An example of regulatory change risk in the short&medium term is related to co-processing. The revision of the EU Renewable Energy Directive (RED) was published in late 2018. The European Commission is working on the elaboration of a secondary regulation whose objective is to establish the methodology to determine the percentage of biofuel in the products obtained in the co-processing of renewable and fossil raw materials. In Spain, this is regulated by ministerial order ITC/2877/2008. The risk lies in the possibility that the methodology established by the European Commission does not recognize the system currently implemented in Spain and this could imply a change in the yields recognized. A significant deviation in terms of biogenic share in co-processed products could have to be assumed by the company. In response to this risk, the construction of a new HVO plant (HVO, hydrotreated vegetable oil) has been approved. Named C-43, the execution of this project will enable our Cartagena site to satisfy the amount of biofuels that Repsol needs for its own compliance under RED, with no further need for external procurement.
Technology	Relevant, always included	Decarbonization is a significant driver of technology development within the energy sector. Technology risk (with its potential downside but with an obvious upside aswell) is a relevant risk for Repsol, especially in the medium - long term, so this risk is shown specially in the long-term Risks Map. Some of the most prominent risks within this category are the appearance of technologies aimed at a) enhancing the operational efficiency of facilities, and b) producing, storing and distributing renewable energy. In order to mitigate these risks, Repsol is acting on three levers. First one is technology watch, i.e., track the status, evolution and potential of incumbent and emerging technologies. Second one is research, development and innovation, i.e., develop projects in selected fields driven by business needs with a clear focus on future profitability. And third one is investment, i.e, investing through capital ventures in technology start-ups, boosting their quick development.
Legal	Not relevant, included	Repsol entities are currently named defendants in seven separate lawsuits filed from 2017 to 2018 in California state courts. Each of the lawsuits, filed primarily by municipal bodies, names a broad swath of energy companies with alleged ties to California and seeks damages for losses associated with climate change allegedly caused by emissions from oil & gas products and operations (primarily related to actual or anticipated rise in sea level and the expected costs to protect against or repair property and infrastructure). The California cases in which Repsol companies are parties have not progressed substantively as the parties continue to dispute the appropriate jurisdiction for hearing of the claims. These cases are being monitored and managed by Repsol's legal department. As the cases in which Repsol entities are parties have not yet been heard on their merits, there has not been any finding regarding liability or damages for any contribution by Repsol to climate change. For this reason, currently this risk is not considered as relevant risk by the Risk Unit and so there is not a specific quantification of potential damages at this time, therefore they do not reach the materiality threshold.
Market	Relevant, always included	Market risk is one of the most outstanding risks of Repsol's risk profile. It is considered both in the short-term map and in the long-term one. But not all of these risks, are related to climate change. The market risk related to Climate change typically has both a downside (due to a reduction in consumption: energy efficiency improvements associated to Climate change and new ways of energy) and an upside (risk upside is often referred to as "opportunity" because of consumer behavior changes: development of new products/services). For instance, the development of market alternatives to traditional fuels (gasoline and diesel) for road transport, such as electricity- hydrogen-, natural gas- or LPG-powered engines poses a relevant risk to Repsol's retail business, with both downside and upside (opportunity) potential. In this risk we assess deviations in fuels sales by this cause in the future, taking into account the regulations of the European Commission (Fit for 55) regarding the limitation on the sale of vehicles with CO2 emissions in 2035, and the rate of renewal of vehicles. There are ongoing initiatives aimed at minimizing the downside and maximizing the upside of this risk, consisting of the addition of new products and services to Repsol's current retail portfolio, e.g., power sales retail of renewable energy, charge points for electric vehicles and innovative business units such as Wible car-sharing.
Reputation	Relevant, always included	The risk of the O&G sector's social license to operate being undermined is a relevant risk for Repsol in the short, medium and long term. There are several risks that relate to reputation and brand. For instance, third parties could perform communication actions, either in the media or in social networks, intended to interfere in the achievement of the company's objectives. In order to manage this risk, Repsol has announced its transition plans towards Net Zero Emissions by 2050 and, as it has reported in its new Strategic Plan, it is resolute to boost the development of its low carbon business. In addition to this new strategic outline, a dedicated communication department performs a variety of tasks, such as: real-time monitoring of media and social networks, assessing of truthfulness and impact of published news, early warning, continuous dialogue with concerned business units, awareness raising, development of communication strategies aimed at underpinning media campaigns, identification of influencers and referents, and involvement in discussions. The company carries out the management of these risks by increasing transparency and engagement with its stakeholders. The permanent dialogue with the stakeholders is key to know their concerns and to disseminate our positioning and company strategy. In addition, Repsol performs predictive assessments of macro-trends in order to anticipate risks and opportunities.
Acute physical	Relevant, always included	Repsol is exposed to acute physical risks, specially to those related to extreme weather hazards such as hurricanes, tropical storms, subsequent landslides, floods or abnormal swell. For this reason, not only a number of these risks have been identified and analyzed in several countries such as Colombia, Perú or the USA within the short term map, because of the occurrence of these events cannot be prevented or reduced, but also they are considered as relevant risks in the long-term one, because according to IPCC forecasts its frequency and intensity could be increased in the coming years as a result of the effects of climate change, and they could even become relevant in places where they are not usual currently. In order to analyze this possible effect in the future, Repsol is carrying out a specific study of physical risks to 2050 in RCP 8.5, RCP 4.5 and RCP 2.6 scenarios and adaptation plans will be defined to mitigate them when the risk is assessed as high. In addition, in countries where the risk is important today because of the physical conditions in that location (regardless of climate change) some contingency procedures have been developed, and workers have been trained therefore enhancing the resilience of the assets and the activities. In Repsol, these emergency response plans typically comprise the access to state-of-the-art weather forecasts that enable the company to trigger the emergency response at the optimal time, safe process shutdown procedures, emergency training, evacuation drills, and the inherently safe design of the facilities in accordance with best engineering practice.
Chronic physical	Not relevant, included	Repsol is also exposed to chronic physical risks such us temperature, wind speed and rainfall patterns changes according to IPCC forecasts. Because of that, a specific study of physical risks is being carried out up to 2050 in RCP 8.5, RCP 4.5 and RCP 2.6 scenarios and adaptation plans will be defined to mitigate them when risk is assessed as high. In this way, we have designed a methodology aligned with the EUTaxonomy requirements, that allows us to analyze this type of risk and see where it is necessary to focus taking as reference the forecasts of climate models. So these risks are included because they are being studied, but in the light of the evidence available by now, they are not currently considered as relevant risks in strategic or financial terms.

**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**

Current regulation	Carbon pricing mechanisms
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**Primary potential financial impact**

Increased indirect (operating) costs

#### Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

#### Company-specific description

Repsol assesses the potential effects of current regulation in countries and markets where the company has business interests. An example of this risk is the potential deviation in the cost of procurement of the EUAs (European Union Allowances). The EUA price is influenced by several factors, as the EU increasing ambition regarding the emissions reductions in 2030 (in order to achieve 55% in 2030 compared to 1990) in the context of European Green Deal. The price of CO2 emissions has undergone a structural change in 2021, firstly due to the toughening of the emissions targets set by the European Union by 2030 (raised from 40% to 55%), and secondly due to the carbon market has become a financial product used for speculative investment, much like other commodities. Besides in 2021, the European emissions market was influenced by other factors, such as the start-up of the UK emissions market, or the calculation of the new figures of the stability reserve, which will again withdraw allowances over the coming period, which could continue to push up the price of allowances. However, these factors have generated a one-off effect, without altering the broader upward price trend. This shift continues through 2022, where the average of analysts considers a price above 118 USD/tCO2 by 2030. In 2021, 60% of Repsol's Industrial Business Scope 1 emissions were in Europe and they are subject to EU policies including EU ETS and their impact is analyzed and considered when shaping the Company's strategy. Repsol has 5 refineries and 3 chemical complexes in Spain and Portugal, all of them under the carbon leakage scheme, so EUA prices affect indirect (operating) costs in Repsol's industrial facilities. Our CCGT in Spain are under carbon leakage scheme but the increase of the price of EUAs is not considered a risk as the cost of emission allowances is directly transferred to the wholesale market. In 2021, Repsol received a total amount of emission allowances allocated free of charge under the Spanish National Allocation Plan equivalent to 7.6 million tons of CO2 that covered the 72% of the Scope 1 emissions subject to the EU ETS in the Industrial Business in Europe (10,5 MtCO2 overall Repsol's facilities in Spain and Portugal). The net cost of carbon management amounted to € 220 million (260 MUSD) in 2021, corresponding mainly to the CO2 emitted by industrial complexes in Spain not covered by free emission allowances (2.9 MtCO2).

#### Time horizon

Short-term

#### Likelihood

Very likely

#### Magnitude of impact

High

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

196700000

#### Potential financial impact figure – minimum (currency)

<Not Applicable>

#### Potential financial impact figure – maximum (currency)

<Not Applicable>

#### Explanation of financial impact figure

Considering that free allowances will drop 4.2% annual from 2021 to 2025, the Company will have to buy in the market around 4.1 MtCO2 in 2025 (short-term). Nevertheless, the Industrial facilities will also reduce their Scope 1 emissions through energy efficiency and renewable hydrogen, so the final amount with free allowances will be around 2.6 MtCO2. As aforementioned, EUA variation could have a significant financial impact in the industrial business located in Europe due to it may directly increase our indirect (operating) costs. That is why Repsol has an internal carbon price to face this kind of risks, more precisely, the Company differentiates between the EU and the rest of the world with regard to the scope of application. Thus, new investments in the EU are assessed on the basis of 70 USD/tCO2 over the 2022-2025 period (or the regulated price if this is higher). The analyst's estimations in 2022 are foreseeing a price about 118 USD/tCO2\*year by 2025, which is 69% higher than the one considered by the Company. Therefore, this carbon price difference will impact in the following way:  $2.6 \text{ MtCO}_2 * (118 - 70) = 124.8 \text{ MUSD}$ . Without the implementation of energy efficiency actions and renewable hydrogen the carbon price difference could impact in the following way:  $4.1 \text{ MtCO}_2 * (118 - 70) = 196.7 \text{ MUSD}$ .

#### Cost of response to risk

1109000000

#### Description of response and explanation of cost calculation

Situation: CO2 rising price in the short-term that affects to the Repsol's Industrial businesses in Europe, as described in the "Company-specific description" Task: Reduction of the Scope 1 emissions of the Industrial businesses located in Europe in order to reduce the economic impact as a result of the reduction of the allowances purchased. Actions implemented: As it was communicated in the Strategic Plan 21-25, the industrial facilities will undergo emissions reduction actions in order to reduce 0.8 MtCO2 and the CAPEX related to this reduction is 472 MUSD. In addition, our hydrogen strategy (updated in October 2021 Low Carbon Day) considers the ambition to install 0.55 GWeq of renewable hydrogen by 2025, whereof 0.45 GWeq will be used in our industrial facilities. This will allow Scope 1 reduction around 0.7 MtCO2. The CAPEX associated to this reduction is 637 MUSD, considering an expending of 1.416 USD/kWeq. Therefore, the total cost response to mitigate this risk is about 1.109 MUSD. These mitigations actions also could bring a cost reduction in terms of savings in natural gas and energy consumption in the industrial facilities. Result: In 2021, the emissions reduction plan of the company has allowed the reduction of 0.56 MtCO2, where the industrial business is included, and we can mention as a case study of the REPSOL PETROLEO industrial complex in Puertollano, a new, more efficient deaerator that operates at very low pressure (0.2 kg/cm2g) has been installed, creating savings of 2 t/h of low pressure steam, which will lead to a thermal energy savings of 1.259 ktoe/year, thereby avoiding 3,679.95 tCO2/year of emissions into the atmosphere, a direct natural gas savings for the complex. Regarding renewable hydrogen, Petronor and engineering company Sener signed a memorandum of understanding to begin the feasibility study for the first electrolyzer factory in Spain, with an investment of 120 million euros. Phase one of the project could be up and running by the end of 2022. The initiative is part of one of the 34 projects planned for the Basque Hydrogen Corridor (BH2C), which is a product of Repsol's strategic decision to invest in the Basque Country in projects to advance toward the energy transition. Cost calculation: is the sum of the CAPEX for the emissions reduction actions (472 MUSD) plus the CAPEX for renewable hydrogen (637 MUSD), 1.109 MUSD.

#### Comment

Energy efficiency will continue being the main lever to reduce Scope 1 emissions in the industrial facilities, meanwhile renewable hydrogen will gain more relevance in the following years mostly supported by regulation and technology developments.

#### Identifier

Risk 2

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

Direct operations

#### Risk type & Primary climate-related risk driver

Emerging regulation

Carbon pricing mechanisms

**Primary potential financial impact**

Increased indirect (operating) costs

**Climate risk type mapped to traditional financial services industry risk classification**

&lt;Not Applicable&gt;

**Company-specific description**

In Europe, phase 4 of the EU Emissions Trading System (EU-ETS) began, which covers the period from 2021 to 2030. This phase considers the target of reducing CO2 emissions by 55% by 2030 compared to 1990, in line with the goal of net zero emissions by 2050 set out in the European Green Deal. To meet these targets, the sectors affected by the EU ETS must reduce their emissions by 61% compared to 2005. To increase the rate of reduction, the global number of emission allowances will decrease at an annual rate of 2.2% from 2021 and going forward a 4.2% reduction is planned to reach the target set for 2030. Recently, on 22 June 2022, the European Parliament in a plenary vote adopted its position on the proposal for a Directive amending the EU ETS Directive, where a progressive Linear Reduction Factor (LRF) could be increased as follows: 4.4% from 2024; 4.5% from 2026 and 4.6% from 2029 (Commission proposal: 4.2 % from the year following entry of this amendment into force, as mentioned in the paragraph above ). Repsol has 5 refineries and 3 chemical complexes in Spain and Portugal, all of them under the carbon leakage scheme, so EUA prices and free allowances affect indirect (operating) costs in Repsol's industrial facilities. For instance, in 2021, 60% of Repsol's Industrial Business Scope 1 emissions were in Europe and they are subject to EU policies including EU ETS . On the other hand, our CCGT in Spain are under carbon leakage scheme but the increase of the price of EUAs is not considered a risk as the cost of emission allowances is directly transferred to the wholesale market. Currently, Repsol's Industrial business has approximately 35% of deficit in its Scope 1 emissions allowances which corresponds to approximately 7.6 MtCO2 free allowances. The risk envisaged is that the deficit could be turned about 50% by 2030 because of the rise on the ambition of the EU ETS and adoption the European Parliament proposal, which will imply about 5 MtCO2 of free allowances by 2030. Therefore, Repsol has analysed the risk a higher decrease than expected of free allowances by 2030 in the Industrial businesses (European refining & chemicals), which will have an economic impact.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – minimum (currency)**

10000000

**Potential financial impact figure – maximum (currency)**

14400000

**Explanation of financial impact figure**

The Industrial business (Refining & Chemicals) emitted 10,5 MtCO2 of Scope 1 and the free allowances amounted 7.6 MtCO2 in 2021. Considering that through the implementation of emissions reduction plan announced in the Strategic Plan 21-25, the inclusion of renewable hydrogen of 1GWeq in our industrial facilities and a free allowances annual drop of 4.2%, the Company will have to buy in the market around 3 MtCO2 by 2030. So, if a higher drop of LRF is adopted by 2030 and the CO2 price considered by that time is 100\$/tCO2 (Repsol new investments in the EU will be assessed on the basis of this price over the 2026-2030 period) the Company will have to buy 3.1 MtCO2. Therefore, this difference will imply 10 MUSD:  $(3.1-3) \text{ MtCO2} \times 100 \text{ \$/tCO2} = 10,000,000 \text{ USD}$ . On the other hand, analyst's estimations in 2030 are foreseeing a price about 144 USD/tCO2\*year by 2030, which is 44% higher than the one considered by the Company. Therefore, if this carbon price is considered the economic impact will be the following one:  $3.1-3 = (3.1-3) \text{ MtCO2} \times 144 \text{ \$/tCO2} = 14,400,000 \text{ USD}$ .

**Cost of response to risk**

1888000000

**Description of response and explanation of cost calculation**

Situation: a deeper decrease than expected of free allowances by 2030 in the Industrial businesses because of a rise in the LRF included in EU ETS. Task: Reduction of the Scope 1+2 emissions of the Industrial businesses located in Europe in order to reduce the economic impact as a result of the reduction of the allowances purchased. Action: As it was communicated in the Strategic Plan 21-25, the industrial facilities will undergo emissions reduction actions in order to reduce 0.8 MtCO2 and the CAPEX related to this reduction is 472 MUSD. In addition, our hydrogen strategy (updated in October 2021 Low Carbon Day) considers the ambition to install 1.9 GWeq of renewable hydrogen by 2030 whereof 1.0 GWeq will be used in our industrial facilities, which will allow a Scope 1 reduction around 1.5 MtCO2. The CAPEX associated to this reduction is 1.416 MUSD, considering an expending of 1.416 USD/kWeq. These mitigations actions also could bring a cost reduction in terms of savings in natural gas and energy consumption in the industrial facilities. Result: In 2021, the emissions reduction plan of the company has allowed the reduction of 0.56 MtCO2 , where the industrial business is included, and we can mention as a case study of the REPSOL PETROLEO industrial complex in Puertollano, a new, more efficient deaerator that operates at very low pressure (0.2 kg/cm2g) has been installed, creating savings of 2 t/h of low pressure steam, which will lead to a thermal energy savings of 1.259 ktoe/year, thereby avoiding 3,679.95 tCO2/year of emissions into the atmosphere, a direct natural gas savings for the complex. Regarding renewable hydrogen, Petronor and engineering company Sener signed a memorandum of understanding to begin the feasibility study for the first electrolyzer factory in Spain, with an investment of 120 million euros. Phase one of the project could be up and running by the end of 2022. The initiative is part of one of the 34 projects planned for the Basque Hydrogen Corridor (BH2C), which is a product of Repsol's strategic decision to invest in the Basque Country in projects to advance toward the energy transition. Moreover, in 2022 Repsol announced the creation of SHYNE (Spanish Hydrogen Network), the largest renewable hydrogen consortium in Spain. Cost calculation: The total cost response to mitigate this risk is about 1.888 MUSD , which is the result of the sum of CAPEX of reduction plans and renewable hydrogen.

**Comment**

We at Repsol believe renewable hydrogen to be one of the main vectors for decarbonizing industry and mobility over the coming decades, in line with what the European Union has set out in its Fit for 55 climate package. Its production and distribution will usher in a new "hydrogen economy" within Europe, in which we will be one of the main protagonists as we aspire to lead the Iberian Peninsula market by 2030.

**Identifier**

Risk 3

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

Direct operations

**Risk type & Primary climate-related risk driver**

Market	Changing customer behavior
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### 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

Electric car's sales in Spain have been growing for several years. Specifically, in 2021 it has increased by 63% compared to 2020. This indicates that changes by consumers are taking place and it impacts directly to the Company's activity of hydrocarbons supply. However, Spain shows a lower evolution of vehicle electrification fleet than other European countries. For instance, in 2021 Spain presented a sales quota of electrified passenger cars of 7.8%, well below the European average, which is close to 17%. Moreover, Spain has an average vehicle fleet age of 13.5 years (the result of a growing trend for more than a decade). These two previous points could set the beginning of a higher trend on decarbonizing the transport sector with the purpose to ensure the emissions reduction established in Spain (-27 MtCO<sub>2</sub>eq 2030 vs.1990) and renewables percentage (28% by 2030). ANFAC (Spanish Association of Car and Truck Manufacturers) proposes to reduce the passenger car fleet from 25 million (2021 data) to 20 million by 2030, being electric cars 3.1 million and 3.9 hybrid by this time. Therefore, if there were a change in the market and there was a reduction in the fleet of passenger cars about 5 million, which corresponds to the oldest ones (more than 15 years) to reduce the average vehicle fleet age, it could impact on the customer business in Spain (Service stations). Repsol Customer Division reached in 2019 over 27 million m<sup>3</sup> of fuel sales and the division currently accounts with more than 24 million customers, which makes Repsol a leader in the Spanish market. More precisely, the Mobility business presents in Spain the highest number of service stations on its portfolio (3,313 over 4,689 in 2021) and it increased 85 M€ the adjusted net income of the company in 2021 in comparison to the previous exercise. At the service stations a wide variety of products are offered: gasoline/gasoil/LPG refuelling, electric charging points, etc, so change in customer behaviour like the reduction of demand in fuel products for mobility will affect directly to this business.

### Time horizon

Medium-term

### Likelihood

Likely

### Magnitude of impact

High

### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

### Potential financial impact figure (currency)

8300000

### Potential financial impact figure – minimum (currency)

<Not Applicable>

### Potential financial impact figure – maximum (currency)

<Not Applicable>

### Explanation of financial impact figure

The financial impact has been calculated considering the following points: first, there is a reduction 5.000.000 of passenger cars by 2030 that correspond to the oldest ones of the fleet and second, the annual average kilometres done with these cars are approximately 5.000 and the average consumption is about 7l/100km (values taken from the Spanish Statistics National Institute) With these inputs, it has been possible to calculate the annual volume of gasoline / gasoil consumed (1.750.000 m<sup>3</sup>), and it has been compared to the amount consumed in Spain at pre-covid levels (34.052.772 m<sup>3</sup>). Hence, the consumption of these passenger cars represents the 5% of the total in Spain. The economic impact will fall into the net margin of the fuel sales, therefore, if it is considered a unitary reference of 0,01 € by litre consumed, there will be a decrease about 17.5 M€ in Spain and considering that Repsol's covers approximately the 40% of the Service Stations of Spain the value turns to 7 M€ (8.3 MUSD). It is worth to mention that the calculation has been based on a unitary basis of net margin, so that depending on the final net margin it could change the financial impact of this risk.

### Cost of response to risk

454000000

### Description of response and explanation of cost calculation

Situation: Reduction about 5% of gasoline and diesel demand in Spain, as result of change in customer behaviour because of no replacement of old cars with new ones, and demand of new alternatives of mobility. Task: Development mobility alternatives (products or services) to satisfy the requirement of new customer's demand. Action: The electrification and the emissions reduction of transport sector must evolve in the same way as the infrastructure to supply electricity and the offer of low carbon products. At Repsol, we are leading the development of more efficient fuels, the supply of multi-energy solutions, and the commitment to electric charging and shared mobility through Wible, all while seeking to provide unrivaled levels of customer service and support through the Waylet app. Result: In 2021, Repsol put into operation the first ultra-fast charging station (150 kW) for electric vehicles in Portugal, which provides the most powerful electric vehicles with a range of 250 kilometers in just 15 minutes of charging. It is also highlighted the construction of more than 300 charging stations, with more than 550 charging stations available to the public at the end of the year (agreements to further develop the public charging network were reached with both public and private entities) and the first electric vehicle station to feature energy storage was developed, which simplifies the process of installing 50 KW charging stations in locations that do not have sufficient electrical power or where the investment cost is high. On the other hand, WiBLE (with more than 30,000 trips completed in our car parks) and Cabify signed a collaboration agreement whereby WiBLE services will also be available on the Cabify app as a further sustainable mobility option. Cost calculation: In October 2021 (Low Carbon Day), Repsol increased the investment for low-emissions projects reaching the amount of 7,700 MUSD (6.5 billion euros) by 2025 and 45% of capital employed by 2030. The Customer Centric Business is included in the decarbonization strategy with the actions aforementioned, and more precisely, according to the Strategic Plan 21-25, 7% of 5.5 billion euros will correspond to this business, therefore the cost is 385 M€ (454 MUSD).

### Comment

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## C2.4

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### (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

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**(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**

Resource efficiency

**Primary climate-related opportunity driver**

Use of more efficient production and distribution processes

**Primary potential financial impact**

Reduced indirect (operating) costs

**Company-specific description**

Energy efficiency is one of the main levers to address Scope 1 and 2 emissions due to it is considered one of the most cost-effective actions to reduce CO2 emissions. For instance, European Commission, derived from the raise of emission's reduction ambition by 2030, promotes 'energy efficiency first' as an overall principle of EU energy policy, and mark its importance in both its practical applications in policy and investment decisions. At Repsol, we have been applying energy efficiency actions since 2006 with the start of emissions reduction plans. For instance, these plans led to a reduction of 5.5 million tons over the period spanning 2006 to 2020. The actions behind energy efficiency comprise electrification, process optimization and methane and flaring emissions management. In relation to the latest, flaring emissions could be reduced in different ways: • Improvement in the design and operating procedures of the facilities. • Reutilization of gas as a fuel, to generate electricity or reinjection • Commercial solutions to make use of the gas once it has been treated The reutilization of gas as a fuel or commercialize it is presented as an opportunity due to it can both reduce the consumption of fuels in the E&P and downstream assets and increase the revenues of these assets because of the increase of gas sales.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

26700000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The use of more efficient production and distribution processes will drive to reduce indirect (operating) costs. The financial impact of this opportunity is associated with the natural gas savings through energy efficiency, methane and flaring reductions. Overall, the reductions amounted 9 million GJ in 2021, of which 1.9 million GJ were derived from Energy Efficiency in our refineries and chemical plants in Spain. Considering an average price of natural gas in Spain 0.047 €/kwh (HHV based), it can be converted in 0.0427 €/kwh (LHV based), with a conversion of 1.1 HHV/LHV. This value can be converted in 11.9 €/GJ. As we are using the average price of natural gas in Spain in 2021, only energy reductions in Spain will be considered for this calculation, which amounts 1.9 million GJ from Energy Efficiency in our refineries and chemical plants in Spain. The result of this financial impact is 22.6 M€, equivalent to 26.7 MUSD. Calculation: 1.9 million GJ \* 11.9 €/GJ = 22.6 M€ = 26.7 MUSD.

**Cost to realize opportunity**

472000000

**Strategy to realize opportunity and explanation of cost calculation**

In the latest Repsol's Strategic Plan, which is set between 2021 and 2025, 1.5 MtCO2 emissions reduction was announced at Company level through the application of energy efficiency actions, electrification, process optimization and methane emissions management. In 2021, 560,000 tCO2 were already reduced and one example of this reductions is the new compressor installation for the Flare Gas Recovery Plant (U 425) at the REPSOL PETROLEO industrial complex in Tarragona, with the aim of recovering the fuel contained in the gas from processing units that otherwise would be used for flaring. In this way, 1,321.73 toe/year of thermal energy would be recovered, thereby avoiding 2,757.11 tons of CO2/year of emissions into the atmosphere, and which means a direct savings of natural gas at the complex. On the other hand, in November 2021 Repsol announced the raise of the methane intensity target by 2025, resulting in an 85% reduction in comparison to the baseline of 2017. Moreover, Repsol joined the Zero Routine Flaring by 2030 initiative of the World Bank, in pursuit of technically and economically feasible solutions to minimize routine flaring by no later than 2030 at its E&P facilities. Repsol established a target of achieving a 50% reduction in CO2e emissions from routine flaring activity by 2025, in relation to E&P operated assets with 2018 as the base year. The cost calculation corresponds to the investment of 400 million euros (472 MUSD) over the period 2021-2025 in the Industrial Business to reduce 0.8 MtCO2 through the application of the set of measures based on energy efficiency. More than 200 initiatives have been identified which considers: adopting best-in-class technologies, exploration of energy use opportunities and utilities optimization and digitalization of operations and integration with AI. It is estimated more than 20% IRR with the implementation of this industrial energy efficiency set of measures.

**Comment**

**Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Shift in consumer preferences

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

#### Company-specific description

For several years, the population's concern about the climate situation has been increasing. Consumers not only take into account that individually they can contribute to the fight against climate change, but they also demand that private companies also adopt measures that support this common goal. This has caused that customers change their preferences when choosing energy sources or products that meet their needs, such as going for low-carbon fuels when refueling their vehicle or contracting electricity that comes from renewable sources for their homes. Changes are also taking place in habits such as car sharing for both city and long-distance trips. This, together with Spanish and European regulation, has promoted the production of low carbon fuels and renewable electricity generation, fundamental pillars for decarbonizing sectors such as transport and the electricity mix, which are directly related to the company's activity. In relation to this, at Repsol we are focused on satisfying any energy related need our customers may have due to we see that the future is multi-energy, low carbon and customer oriented. In the electricity and gas market, for instance, we already have some 1.35 million customers in Spain. One of the main factors enabling us to improve our relationship with customers is our commitment to digitalization. We have launched initiatives such as Vivit, a mobile app that centralizes the management of all the products we offer for the home and which, together with Waylet — our payment app for service stations and retailers — will enable us to achieve our strategic goal of reaching eight million digital customers by 2025. Moreover, Repsol has continued to promote its multi-energy supply model by increasing the number of electricity and gas customers, providing 100% low-emission certified electricity, and launching the Repsol Más Energías transversal loyalty program. Furthermore, Repsol leads the development of more efficient fuels, the supply of multi-energy solutions such as AutoGas or Gas Natural Vehicular, the commitment to electric charging and shared mobility through Wible, and offers its customers cutting-edge digital solutions, such as self-consumption (Solify) and distributed generation (Solmatch).

#### Time horizon

Short-term

#### Likelihood

Very likely

#### Magnitude of impact

High

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

1652000000

#### Potential financial impact figure – minimum (currency)

<Not Applicable>

#### Potential financial impact figure – maximum (currency)

<Not Applicable>

#### Explanation of financial impact figure

The Strategic Plan 2021-2025 seeks to bring about the Company's transformation and sets the tone for accelerating the energy transition, following a cost-effective and realistic path and ensuring profitability, future success and maximum value for shareholders. Under the plan, the customer centric business sets the goal of raising EBITDA at the Customer division by 1.4 times to 1.4 billion euros (1,652 MUSD) by 2025 in comparison to 2019 levels (1 billion euros). Therefore, there will be an increase of 1.4 billions euros.

#### Cost to realize opportunity

454000000

#### Strategy to realize opportunity and explanation of cost calculation

Under the Strategic Plan 21-25, the Customer Unit will be tasked with meeting the energy and mobility needs of our 24 million customers. We want to harness our competitive advantages to lead the multi-energy supply to consumers in the Iberian Peninsula, by offering them a differential global service that features a steadily growing weight of low-emissions energy and digital products and tools. As an example of this, in 2022, we will work to make Repsol their multi-energy supplier of choice and carving out a competitive position from which to serve society, thanks, among other things, to a broad range of digital solutions, an end-to-end differentiated value proposition and continuous improvement of operations. One of the key priorities here is to extend the network of electric charging stations, an objective to which we will make a decisive contribution. Our company alone will have more than 1,000 public charging points by the end of 2022 and we are committed to installing fast or ultra-fast charging points every 50 kilometers on major routes across the country. Another energy sector whose development we are strongly supporting is the self-consumption of renewable energy. Here, we are promoting the concept of solar communities, where people come together to share the photovoltaic energy generated on a rooftop near their homes. We already have more than 240 of these communities in Spain, which will cut CO2 emissions by more than 2,300 metric tons per year. Moreover, the strategic plan envisages an increase in the number of Electricity and Gas consumers (focusing on the Iberian Peninsula) to two million. The new horizontal loyalty program will grow from 2 million digital customers today to eight million by 2025. Cost calculation: In October 2021 (Low Carbon Day), Repsol increased the investment for low-emissions projects reaching the amount of 7,700 MUSD (6.5 billion euros) by 2025 and 45% of capital employed by 2030. The Customer Centric Business is included in the decarbonization strategy with the actions aforementioned, and more precisely, according to the Strategic Plan 21-25, 7% of 5.5 billion euros will correspond to this business, therefore the cost is 385 M€ (454 MUSD).

#### Comment

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#### Identifier

Opp3

#### Where in the value chain does the opportunity occur?

Direct operations

#### Opportunity type

Products and services

#### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

#### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

#### Company-specific description

Repsol's decarbonization strategy is inspired by a vision of the energy transition that is in line with the goal of limiting global warming to 1.5°C based on technological neutrality and the use of available and emerging technologies, as a result of analysing the current situation and its foreseeable progression in the medium and long term. Decarbonization is a unique opportunity to generate value and to be a party to a decisive moment for the future of humanity, in which we are changing the way we produce and consume energy and, with the support of technology, we are shaping new industrial sectors that will generate wealth and quality employment. Two of the main pillars behind the decarbonization strategy are the renewable electricity generation and the low carbon fuels production in order to address the reduction of Scope 3 emissions and



accomplish with the regulation at European Union and Spanish level. More precisely, in a relatively short period of time, Repsol has incorporated technical and management capabilities and developed a portfolio of projects in Spain, Chile and the United States that has enabled it to set the ambitious renewable capacity targets for 2025 (6GW) and 2030 (20GW). In 2021, Repsol reached 1,513 MW of renewable capacity and the generation capacity under development is 2,323 MW. Moreover, Repsol helps to reduce CO2 emissions released during transport through the use of biofuels incorporated in gasoline, kerosene and gasoil. In 2021, the total volume of biofuels incorporated into the fuels marketed by Repsol in 2021 was 1,077,935 m3 of which 511,931 m3 was produced at the Group's refineries, and the rest, 566,004 m3 was purchased from third-party companies and blended in the right proportion to meet gasoline and diesel specifications and our customers' requirements. These biofuels have reduced emissions released during transport by 2.2 million tons of CO2. Repsol's biofuel production capacity is 960,000 m3/year, divided up between BioETBE (429,000 m3/year) and hydrogenated vegetable oil (HVO, 531,000 m3/year). In addition, in August 2021 Repsol produced the third batch of biojet in the Spanish market at the Bilbao refinery, with waste-sourced raw material. Repsol is a pioneer in the production of this sustainable aviation fuel in Spain. This batch comprises 5,300 tons of bio-based aviation fuel. Its use will avoid the emission of 300 tons of CO2 into the atmosphere, the equivalent of 40 one-hour flights.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

543000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The development and expansion of low emission goods and services will deliver increased revenues resulting from increased demand for products and services. Repsol's strategic plan 21-25 defined a strategy to expand its low carbon generation business. So, for this business it is expected to multiply the EBITDA 8 times in comparison to 2019 levels (40 million euros) through the increase of the installed capacity by 2025, reaching a value about 331 million euros (391 MUSD), considering a Spanish average power price of 42.5 €/MWh. Therefore, it results on an increase of our benefits of 291M€ (331 M€ - 40 M€), which is equivalent to USD 343 million. On the other hand, according to our strategic plan 2021-2025 too, our new low carbon initiatives, including low carbon fuels and renewable gases, like the new Advanced biofuels unit in Cartagena (250kt/y advanced HVO, and SAF) presents a financial impact estimated to be 200 M\$ by 2025. Calculation: (331 M€ - 40 M€) \*1.18 \$/€ + 200M\$ = 543 MUSD

**Cost to realize opportunity**

3180000000

**Strategy to realize opportunity and explanation of cost calculation**

The Strategic Plan 2021-2025 (SP 21-25 or the Plan) seeks to bring about the Company's transformation and sets the tone for accelerating the energy transition, following a cost-effective and realistic path and ensuring profitability, future success and maximum value for shareholders. Under the strategic plan it is found: - At the renewable electricity generation business the objective is to increase our installed capacity to 6 GW by 2025 and to 20 GW by 2030, marking an increase of 60%. In 2021, we continued to develop our projects in Spain as scheduled, with highlights including the inauguration of the Kappa (Ciudad Real) and Valdesolar (Badajoz) photovoltaic farms and start of work on the Delta II wind farm (Aragon). We also completed work on our first wind farm in Chile and entered the North American market with the acquisition of Hecate Energy; two further examples of our commitment to continue growing in OECD countries. - We continuously adapt our industrial complexes so that they can process waste raw materials such as used cooking oil, waste biomass, and agricultural and forestry waste into carbon-neutral products (or fuels). Repsol is set to become a benchmark in advanced biofuels, with a production capacity of 1.3 million metric tons by 2025 and of over 2 million metric tons by 2030, of which more than 65% will be produced from waste. In 2021, Repsol has joined the EcoPlanta project alongside Enerkem and Agbar to build a waste recovery plant in Tarragona with the capacity to convert some 400,000 metric tons of non-recyclable municipal solid waste into 220,000 metric tons of methanol per year, with subsequent transformation into circular plastics or advanced biofuels, thus reducing waste that would otherwise end up in landfill. The project has been shortlisted among more than 300 projects for its contribution to the fight against climate change by the European Innovation Fund Cost calculation: According to Repsol Strategy Plan 21-25The Low Carbon Generation and Industrial business, which are the ones that are producing and will continue developing products such as the ones mentioned above, approximately represent 49 % of the capital expenditure (5.5 billion euros) for this period , therefore the cost is 2.695 M€ (3.180 MUSD).

**Comment**

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### C3. Business Strategy

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#### C3.1

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

Row 1

**Transition plan**

Yes, we have a transition plan which aligns with a 1.5°C world

**Publicly available transition plan**

Yes

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

Our transition plan is voted on at AGMs and we also have an additional feedback mechanism in place

**Description of feedback mechanism**

For more than a decade, Repsol has maintained an active dialogue on environmental, social, and governance (ESG) issues with institutional investors, proxy advisors and other stakeholders to learn first-hand their opinion and position on these issues and explain the Company practices. Moreover, Repsol is committed to constantly adapting its corporate governance practices to the highest international standards. Within this framework of dialogue with our shareholders, including, among others, the Climate Action 100+ initiative –which brings together 615 investors with more than \$65 trillion under management—, it has been resolved to submit the energy transition strategy of Repsol to the advisory vote in its Annual General Meeting. To cover 65% of the ESG institutional shareholding identified according to the Leaders Arena methodology, it is carried out through Roadshows, face-to-face meetings and Conferences. The objective is to discuss with our investors and stakeholders and obtain feedback about Repsol’s ESG strategy and specifically, climate change topics. Thanks to this approach the Company ranks highly within its sector in the ESG performance assessments conducted by the most renowned rating agencies operating within the market (MSCI, Vigeo-Eiris, Sustainalytics, CDP, etc.). The presence of ESG focused investors in our institutional shareholder base has continued to increase, reaching 34.1% as of March 2021, compared to 32% in January 2020. The result of this dialogue has borne fruit in numerous recognitions. In 2021, the IIGCC initiative nominated Repsol to participate, along with other European companies in the O&G sector, in the project to define a common standard to achieve NZE commitment by 2050. The conclusions, messages and feedback obtained from the roadshows and other ESG events, including the Low Carbon Day held on October 5, 2021, conducted by our CEO and attended by Senior Management, are periodically presented to the Board of Directors. During the period, the Board heard about the most ambitious decarbonization objectives and the progress made in developing the low-carbon businesses, such as hydrogen, advanced biofuels, renewable generation and CO2 capture. Finally, in May 2022, Repsol’s climate strategy was submitted to the advisory vote of shareholders during the Annual General Meeting held in Madrid. Resolution 17th was approved with a total quorum of 83.003%

**Frequency of feedback collection**

More frequently than annually

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

P.60 (Roadmap summary) P.61 (Governance) P.63 (Strategy) P.63 (Scenario Analysis) P.67 (Resilience of the Strategy + Low Carbon initiatives + Financial Planning) P.71 (Risks and opportunities) P.74 (Targets & Metrics + Scope 1,2,3 accounting with verification) Integrated management Report 2021.pdf

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

<Not Applicable>

**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
Transition scenarios IEA NZE 2050	Company-wide	<Not Applicable>	Through scenario analysis, business scenarios are developed, based on assumptions about the energy context over different time horizons (demand for oil and gas, growth of renewables, changes in technologies and regulation, etc.), with plans that adapt the businesses' development to the conditions of the environment, without compromising the decarbonization objectives. Repsol envisions the quantitative analysis of the following scenarios that will allow for the gradual decarbonization of its energy portfolio until ultimately achieves the goal of net zero emissions by 2050, and which are divided on period and businesses: In this decade through to 2030, a scenario is built from the specific business objectives such as the increase of renewable capacity and low carbon fuels production. On the other hand, hydrocarbon production in this period amounts to 600-630 kboed (max. production of 709 kboed in 2019) and the refinery activity remains at current level, with a reduction in crude processing toward the end of the decade of around 10% from 2019 values. In the long term (2031-2050) two central scenarios have been developed under the macro conditions set out in the SDS and NZE of the IEA for the Upstream and Renewable Electricity Generation businesses, maintaining a single macro environment for the Industrial and Customer compatible with European Green Deal and the Fit for 55 package. NZE scenario considers no new oil and gas fields approved for development, reaching by 2040 net zero emissions electricity globally, high electrification of the transport sector, growth of renewable hydrogen deployment in whole economy, use of CCUS in hard-to-abate sectors and the carbon prices are in place in all regions. Therefore, Repsol considers a high decline of hydrocarbon production because of the depletion of operating assets in 2030, considering that no new developments will be undertaken at that time given the sharp reduction in global demand reflected in the IEA NZE. Besides renewable capacity is expected to grow in line with its relevant role in the world electrification that is assumed in this scenario. Finally, for the Industrial business, whose activity is heavily dependent on prevailing levels of demand within the transportation sector, it is visualized 3 scenarios depending on how the technologies that enable decarbonization evolves and in line with the climate objectives that the European Union has set.
Transition scenarios IEA SDS	Company-wide	<Not Applicable>	Through scenario analysis, business scenarios are developed, based on assumptions about the energy context over different time horizons (demand for oil and gas, growth of renewables, changes in technologies and regulation, etc.), with plans that adapt the businesses' development to the conditions of the environment, without compromising the decarbonization objectives. Repsol envisions the quantitative analysis of the following scenarios that will allow for the gradual decarbonization of its energy portfolio until ultimately achieves the goal of net zero emissions by 2050, and which are divided on period and businesses: In this decade through to 2030, a scenario is built from the specific business objectives such as the increase of renewable capacity and low carbon fuels production. On the other hand, hydrocarbon production in this period amounts to 600-630 kboed (max. production of 709 kboed in 2019) and the refinery activity remains at current level, with a reduction in crude processing toward the end of the decade of around 10% from 2019 values. In the long term (2031-2050) two central scenarios have been developed under the macro conditions set out in the SDS and NZE of the IEA for the Upstream and Renewable Electricity Generation businesses, maintaining a single macro environment for the Industrial and Customer compatible with European Green Deal and the Fit for 55 package. SDS scenario considers policies promoting production and use of alternative fuels and technologies such as hydrogen, biogas, biomethane and CCUS across sectors. Additionally, it is assumed a deployment increase of renewables, fossil fuel subsidies phased out in the short and medium term, and carbon pricing expansion to all advanced economies. Therefore, Repsol considers a more severe drop in production from 2030 onwards than the worldwide decline envisaged in the SDS scenario due to a greater contribution of lower-cost hydrocarbons in the hands of national companies in producing countries. Besides renewable capacity is expected to grow in line with the assumption aforementioned. Finally, for the Industrial business, whose activity is heavily dependent on prevailing levels of demand within the transportation sector, it is visualized 3 scenarios depending on how the technologies that enable this sector decarbonization develops and in line with the emissions reduction objectives that the European Union has set.
Physical climate scenarios RCP 4.5	Company-wide	<Not Applicable>	Repsol is developing an internal methodology to assess physical climate risks and vulnerability. This methodology is aligned with the technical screening criteria of "do no significant harm" (DNSH) and "substantial contribution" to the climate change adaptation objective as defined in the EU Taxonomy. To perform the assessment, Repsol considers a temporal horizon of 30 years, from now to 2050 and uses as a baseline reference the climate data from last 10 years, and climate projections across the existing range of future scenarios from IPCC including RCP2.6, RCP4.5 and RCP8.5. This information is obtained from European Commission service "Copernicus". To complete the assessment, Repsol is developing an internal methodology based on the evaluation of exposure, consequences, and vulnerability of the impacts of physical climate-hazards. This assessment is aligned with the methodology defined by the IPCC in its "Assessments Reports on Climate Change: Impacts, Adaptation and Vulnerability" report. Repsol has evaluated the acute and chronic physical risks, which are the impacts associated with meteorological phenomena or climate variations whose frequency, periodicity and/or magnitude may be increased as a result of climate change, in new and existing assets/acquisitions. Specifically, risks have been determined at local level since climate predictions depend largely on geographical location and temperature. Besides, pluviometry, wind, landslides/sea level and solar impacts have been included in this physical scenario analysis. Under RCP 4.5, which is an intermediate scenario and similar the IEA's Stated Policies scenario in which it is considered that the mitigation measures approved and committed by the governments are carried out. It is highlighted that increases in the values of average temperature could produce a reduction in air density, which could lead to a reduction in production in the wind assets
Physical climate scenarios RCP 8.5	Company-wide	<Not Applicable>	Repsol is developing an internal methodology to assess physical climate risks and vulnerability. This methodology is aligned with the technical screening criteria of "do no significant harm" (DNSH) and "substantial contribution" to the climate change adaptation objective as defined in the EU Taxonomy. To perform the assessment, Repsol considers a temporal horizon of 30 years, from now to 2050 and uses as a baseline reference the climate data from last 10 years, and climate projections across the existing range of future scenarios from IPCC including RCP2.6, RCP4.5 and RCP8.5. This information is obtained from European Commission service "Copernicus". To complete the assessment, Repsol is developing an internal methodology based on the evaluation of exposure, consequences, and vulnerability of the impacts of physical climate-hazards. This assessment is aligned with the methodology defined by the IPCC in its "Assessments Reports on Climate Change: Impacts, Adaptation and Vulnerability" report. Repsol has evaluated the acute and chronic physical risks, which are the impacts associated with meteorological phenomena or climate variations whose frequency, periodicity and/or magnitude may be increased as a result of climate change, in new and existing assets/acquisitions. Specifically, risks have been determined at local level since climate predictions depend largely on geographical location and temperature. Besides, pluviometry, wind, landslides/sea level and solar impacts have been included in this physical scenario analysis. Under RCP 8.5, which is the most pessimistic scenario in which is considered what would happen if no climate change mitigation measures were carried out and it corresponds to a temperature increase of 4-5°C. It is highlighted that maximum temperatures could affect to solar panels production, due to inverters above 40°C no longer work at their maximum power (loss of efficiency to dissipate heat) and require cooling.

**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**

- How must the Company be transformed to satisfy the energy demand of the future? - Which technology development will be needed to face the energy transition, and which could be its abatement cost evolution? - How could regulation affect the product portfolio and operations of the Company? - How could the Company adapt its business to the customers behaviors change? - How could decarbonization guarantee the future and profitability of our businesses? - How could Oil&Gas companies balance profitability of the business in the short-term and climate risks in the long-term?

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

Repsol identifies and assesses the long-term risks associated with climate change. The importance of the risks identified is determined by their economic impact on each of the businesses and geographical areas. By 2030, the risk analysis reveals that the probability of suffering negative impacts from the energy transition is low. In other words, Repsol is prepared for even the most rapid transition scenarios thanks to its decarbonization pathway. Thus, in 2030, the Company has a very high probability of being able to harness opportunities that will completely neutralize any potentially negative impacts, as a result of its position and its long-term climate strategy, which places it in a favourable competitive position. Moreover, derived from Repsol's scenario analysis, the Company has started new and innovative projects such as the pilot plant in Petronor refinery to produce e-fuels and renewable hydrogen, due to the Company foresees an increase of these fuels in transport sectors as maritime and aviation, which are hard to electrify. In the long-term the scenario analysis looks at the Company's resilience in the face of climate-related risks, since in all the scenarios analyzed the performance of the businesses allows it to achieve the goal of net zero emissions (100% reduction in CII) by 2050 under technologically and economically viable conditions by taking unlocking opportunities for transformation of traditional businesses and growth in new energies. Given the uncertainty of this period regarding environmental conditions, the development of technologies and regulation, two central scenarios have been developed that are in line with the SDS and NZE scenarios of the IEA, and also with the European Green Deal in terms of energy product demand within the EU. This allows Repsol to test the resilience of its strategy against changes in the global energy mix that are compatible with the SDS and NZE, and the trend in transport within the EU and also against assumptions regarding the development of decarbonization technologies. In addition, 3 alternative scenarios (deep oil decarbonization, hydrogen and electrification) have also been developed in which different decarbonization levers become more relevant in the future energy portfolio depending on the evolution of decarbonization technologies, in particular for transport. Regarding O&G production, which is also related to stranded assets, a more severe drop in production at the Company from 2030 onwards than the worldwide decline envisaged in the IEA scenarios has been taken into consideration due to a greater contribution of lower-cost hydrocarbons in the hands of national companies in producing countries. This will also make it easier to reach the decarbonization targets of 250-300 kboed (SDS scenario) and 30-80 kboed (NZE scenario) by 2050. As aforementioned, the company has tested its resilience in both production scenarios and a favourable result has been obtained without stranded assets.

C3.3

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**(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	Energy transition, regulation and the increasing customer's demand of low carbon energy could entail opportunities for Repsol since it is possible to create in the medium and long-term new business lines which allows to diversify the company's portfolio into low emission products and services (as reported in C2.3a Risk 3 and C2.4a Opportunity 3). Regarding low carbon power generation, Repsol Commercial & Renewables has become a major player in the Spanish electricity generation market, with a total installed capacity in operation of 3,738 MW and capacity under development of 2,323 MW as at December 31, 2021. Besides the Electricity and Gas business has made further improvements to its multi-energy range of products and services, with highlights in the period including the acquisition of 70% of Gana Energia and also managed to increase its portfolio (> 1.3 million customers at the end of the period, up 15% on 2020). Repsol secured the highest level of assurance (A label) for the second straight year, for its environmentally friendly sourcing of the power it supplies, according to the National Markets and Competition Commission. Repsol is the only major retail marketer in Spain, in terms of customers supplied, that guarantees 100% renewable electricity. In October 2021, Repsol announced the raise of the renewable installed capacity target by 2030: 20 GW, an increase of 60% compared to the previous target set in the Strategic Plan 21-25. Furthermore, by 2025, installed capacity will increase to 6 GW, up from the 1.5 GW with which Repsol ended the year. In line with this strategy, operating investments in 2021 amounted to 829 million euros in the Commercial & Renewables Division, and wind and solar photovoltaic power generation increased following the entry into commercial operation of projects in Spain and Chile, thus reaching an installed operating capacity of 820 MW. In addition, there has been an international expansion in USA with the acquisition of 100% of Jicarilla 2 and 40% of Hecate Energy Group, LLC, a US company specializing in the development of photovoltaic and battery projects for energy storage that has a portfolio of over 40 GW of renewable and storage projects under development. Of this number, 16.8 GW relate to advanced photovoltaic projects and 4.3 GW to battery projects.
Supply chain and/or value chain	Yes	Industry and transport are outstanding sectors in relation to climate change at global level and as a result, the regulation of the European Union is very focused on reducing their emissions. Package Fit for 55 released in July 2021, presented ambitious targets supporting H2 development in order to promote the decarbonization of these sectors: Min. 50% share of renewable H2 consumption in industry, 2.6% minimum quota of RFNBO in transport and 0.7% e-fuels share in the aviation fuel mix (5% in 2035) by 2030. Repsol believes renewable hydrogen to be one of the main vectors for decarbonizing industry (refinery, ammonia, methanol, iron & steel, etc.) and mobility over the coming decades and transforming the company (as reported in C2.1a Risk 1 and 2). It is present throughout the value chain of the company: production, consumption in industrial facilities and commercial business (other industries & retail). Repsol has created SHYNE (Spanish Hydrogen Network) multi-sector consortium with the participation of 30 Spanish companies (Iberia, Talgo, Enagás, Alsa, Bosch, Scania, among others) to promote the use of renewable hydrogen across all segments of transport. This will be achieved by producing fuels and creating a broad infrastructure of at least 12 hydrogen plants. The project, which aims to reach an installed capacity of 500 MWe by 2025 and 2,000 MWe by 2030, will entail an investment of 3.23 billion euros. In addition, in October 2021 Repsol announced its plan to lead the production of this sustainable gas in the Iberian Peninsula and to become a key player also in the European market, with an equivalent generation capacity of 552 MWe by 2025 and 1.9 GWe by 2030 (60% higher than the ambition presented in the Strategic Plan 21-25) and a planned investment of 2,549 million euros. Repsol, as for first steps, has approved an investment in a 2.5 MWe electrolyzer, which may be brought online in the second half of 2022 in Bilbao, and it has also made further progress in designing a number of large renewable hydrogen facilities in Tarragona and Cartagena and at Petronor, which will be commissioned between 2024 and 2025. Meanwhile, we continue to make progress in the design of the DEMO plant for the production of synthetic fuels in the Port of Bilbao, which is scheduled to come into operation in 2024.
Investment in R&D	Yes	As explained in C2.2a, technology risk is a relevant risk for Repsol. Some of the most prominent risks within this category are the appearance of technologies aimed at a) enhancing the operational efficiency of facilities, and b) producing, storing and distributing renewable energy. Technological innovation is an essential driver for building more sustainable energy models and meeting the challenge of decarbonization in industrial production and transportation. Repsol Technology Lab is one of the most cutting-edge private R&D models in Spain. It supplements the Company's own research work with the Corporate Venturing investment fund and an open innovation strategy by establishing partnerships with technology centers, companies and universities around the world. Repsol has invested 4,496 k€ (5,305 kUSD) this 2021 (aprox. 50% higher than previous year) in R&D for advanced biofuels. Development of fuels with a low carbon footprint for mobility, including race cars Repsol is working to seek out new low carbon circular fuels for road, air, and maritime transport. In 2021 the following activities were carried out: • First pilot project in the field with Hydrotreated Vegetable Oil (HVO), a 100% renewable fuel with net zero emissions. Twelve buses of the Alsa fleet participated in this project, which provided service around the city of Bilbao for 4 months. The buses used 120,000 liters of fuel produced from waste and supplied by Repsol Technology Lab. This resulted in a reduction of approximately 300 metric tons of CO2 emissions over the course of the pilot project. • Collaboration agreement signed between Repsol and Iberia to move towards more sustainable mobility. Coprocessing-based jet fuel was supplied as a preliminary stage to the supply of jet fuel based on advanced and synthetic biofuels to be produced at Repsol's industrial complexes. • Development of a new fuel for race cars with a low carbon footprint, using 50% biofuel while maintaining optimum performance. This fuel was created specifically for the Toyota Hilux and tested in the Morocco Rally with excellent results. This is completely in line with Repsol strategy and decarbonization targets, By 2030, Repsol will process 3 Mt of waste per year. Under the framework of the strategic objectives defined for 2021-2025: It will reach low carbon biofuel production of 1.3 Mt by 2025 and more than 2 Mt by 2030.
Operations	Yes	Efficiency will drive Repsol's decarbonization of the Scope 1 and 2 emissions in the assets we operate (as reported in C2.4a Opportunity 1). Energy efficiency requires a continuous process of searching for opportunities for improvement in the fields of technology, design, and operating and maintenance procedures such as electrification and reducing methane and routine flare emissions. It has always played a part in our projects and operations, being prominent since 2006 in ambitious plans and goals to reduce the energy and emissions of our operations. Repsol has set an internal carbon price for making investment decisions on new projects (as reported in C2.4a Risk 1 and 2 ). It applies to all investments, including cases where there is no regulated carbon price, with the conviction that the cost of CO2 emissions will be internalized through regulatory mechanisms in all geographical areas over the time horizon of the life of such investments. It was updated in November 2021 , differentiating between the EU and the rest of the world with regard to the scope of application. Thus, new investments in the EU are assessed on the basis of \$70/t over the 2022-2025 period (or the regulated price if this is higher), rising to \$100/t in 2030. In the rest of the world, in countries without more stringent specific regulation, \$60/t is applied across the entire 2022-2030 period. Through this carbon price the Company will be able to promote even in a higher level the energy efficiency in all its operations, allowing a reduction of Scope 1&2. In this context, Repsol has initiated a new plan for the 2021-2025 horizon in order to achieve a further reduction of 1.5 Mt of CO2 by 2025. This will include, among other measures, electrification projects, energy integration of units, process optimization, efficient operation of plants and facilities and reduction of methane emissions. In 2021, Repsol achieved a reduction of 0.56 Mt CO2e. Furthermore, we will invest more than 400 million euros in the 2021-2025 Strategic Plan period to reduce 800,000 tonnes of CO2. As an example of this, two new air preheaters were installed in two furnaces at the refinery in Cartagena (Spain) in order to recover residual heat and thereby reduce CO2 emissions by 14,000 metric tons per year .

**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	Capital allocation Access to capital	<p>Capital Allocation: Repsol's strategy is inspired by a vision of the energy transition that is in line with the goal of limiting global warming to 1.5°C and achieving GHG emissions neutrality. It is a vision based on technological neutrality and the use of available and emerging technologies as a result of analyzing the current situation at any given time and its foreseeable progression in the medium and long term. The identification of risks and opportunities associated with climate change ultimately gives rise to a strategy that combines ambitious decarbonization objectives and the development of profitable businesses and projects. The strategy is implemented through in specific plans for this decade, in which business objectives can be set out more clearly, together with an analysis of possible long-term scenarios (2031- 2050) that take into account the uncertainty associated with factors such as the pace of technological development, regulation or consumers' energy needs. All of this is compatible with the Company's goal of achieving emissions neutrality by 2050. In October 2021, Repsol raised its investment in low-carbon solutions in comparison to the one announced in the 21-25 Strategic Plan. The Company is set to invest a total of 6.5 billion euros (7,700 MUSD) between 2021 and 2025, one billion more than initially planned and accounting for 35% of our total investment. For the long-term, through a Scenario Analysis, the Company has determined two transition scenarios (SDS and NZE added in question 3.2a) in which the percentage of capital employed in low carbon business out of the total could be 55-65% by 2040 and 65-75% by 2050 under SDS scenario, and 65-75% by 2040 and 75-85% by 2050 under NZE scenario. Moreover, in 2021, Repsol developed its own methodology to assess whether an investment is in line and compatible with its path towards decarbonization. Any investment proposal submitted to the Executive Committee and the Board of Directors must include a report drawn up by the Sustainability Department that reflects the impact of the investment on the Company's Carbon Intensity Indicator. The investments can be categorized as follows depending on whether the impact is positive, neutral or negative: • Aligned with the energy transition, when it does not affect or facilitate the Company's CII reduction targets. • Enabling the energy transition, if it has a negative impact on the CII of less than 1% that can be offset by other initiatives. Additional conditions are also imposed on exploration and production investments (limited life of exploitable reserves and no investment in oil sands, extraheavy crude and Arctic offshore). • Misaligned, when it does not meet the requirements of either of the two previous categories. Access to Capital: At Repsol we have a firm and continuous commitment to sustainability as an essential pillar for generating value today and in the future. We believe the issuance of Transition Financing Instruments will support our efforts to be part of the solution and reinforce our commitment towards a low emissions future. Repsol has designed its financing policy in line with its transition strategy and climate roadmap, embedding all its decarbonization levers that contribute to achieve the ambitious objectives set by the Company. Only inclusive and flexible transition financing will accelerate the achievement of the decarbonization goals of the Paris Agreement. Thus, Repsol has developed an overarching transition framework (the "Transition Financing Framework" or the "Framework") making it possible for us to use all the available transition financing instruments in the market to fund our decarbonization levers previously defined: Efficiency, Portfolio Transformation, Low Carbon Fuels &amp; Circularity, Low Carbon Power Generation, Technology Breakthroughs &amp; Carbon Sinks. As transition is a financing thematic that applies to various instruments, this framework allows us to issue in different formats: (i) Use of Proceeds Financing Instruments' format where the proceeds of the financing instruments can be earmarked either to Green Eligible Projects and/or Transition Eligible Projects as defined in the Use of Proceeds section of the Transition Financing Framework. (ii) Sustainability-Linked Financing Instruments' format with General Corporate Purpose financings at Corporate Level where financial or structural characteristics can vary depending on whether the Key Performance Indicator(s) "KPI(s)" reach (or not) the predefined Sustainability Performance Target(s) "SPT(s)" as defined in the Sustainability-Linked Financing section of the Transition Financing Framework. In other words, this Framework allows Repsol to issue Green (Use of Proceeds) bond/loans, Transition (Use of Proceeds) bond/loans and Transition Sustainability-Linked bonds/loans and other financial instruments. It was updated this March 2022 because of the raise in our Carbon Intensity Indicator targets. In July 2021, Repsol Europe Finance, S.à.r.l. (REF) completed an issuance of Eurobonds (guaranteed by Repsol, S.A.) linked to sustainability targets (SLB) for a total of 1,250 million euros. A 650-million-euro tranche at an issue price of 99,077%, paying an annual fixed coupon of 0,375% maturing in July 2029; and another 600 million euro tranche at an issue price of 99,108%, paying an annual fixed coupon of 0,875% and maturing in July 2033 . It is worth to mention that on 18th of May 2022, OFISO (Spanish Sustainable Financing Observatory) gave Repsol the OFISO 2022 Award for its trajectory and leadership in sustainable financing.</p>

**C3.5**

**(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?**

Yes

**C3.5a**

**(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C world.**

**Financial Metric**

CAPEX

**Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)**

28

**Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)**

35

**Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)**

45

**Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world**

Repsol has made public its commitment to be part of the solution in the fight against climate change by focusing its strategy on becoming a company with net zero CO2 emissions by 2050, in line with the objectives of the Paris and Glasgow Summits and the Sustainable Development Goals of the United Nations, which aim to limit global warming to 1.5°C with respect to pre-industrial levels. The reduction in the Carbon Intensity Indicator (CII) measured in gCO2e/MJ is the metric used by the Company to monitor its decarbonization and has set intermediate targets (15% by 2025, 28% by 2030 and 55% by 2040) towards emission neutrality by 2050. Behind these CII targets, there are decarbonization levers that will contribute at different weights to reach the objectives in the short, medium, and long-term: (i) Emissions reduction in traditional businesses, through efficiency measures and portfolio optimization, (ii) industrial transformation (advanced biofuels, biogas from organic waste, renewable hydrogen, synthetic fuels, circular economy, etc.), (iii) renewable electricity generation, (iv) CO2 capture and storage Therefore, to determine the percentage of CAPEX aligned with 1.5 world, the investment/capital employed in these levers at company level has been identified. In terms of capital allocation, Repsol will allocate a total of 7,700 MUSD over the 2021-2025 horizon to low carbon investments, representing 35% of total investment for the period. By 2030 Repsol's ambition is to achieve a capital employed of 45% in low-carbon businesses.

**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

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

**Target reference number**

Abs 1

**Year target was set**

2021

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

<Not Applicable>

**Base year**

2016

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

24875372

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

540563

**Base year 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)**

25415935

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

100

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

100

**Base year 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 (%)**

55

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

11437170.75

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

19489578

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

396059

**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)**

19885637

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

39.5621379765382

**Target status in reporting year**

New

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain target coverage and identify any exclusions**

In response to the demands of its stakeholders of tracking the absolute emissions, in 2021 Repsol released Abs 1 target which covers the Scope 1+2 emissions from operated assets at Company level and it implies the reduction of these emissions by 55% in 2030 compared to 2016. This target allows to monitor the operational efficiency, which is the basis for the decarbonization of scope 1 and 2 emissions, opportunities management in technology and design related to our own operations that bring an emission reduction.

#### Plan for achieving target, and progress made to the end of the reporting year

During all these years, Repsol has worked to improve the efficiency of its operations, focusing not only on implementing energy efficiency actions at facilities, but also on reducing methane emissions and reducing flaring at the E&P business. In 2021, a reduction of 22% of this target was reached, especially at the E&P business due to portfolio, methane and routine flaring management and energy efficiency actions. Downstream businesses have also contributed with electrification and energy efficiency actions. The following levers are considered to reach this target by 2030: 1) Efficiency, which includes emission reduction plans and reduction of methane and flaring emissions. Repsol emission reduction plans were launched in 2006 and remain in force today. Repsol has initiated a new plan for the 2021-2025 horizon to achieve a reduction of 1.5 Mt of CO<sub>2</sub> by 2025. This will include, among other measures, electrification projects, energy integration of units, process optimization, efficient operation of plants and facilities and reduction of methane emissions. In 2021, a reduction of 0.56 Mt CO<sub>2</sub>e was achieved. Moreover, given that natural gas plays an important role in the energy transition, Repsol announced its new objective in October 2021 to reach a methane intensity of 0.20% by 2025 for its operated assets at E&P, a value recognized as near zero for the oil and gas sector by international organizations such as the UNEP, and which is consistent with the commitment recently announced by the Oil and Gas Climate Initiative (OGCI), of which Repsol is a member. In 2021, the methane intensity value was particularly low, mainly because quieter levels of activity impacted operations. Additionally, Repsol joined the Zero Routine Flaring by 2030 initiative of the World Bank in June 2016. In the reporting year, routine flaring emissions were roughly 40% down on 2020, largely due to quieter levels of activity. 2) Optimization of the E&P portfolio to prioritize assets and projects under development that have a shorter life cycle and are less carbon intensive. 3) Renewable Hydrogen production that allows emissions reduction since the production process changes from steam reforming of natural gas to water electrolysis and biomethane reforming. This lever is associated to the objective to install 0.55 and 1.9 GWeq in 2025 and 2030, respectively. 4) Legacy Activity Emissions reduction due to the transformation of the legacy businesses into a low carbon energy supply hubs.

#### List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

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#### Target reference number

Abs 2

#### Year target was set

2021

#### Target coverage

Company-wide

#### Scope(s)

Scope 1

Scope 2

Scope 3

#### Scope 2 accounting method

Location-based

#### Scope 3 category(ies)

Category 1: Purchased goods and services

Category 11: Use of sold products

#### Base year

2016

#### Base year Scope 1 emissions covered by target (metric tons CO<sub>2</sub>e)

24858613

#### Base year Scope 2 emissions covered by target (metric tons CO<sub>2</sub>e)

484240

#### Base year Scope 3 emissions covered by target (metric tons CO<sub>2</sub>e)

86375939

#### Total base year emissions covered by target in all selected Scopes (metric tons CO<sub>2</sub>e)

111718792

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

99.9

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

89.6

#### Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

97.4

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

97.9

#### Target year

2030

#### Targeted reduction from base year (%)

30

#### Total emissions in target year covered by target in all selected Scopes (metric tons CO<sub>2</sub>e) [auto-calculated]

78203154.4

#### Scope 1 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)

19477264

#### Scope 2 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)

288124

#### Scope 3 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)

67401213

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

87166601

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

73.2559269587042

**Target status in reporting year**

New

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain target coverage and identify any exclusions**

In response to the demands of its stakeholders of tracking the absolute emissions in order to ensure that the carbon intensity (gCO2e/MJ) not only decreases because of the increase of production (denominator) but the emissions reduction too (numerator), Repsol has set the Abs2 which corresponds to the numerator of the CII and has to be reduced 30% by 2030 in comparison to 2016. It considers the direct and indirect emissions (scope 1 and 2) from E&P (operated assets), Refining and Chemical industrial sites in Spain, Portugal and Peru and Low Carbon Generation sites world-wide businesses. The rest of the businesses and areas of the company have not been included because they are not material (< 1% of the total scope 1 and 2). Scope 3 included in the target corresponds to the emissions associated with the use of our products from our oil and gas production (Cat.11), and the ones from third-party hydrogen plants that supply our industrial facilities (Cat.1). Besides, avoided emissions from our low-carbon power generation assets are included because they replace the marginal power mix in the country where they are located (this will reduce over time, as the electricity mix of each country progressively decarbonizes) and if levers such as Carbon Capture, Use and Storage (CCUS) or Natural Climate Solutions (NCS) are implemented are also considered. In the base year, Scope 3 Cat.11 associated to the Upstream production was approximately the 50% of Scope 3 Cat.11 calculated in relation to the refinery sales.

**Plan for achieving target, and progress made to the end of the reporting year**

In 2021, a 22% reduction of Abs 2 was achieved. One third corresponds to the reduction of Scope 1+2 emissions through the levers explained in the Abs1, while the rest has been achieved through a reduction in Scope 3 emissions, impacted by a drop in E&P production partly due to the ongoing pandemic. The following levers are considered to reach 30% reduction by 2030: 1. Energy Efficiency actions, reduction of methane and routine flare emissions, portfolio optimization and legacy activity, as aforementioned in Abs1. 2. Transformation of the Industrial business. Advanced biofuels, biogas from organic waste, renewable hydrogen (for addressing both Scope 1+2 and Scope 3 emissions) and, in the longer term, synthetic fuels are key to decarbonization in the many energy uses where renewable electricity cannot be used efficiently. The circular economy also plays a key role in decarbonization and the transformation of industrial complexes so that they are adapted to use different types of waste as raw materials. 3. Renewable electricity generation. In a relatively short period of time, Repsol has incorporated technical and management capabilities and developed a portfolio of projects in Spain, Chile and the United States that has enabled it to set the ambitious renewable capacity targets for 2025 and 2030, 6GW and 20 GW, respectively. 4. CCUS. The first CO2 capture (about 1.6 MtCO2/y) and storage project at Sakakemang (Indonesia) is expected to have an impact through to 2030.

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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**Target reference number**

Abs 3

**Year target was set**

2018

**Target coverage**

Business division

**Scope(s)**

Scope 1

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

<Not Applicable>

**Base year**

2018

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

344000

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

<Not Applicable>

**Base year 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)**

344000

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

1.5

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

<Not Applicable>

**Base year 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**

1.5

**Target year**



2025

**Targeted reduction from base year (%)**

50

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

172000

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

327000

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

<Not Applicable>

**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)**

327000

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

9.88372093023256

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain target coverage and identify any exclusions**

This target refers to our Routine Flaring target, with 2 different time horizons, 2025 as reported in Abs 3 and 2030 as reported in Abs4. The aim is to minimize routine flaring as soon as possible and by no later than 2030 at Upstream operated facilities, so it covers Scope 1 emissions from this business unit and no exclusions have been made.

**Plan for achieving target, and progress made to the end of the reporting year**

In June 2016, Repsol joined the Zero Routine Flaring (ZRF) by 2030 initiative of the World Bank, in the pursuit of technically and economically feasible solutions to minimize routine flaring as soon as possible and by no later than 2030 at its E&P facilities. Since then, work has been carried out each year to improve the inventory of emissions due to gas flaring, segregating this inventory into routine and non-routine flaring, as per the definitions of the Global Gas Flaring Reduction Partnership of the World Bank and standardizing criteria among OGCI companies. Repsol also set a target of achieving a 50% reduction in CO2e emissions from routine gas flaring activity by 2025 in relation to E&P operated assets and with 2018 as the baseline year, along with specific action plans. The lines of work are: • Improvement in the design and operating procedures of the facilities. Development plans for new assets designed under ZRF criteria. • Reutilization of gas as a fuel, to generate electricity or reinjection • Commercial solutions to make use of the gas once it has been treated In addition, under the company's strategy of optimizing E&P portfolio to prioritize assets and projects less carbon intensive, disposal of high flaring intensive assets is also contributing to flaring emissions reduction. In 2021, routine flaring emissions were roughly 40% down on 2020, largely due to quieter levels of activity. Overall, this represented a reduction of 5% in respect of the baseline year (2018).

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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**Target reference number**

Abs 4

**Year target was set**

2018

**Target coverage**

Business division

**Scope(s)**

Scope 1

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

<Not Applicable>

**Base year**

2018

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

344000

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

<Not Applicable>

**Base year 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)**

344000

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

1.5

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

<Not Applicable>

**Base year 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**

1.5

**Target year**

2030

**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)**

327000

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

<Not Applicable>

**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)**

327000

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

4.94186046511628

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain target coverage and identify any exclusions**

This target refers to our Routine Flaring target, with 2 different time horizons, 2025 as reported in Abs 3 and 2030 as reported in Abs4. The aim is to minimize routine flaring as soon as possible and by no later than 2030 at Upstream operated facilities, so it covers Scope 1 emissions from this business unit and no exclusions have been made.

**Plan for achieving target, and progress made to the end of the reporting year**

In June 2016, Repsol joined the Zero Routine Flaring (ZRF) by 2030 initiative of the World Bank, in the pursuit of technically and economically feasible solutions to minimize routine flaring as soon as possible and by no later than 2030 at its E&P facilities. Since then, work has been carried out each year to improve the inventory of emissions due to gas flaring, segregating this inventory into routine and non-routine flaring, as per the definitions of the Global Gas Flaring Reduction Partnership of the World Bank and standardizing criteria among OGCI companies. The lines of work are: • Improvement in the design and operating procedures of the facilities. Development plans for new assets designed under ZRF criteria. • Reutilization of gas as a fuel, to generate electricity or reinjection • Commercial solutions to make use of the gas once it has been treated In addition, under the company's strategy of optimizing E&P portfolio to prioritize assets and projects less carbon intensive, disposal of high flaring intensive assets is also contributing to flaring emissions reduction. In 2021, routine flaring emissions were roughly 40% down on 2020, largely due to quieter levels of activity. Overall, this represented a reduction of 5% in respect of the baseline year (2018).

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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## C4.1b

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

**Target reference number**

Int 1

**Year target was set**

2019

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

Scope 3

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

Category 1: Purchased goods and services

Category 11: Use of sold products

**Intensity metric**

Other, please specify (gCO2e/MJ)

**Base year**

2016

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

17.3

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

0.3

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

60.1

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

77.7

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

99.9

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

89.6

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

97.4

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

97.9

**Target year**

2025

**Targeted reduction from base year (%)**

15

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

66.045

**% change anticipated in absolute Scope 1+2 emissions**

-41.3

**% change anticipated in absolute Scope 3 emissions**

-17.5

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

16.5

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

0.2

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

57.2

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

73.9

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

32.6040326040326

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain target coverage and identify any exclusions**

The Carbon Intensity Indicator (CII), expressed in gCO2e/MJ, is a response to the company's need to move towards a business model compatible with the Paris Agreement, achieving net zero emissions by 2050. Repsol's methodology targets the main lever behind decarbonization: the primary energy mix that the company produces and supplies to society, as well as its degree of decarbonization. Our methodology also avoids double counting of emissions which would happen if the same emissions were attributed to more than one link in the production – refining – marketing chain or the other way round, not counting an increase in scope 3 emissions from using the products when oil production increases in cases where the volume of marketed products is greater than this production. The numerator of the CII shows the emissions generated by the Company's activities (direct and indirect emissions derived from operated assets of E&P, Refining and Chemicals, and from electricity generation), as well as emissions generated by the use of fuel products derived from primary energy production (oil and natural gas), avoided emissions from our low-carbon power generation assets are subtracted in the equation of the numerator because they replace the marginal power mix in the country where they are located and avoided emissions if levers such as Carbon Capture, Use and Storage (CCUS) or Natural Climate Solutions (NCS) are implemented. The denominator shows the energy that Repsol makes available to society in the form of end products (fuel and non-fuel products) derived from the production of primary energy from oil and gas and from low carbon energy sources (renewables solar, wind, hydropower and combined cycle gas turbines and surplus from natural gas cogeneration).

**Plan for achieving target, and progress made to the end of the reporting year**

Repsol has devised a CII measured in g CO2e/MJ as the main metric for monitoring the Company's progress toward the goal of net zero emissions by 2050 upon achieving a 100% reduction in the CII. To help monitor this process, the Company has set intermediate reduction targets of 15% by 2025, 28% by 2030 and 55% by 2040 (compared to base year 2016). In 2021, a 5.0% reduction was achieved with respect to the baseline year (2016). This value was the same as in the previous year, despite the business recovery at the industrial businesses, due to the implementation of energy efficiency plans, management of methane emissions at operated Upstream assets and the growth of installed renewable capacity, both domestically and internationally. The levers behind the 15% reduction of CII are the following ones: 1. Energy Efficiency actions, flaring emissions reduction that comprehends the target of reducing it by 50% in 2025 in comparison to 2018 levels (Abs 3), methane emissions reduction (Int 5), portfolio optimization and legacy activity. 2. Transformation of the Industrial business. Advanced biofuels, biogas from organic waste, renewable hydrogen and the circular economy also plays a key role in decarbonization and the transformation of industrial complexes so that they are adapted to use different types of waste as raw materials. 3. Renewable electricity generation. In a relatively short period of time, Repsol has incorporated technical and management capabilities and developed a portfolio of projects in Spain, Chile and the United States that has enabled it to set the ambitious renewable capacity target for 2025 of 6GW. In terms of capital allocation, Repsol will allocate a total of 7,700 MUSD ( over the 2021-2025 horizon to low carbon investments, representing 35% of total investment for the period.

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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**Target reference number**

Int 2

**Year target was set**

2019

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

Scope 3

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

Category 1: Purchased goods and services

Category 11: Use of sold products

**Intensity metric**Other, please specify (gCO<sub>2</sub>e/MJ)**Base year**

2016

**Intensity figure in base year for Scope 1 (metric tons CO<sub>2</sub>e per unit of activity)**

17.3

**Intensity figure in base year for Scope 2 (metric tons CO<sub>2</sub>e per unit of activity)**

0.3

**Intensity figure in base year for Scope 3 (metric tons CO<sub>2</sub>e per unit of activity)**

60.1

**Intensity figure in base year for all selected Scopes (metric tons CO<sub>2</sub>e per unit of activity)**

77.7

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

99.9

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

89.6

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

97.4

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

97.9

**Target year**

2030

**Targeted reduction from base year (%)**

28

**Intensity figure in target year for all selected Scopes (metric tons CO<sub>2</sub>e per unit of activity) [auto-calculated]**

55.944

**% change anticipated in absolute Scope 1+2 emissions**

-55

**% change anticipated in absolute Scope 3 emissions**

-22.7

**Intensity figure in reporting year for Scope 1 (metric tons CO<sub>2</sub>e per unit of activity)**

16.5

**Intensity figure in reporting year for Scope 2 (metric tons CO<sub>2</sub>e per unit of activity)**

0.2

**Intensity figure in reporting year for Scope 3 (metric tons CO<sub>2</sub>e per unit of activity)**

57.2

**Intensity figure in reporting year for all selected Scopes (metric tons CO<sub>2</sub>e per unit of activity)**

73.9

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

17.4664460378746

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

&lt;Not Applicable&gt;

**Please explain target coverage and identify any exclusions**

The Carbon Intensity Indicator (CII), expressed in gCO<sub>2</sub>e/MJ, is a response to the company's need to move towards a business model compatible with the Paris Agreement, achieving net zero emissions by 2050. Repsol's methodology targets the main lever behind decarbonization: the primary energy mix that the company produces and supplies to society, as well as its degree of decarbonization. Our methodology also avoids double counting of emissions which would happen if the same emissions were attributed to more than one link in the production – refining – marketing chain or the other way round, not counting an increase in scope 3 emissions from using the products when oil production increases in cases where the volume of marketed products is greater than this production. The numerator of the CII shows the emissions generated by the Company's activities (direct and indirect emissions derived from operated assets of E&P, Refining and Chemicals, and from electricity generation), as well as emissions generated by the use of fuel products derived from primary energy production (oil and natural gas), avoided emissions from our low-carbon power generation assets are subtracted in the equation of the numerator because they replace the marginal power mix in the country where they are located and avoided emissions if levers such as Carbon Capture, Use and Storage (CCUS) or Natural Climate Solutions (NCS) are implemented. The denominator shows the energy that Repsol makes available to society in the form of end products (fuel and non-fuel products) derived from the production of primary energy from oil and gas and from low carbon energy sources (renewables solar, wind, hydropower and combined cycle gas turbines and surplus from natural gas cogeneration).

**Plan for achieving target, and progress made to the end of the reporting year**

Repsol has devised a CII measured in g CO<sub>2</sub>e/MJ as the main metric for monitoring the Company's progress toward the goal of net zero emissions by 2050 upon achieving a 100% reduction in the CII. To help monitor this process, the Company has set intermediate reduction targets of 15% by 2025, 28% by 2030 and 55% by 2040 (compared to base year 2016). In 2021, a 5.0% reduction was achieved with respect to the baseline year (2016). This value was the same as in the previous year, despite the business recovery at the industrial businesses, due to the implementation of energy efficiency plans, management of methane emissions at operated Upstream assets and the growth of installed renewable capacity, both domestically and internationally. The levers behind the 28% reduction of CII are the following ones: 1. Emissions reduction at the traditional businesses through efficiency measures and portfolio optimization: • Energy efficiency and electrification. • Reducing methane emissions and ZRF (Abs4). • Optimization of the E&P portfolio to prioritize assets and projects under development that have a shorter life cycle and are less carbon intensive. 2. Transformation of the Industrial business. Advanced biofuels, biogas from organic waste, renewable hydrogen and, in the longer term, synthetic fuels are key to decarbonization in the many energy uses where renewable electricity cannot be used efficiently. The circular economy also plays a key role in decarbonization and the transformation of industrial complexes so that they are adapted to use different types of waste as raw materials. 3. Renewable electricity generation. In a relatively short period of time, Repsol has incorporated technical and management capabilities and developed a portfolio of projects in Spain, Chile and the United States that has enabled it to set the ambitious renewable capacity targets for 2025 and 2030 already mentioned. 4. CCUS. The first CO<sub>2</sub> capture (about 1.6 MtCO<sub>2</sub>/y) and storage project at Sakakemang (Indonesia) is expected to have an impact through to 2030. By 2030 Repsol's ambition is to achieve a capital employed of 45% in low-carbon businesses.

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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**Target reference number**

Int 3

**Year target was set**

2019

**Target coverage**

Company-wide

**Scope(s)**

Scope 1  
Scope 2  
Scope 3

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

Category 1: Purchased goods and services  
Category 11: Use of sold products

**Intensity metric**

Other, please specify (gCO<sub>2</sub>e/MJ)

**Base year**

2016

**Intensity figure in base year for Scope 1 (metric tons CO<sub>2</sub>e per unit of activity)**

17.3

**Intensity figure in base year for Scope 2 (metric tons CO<sub>2</sub>e per unit of activity)**

0.3

**Intensity figure in base year for Scope 3 (metric tons CO<sub>2</sub>e per unit of activity)**

60.1

**Intensity figure in base year for all selected Scopes (metric tons CO<sub>2</sub>e per unit of activity)**

77.7

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

99.9

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

89.6

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

97.4

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

97.9

**Target year**

2040

**Targeted reduction from base year (%)**

55

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

34.965

**% change anticipated in absolute Scope 1+2 emissions**

-71.2

**% change anticipated in absolute Scope 3 emissions**

-61.2

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

16.5

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

0.2

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

57.2

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

73.9

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

8.89200889200889

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

&lt;Not Applicable&gt;

**Please explain target coverage and identify any exclusions**

The Carbon Intensity Indicator (CII), expressed in gCO2e/MJ, is a response to the company's need to move towards a business model compatible with the Paris Agreement, achieving net zero emissions by 2050. Repsol's methodology targets the main lever behind decarbonization: the primary energy mix that the company produces and supplies to society, as well as its degree of decarbonization. Our methodology also avoids double counting of emissions which would happen if the same emissions were attributed to more than one link in the production – refining – marketing chain or the other way round, not counting an increase in scope 3 emissions from using the products when oil production increases in cases where the volume of marketed products is greater than this production. The numerator of the CII shows the emissions generated by the Company's activities (direct and indirect emissions derived from operated assets of E&P, Refining and Chemicals, and from electricity generation), as well as emissions generated by the use of fuel products derived from primary energy production (oil and natural gas), avoided emissions from our low-carbon power generation assets are subtracted in the equation of the numerator because they replace the marginal power mix in the country where they are located and avoided emissions if levers such as Carbon Capture, Use and Storage (CCUS) or Natural Climate Solutions (NCS) are implemented. The denominator shows the energy that Repsol makes available to society in the form of end products (fuel and non-fuel products) derived from the production of primary energy from oil and gas and from low carbon energy sources (renewables solar, wind, hydropower and combined cycle gas turbines and surplus from natural gas cogeneration).

**Plan for achieving target, and progress made to the end of the reporting year**

Repsol has set intermediate reduction targets of 15% by 2025, 28% by 2030 and 55% by 2040 (compared to base year 2016) for its Carbon Intensity Indicator (CII). In 2021, a 5.0% reduction was achieved with respect to the base year (2016), due to the implementation of energy efficiency plans, management of methane emissions and the growth of installed renewable capacity. The levers behind the 55% reduction of CII are the following ones: 1. Emissions reduction through a drop in production capacity in legacy businesses due to its transformation to low carbon industrial facilities. Future fuel distillation is in line with changes in demand compatible with the European Green Deal, therefore crude oil distillation will drop between 10 and 80-90% in this timeframe vs.2019. This will be compensated by an increase in the production of low-carbon fuels. Besides, a decrease of hydrocarbon production will contribute to the decarbonization of the company. In this timeframe we could have a total production between 600 kboed (2030 forecast) and 250-300 kboed, obtained in the SDS scenario analysis. 2. Transformation of the Industrial business. Production of low-carbon fuels such as advanced biofuels, synthetic fuels and renewable hydrogen will increase its participation in the energy product mix. These products are key to decarbonization in the many energy uses where renewable electricity cannot be used efficiently. Repsol production of renewable hydrogen will boost between 1.9 and 10-15 GWe. The Chemical business shows growth in line with the increase in demand estimated under IEA's macro scenarios. 3. Renewable electricity generation. This will be the business line that will experience the greatest growth in the long term, under SDS scenario the installed capacity (national and international) will be between 20 GW (2030 target) and 40-45GW. 4. CCUS. This lever will have an important role in the decade from 2030 to 2040, mainly because of the development of CCUS Hubs all around the world. In the previous decade, carbon capture and storage technology would have dropped its abatement cost (thanks to the deployment of pilot projects in E&P businesses and the development of new energy vectors as e-fuels), moreover transport and distribution CO2 grids would have been deployed thanks to the policy and public institutions support (governments).

**List the emissions reduction initiatives which contributed most to achieving this target**

&lt;Not Applicable&gt;

**Target reference number**

Int 4

**Year target was set**

2019

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

Scope 3

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

Category 1: Purchased goods and services

Category 11: Use of sold products

**Intensity metric**

Other, please specify (gCO2eq/MJ)

**Base year**

2016

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

17.3

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

0.3

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

60.1

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

77.7

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

99.9

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

89.6

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

97.4

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

97.9

**Target year**

2050

**Targeted reduction from base year (%)**

100

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

0

**% change anticipated in absolute Scope 1+2 emissions**

-100

**% change anticipated in absolute Scope 3 emissions**

-100

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

16.5

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

0.2

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

57.2

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

73.9

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

4.89060489060489

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain target coverage and identify any exclusions**

The Carbon Intensity Indicator (CII), expressed in gCO2e/MJ, is a response to the company's need to move towards a business model compatible with the Paris Agreement, achieving net zero emissions by 2050. Repsol's methodology targets the main lever behind decarbonization: the primary energy mix that the company produces and supplies to society, as well as its degree of decarbonization. Our methodology also avoids double counting of emissions which would happen if the same emissions were attributed to more than one link in the production – refining – marketing chain or the other way round, not counting an increase in scope 3 emissions from using the products when oil production increases in cases where the volume of marketed products is greater than this production. The numerator of the CII shows the emissions generated by the Company's activities (direct and indirect emissions derived from operated assets of E&P, Refining and Chemicals, and from electricity generation), as well as emissions generated by the use of fuel products derived from primary energy production (oil and natural gas), avoided emissions from our low-carbon power generation assets are subtracted in the equation of the numerator because they replace the marginal power mix in the country where they are located and avoided emissions if levers such as Carbon Capture, Use and Storage (CCUS) or Natural Climate Solutions (NCS) are implemented. The denominator shows the energy that Repsol makes available to society in the form of end products (fuel and non-fuel products) derived from the production of primary energy from oil and gas and from low carbon energy sources (renewables solar, wind, hydropower and combined cycle gas turbines and surplus from natural gas cogeneration)

**Plan for achieving target, and progress made to the end of the reporting year**

Repsol has set intermediate reduction targets of 15% by 2025, 28% by 2030 and 55% by 2040 (compared to base year 2016) for its Carbon Intensity Indicator (CII). In 2021, a 5.0% reduction was achieved with respect to the baseline year (2016), due to the implementation of energy efficiency plans, management of methane emissions and the growth of installed renewable capacity. The levers behind the 100% reduction of CII are the following ones: 1. Transformation of the oil and gas portfolio with lower hydrocarbon production. As mentioned in Int3 a decrease in the total production is forecasted in the long-term reaching in SDS scenario values of 250-300 kboed. 2. Transformation of the Industrial business. By 2050 the production of low-carbon fuels such as advanced biofuels, synthetic fuels and renewable hydrogen will continue increasing its participation in the energy product mix (about 70%), as result of higher demand of these products that allow a reduction of Scope 3 emissions and the regulation behind. An example of this, Repsol capacity of renewable hydrogen reaches 10-15 GWe in SDS scenario analysis in this timeframe. 3. Renewable electricity generation. An increase over 100% is expected in SDS scenario between 2030 and 2050, due to the renewable electrification of the economy that this scenario considers.

4. CCUS. After a decrease of abatement costs and increase of technology development, by 2050 this lever will be totally deployed, reaching in Repsol's SDS scenario around 10 MtCO<sub>2</sub>. Under SDS scenario, a percentage between 65 and 75 of capital expenditure in low carbon business out of total average capex for the period 2041-2050 is considered.

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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**Target reference number**

Int 5

**Year target was set**

2018

**Target coverage**

Business division

**Scope(s)**

Scope 1

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

<Not Applicable>

**Intensity metric**

Other, please specify (m3 of methane/m3 of marketed gas (operated assets))

**Base year**

2017

**Intensity figure in base year for Scope 1 (metric tons CO<sub>2</sub>e per unit of activity)**

1.34

**Intensity figure in base year for Scope 2 (metric tons CO<sub>2</sub>e per unit of activity)**

<Not Applicable>

**Intensity figure in base year for Scope 3 (metric tons CO<sub>2</sub>e per unit of activity)**

<Not Applicable>

**Intensity figure in base year for all selected Scopes (metric tons CO<sub>2</sub>e per unit of activity)**

1.34

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

20

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

<Not Applicable>

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

<Not Applicable>

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

20

**Target year**

2025

**Targeted reduction from base year (%)**

25

**Intensity figure in target year for all selected Scopes (metric tons CO<sub>2</sub>e per unit of activity) [auto-calculated]**

1.005

**% change anticipated in absolute Scope 1+2 emissions**

87

**% change anticipated in absolute Scope 3 emissions**

0

**Intensity figure in reporting year for Scope 1 (metric tons CO<sub>2</sub>e per unit of activity)**

0.77

**Intensity figure in reporting year for Scope 2 (metric tons CO<sub>2</sub>e per unit of activity)**

<Not Applicable>

**Intensity figure in reporting year for Scope 3 (metric tons CO<sub>2</sub>e per unit of activity)**

<Not Applicable>

**Intensity figure in reporting year for all selected Scopes (metric tons CO<sub>2</sub>e per unit of activity)**

0.77

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

170.149253731343

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain target coverage and identify any exclusions**

The company targets a methane intensity of 0.2% in operated assets by 2025, (operated methane emissions/ marketed gas (% vol / vol)). This value is recognized as near-zero by relevant shareholders for the O&G sector and it also coincides with the new target announced by the OGCI (Oil and Gas Climate Initiative) of which Repsol is a member.

**Plan for achieving target, and progress made to the end of the reporting year**

Repsol announced in 2021 its new objective in relation to methane emissions recution: reach a methane intensity of 0.20% by 2025 for its operated assets at E&P, a value recognized as near zero for the O&G sector by international organizations such as the UNEP, and which is consistent with the commitment recently announced by the Oil and Gas Climate Initiative (OGCI), of which Repsol is a member. Levers behind this target: - Accurate detection and quantification methodologies implementation. In Repsol, we usually perform LDAR campaigns annually at least in each asset, and we always quantify the emissions. These campaigns help us monitor our fugitive emissions and increase the accuracy of our methane inventory thanks to quantification. If we don't quantify the emissions, our reporting would be based on emission factors, and we have observed that the fugitives usually are much lower than the emission factor calculations. - Emission reduction opportunities identification & application. Some examples: o Reducing venting emissions; pneumatics retrofit o Improving membranes performance o Flaring reduction - Transition to a lower emissions portfolio (disposal of carbon intensive assets) Since 2017, Repsol has worked not only on improving the quantification and monitoring of methane emissions, but also on undertaking reduction actions at its operated assets, including campaigns to detect and quantify fugitive emissions. In 2021, the methane intensity value was particularly low, mainly because quieter levels of activity impacted operations. With regards technologies, we are testing emerging aerial technologies, such as drones and aircrafts in order to be able to cover remote locations, which is specifically challenging. There are thousands of wells, and so it is possible to find thousands of tiny leaks. In this sense, in 2021 we are testing satellites detection technology in Eagle Ford and Lybia, aircrafts in Eagle Ford and Marcellus and drones in Marcellus. The important point of monitoring is to early detect super-emitters, quantify them and fix them as soon as possible. Monitoring will help to avoid "missed" emissions and to early detect super-emitters, so they can be mitigated. Increasing measurements (combination of top-down and bottom-up) will help the industry to have a clearer picture of their emissions, so it is easier to start proposing reduction actions.

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

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**C4.2**

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**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Target(s) to reduce methane emissions

Net-zero target(s)

**C4.2b**

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

**Target reference number**

Oth 1

**Year target was set**

2018

**Target coverage**

Business division

**Target type: absolute or intensity**

Intensity

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

Methane reduction target	Total methane emissions in m3
--------------------------	-------------------------------

**Target denominator (intensity targets only)**

Other, please specify (m3 of marketed gas (operated assets) )

**Base year**

2017

**Figure or percentage in base year**

1.34

**Target year**

2025

**Figure or percentage in target year**

0.2

**Figure or percentage in reporting year**

0.77

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

50

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

Repsol has a specific methane intensity target, also reported in question 4.1b as Int 5. Methane emissions reduction are also included in our GHG Scope 1 and 2 targets (Abs 1 and Abs 2). By proposing a target for flaring in 2025 and 2030 (Abs 3 and Abs 4), Repsol is also committed to reduce methane emissions. Finally, the carbon intensity indicator is including methane emissions in its calculation, our NZE target in all the 4 time horizons described in 4.1b are also including these reductions (Int 1, Int 2, Int 3 and Int 4).

**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 company targets a methane intensity of 0.2% in operated assets by 2025, (operated methane emissions/ marketed gas (% vol / vol)). This value is recognized as near-zero by relevant shareholders for the O&G sector and it also coincides with the new target announced by the OGCI (Oil and Gas Climate Initiative) of which Repsol is a member.

**Plan for achieving target, and progress made to the end of the reporting year**

Given that natural gas plays an important role in the energy transition, it is essential to minimize methane emissions. Therefore, Repsol announced its new objective in October 2021: to reach a methane intensity of 0.20% by 2025 for its operated assets at E&P, a value recognized as near zero for the oil and gas sector by international organizations such as the UNEP, and which is consistent with the commitment recently announced by the Oil and Gas Climate Initiative (OGCI), of which Repsol is a member. Levers behind this target: - Accurate detection and quantification methodologies implementation. In Repsol, we usually perform LDAR campaigns annually at least in each asset, and we always quantify the emissions. These campaigns help us monitor our fugitive emissions and increase the accuracy of our methane inventory thanks to quantification. If we don't quantify the emissions, our reporting would be based on emission factors, and we have observed that the fugitives usually are much lower than the emission factor calculations. - Emission reduction opportunities identification & application. Some examples: o Reducing venting emissions; pneumatics retrofit o Improving membranes performance o Flaring reduction - Transition to a lower emissions portfolio (disposal of carbon intensive assets) With regards technologies, we are testing emerging aerial technologies, such as drones and aircrafts in order to be able to cover remote locations, which is specifically challenging. There are thousands of wells, and so it is possible to find thousands of tiny leaks. In this sense, in 2021 we are testing satellites detection technology in Eagle Ford and Lybia, aircrafts in Eagle Ford and Marcellus and drones in Marcellus. The important point of monitoring is to early detect super-emitters, quantify them and fix them as soon as possible. Monitoring will help to avoid "missed" emissions and to early detect super-emitters, so they can be mitigated. Increasing measurements (combination of top-down and bottom-up) will help the industry to have a clearer picture of their emissions. Since 2017, Repsol has worked not only on improving the quantification and monitoring of methane emissions, but also on undertaking reduction actions at its operated assets, including campaigns to detect and quantify fugitive emissions. In 2021, the methane intensity value was particularly low, mainly because quieter levels of activity impacted operations.

**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

Abs2

Int1

Int2

Int3

Int4

##### Target year for achieving net zero

2050

##### Is this a science-based target?

No, but we anticipate setting one in the next 2 years

##### Please explain target coverage and identify any exclusions

The Carbon Intensity Indicator (CII), expressed in gCO<sub>2</sub>e/MJ, is a response to the company's need to move towards a business model compatible with the Paris Agreement, achieving net zero emissions by 2050. Repsol's methodology targets the main lever behind decarbonization: the primary energy mix that the company produces and supplies to society, as well as its degree of decarbonization. Our methodology also avoids double counting of emissions which would happen if the same emissions were attributed to more than one link in the production – refining – marketing chain or the other way round, not counting an increase in scope 3 emissions from using the products when oil production increases in cases where the volume of marketed products is greater than this production. The numerator of the CII shows the emissions generated by the Company's activities (direct and indirect emissions derived from operated assets of E&P, Refining and Chemicals, and from electricity generation), as well as emissions generated by the use of fuel products derived from primary energy production (oil and natural gas), avoided emissions from our low-carbon power generation assets are subtracted in the equation of the numerator because they replace the marginal power mix in the country where they are located and also avoided emissions if levers such as Carbon Capture, Use and Storage (CCUS) or Natural Climate Solutions (NCS) are implemented. The denominator shows the energy that Repsol makes available to society in the form of end products (fuel and non-fuel products) derived from the production of primary energy from oil and gas and from low carbon energy sources (renewables solar, wind, hydropower and combined cycle gas turbines and surplus from natural gas cogeneration). By 2050, the numerator of CII will reach Net Zero, thus the Carbon Intensity Indicator will be net zero as well.

##### 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

The scenario analysis carried out by Repsol presents an initial 2021-2030 period that will be deterministic, in which the 28% reduction by 2030 in the CII corresponds to the specific plans established for each of the Company's businesses. In the second period (2031-2050), given the uncertainty regarding environmental conditions, the development of technologies and regulation, two central scenarios have been developed for the Company that are in line with the SDS and NZE macro scenarios of the IEA, and also with the European Green Deal in terms of energy product demand within the EU. The various decarbonization levers make the following contribution to reducing the CII over the 2031-2050 horizon under the central SDS: - Transformation of the oil and gas portfolio with lower hydrocarbon production, 23% - Industrial transformation for the production of low carbon fuels, 18% - Renewable electricity generation, 15% - CCUS, 6% These percentages, once added to the 28% cumulative reduction by 2030 and the 10% attributed to NCS, if the technology is not developed as fast as expected, effectively achieve the 100% reduction in the CII (net zero emissions) by 2050. Repsol prioritizes the decarbonization of energy production, so no contribution from NCSs has been considered until 2030. Nevertheless, Repsol recognizes the necessary role of NCS in achieving global emissions neutrality targets. The greater potential of the technologies is shown through the alternative scenarios, where the CII can be reduced by 95% under a macro environment that is consistent with the SDS scenario, which is greater than the reduction that could be achieved under the corresponding central scenario. It is worth to mention that Repsol applies the following hierarchy: first mitigate and the compensate. So, the Company is going to reach NZE by 2050 applying the best technological solutions (cost-efficient). Under the NZE central scenario, lower hydrocarbon production accelerates the Company's decarbonization, leading to net zero emissions by 2050 without the need for NCS.

##### Planned actions to mitigate emissions beyond your value chain (optional)

Aside from the decarbonization levers described along the module, Repsol promotes other initiatives –albeit with less of an impact in the period– to raise awareness among customers of the cost of reducing Scope 3 emissions through carbon offsetting mechanisms based on natural climate solutions. Repsol currently offers its fuel customers the NetZero Emissions Commitment program to allow for voluntary offsetting of emissions every time they fill up the vehicle. The initiative is available for payments made through Repsol's mobile app, Waylet. Repsol customers can offset the CO<sub>2</sub> emissions from their fuel consumption by supporting forestry projects. It is voluntary and every time the customer decides to offset, Repsol matches the amount. We have selected projects framed in the international mechanism "REDD+" developed by the United Nations Framework Convention on Climate Change (UNFCCC), which provides incentives to developing countries that protect and restore carbon reserves in forests. As their acronym indicates, REDD+ projects are aimed at reducing emissions due to deforestation and forest degradation, as well as supporting their sustainable management, conservation, and improvement of their carbon reserves. The projects are the following ones: • The Cordillera Azul National Park which avoids deforestation in a magnificent expanse of lowland and montane forests in four departments in central Peru: San Martín, Ucayali, Huánuco, and Loreto. The project's avoided-deforestation objective is accomplished by strengthening park protection, engaging local communities and other stakeholders in land-use management compatible with conservation, and improving the quality of life of the park's neighbors. • The Madre de Dios Amazon which is designed around the impending effects of a new trans-Amazonian, inter-oceanic road that is nearly complete from Brazil to the Pacific Ocean and Peruvian ports. Madre de Dios has also obtained a "Gold" rating from the CCB (Climate, Community & Biodiversity) standard for its contribution to the environmental and social sustainability of the area. It is worth to mention that these compensation projects are supported by Repsol in an independent way, so that they do not contribute to the company's decarbonization strategy.

#### 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	63	
To be implemented*	30	110078
Implementation commenced*	62	191504
Implemented*	110	560000
Not to be implemented	16	

### 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
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**Estimated annual CO2e savings (metric tonnes CO2e)**

560000

**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)**

26700000

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

84000000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

16-20 years

**Comment**

During 2021, 110 energy efficiency actions in Refining, Chemicals and E&P sub-divisions were carried out. These measures such as the improvements in furnaces, energy integration of unit's heat recovery, more efficient energy generation and distribution and operation optimization of dynamic systems and methane and flaring management have allowed the reduction of 560.000 tCO2e. As an example of these reductions, in the industrial complex of Puertollano, a new, more efficient deaerator that operates at very low pressure (0.2 kg/cm2g) has been installed, creating savings of 2 t/h of low pressure steam, which will lead to a thermal energy savings of 1.259 ktoe/year, thereby avoiding 3,679.95 tCO2/year of emissions into the atmosphere, a direct natural gas savings for the complex.

### C4.3c

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

Method	Comment
Dedicated budget for energy efficiency	As it was included in the Strategic Plan 21-25, the industrial facilities will undergo emissions reduction actions in order to reduce 0.8 MtCO <sub>2</sub> and the CAPEX related to this reduction is 472 MUSD. In 2021, a total of 84 MUSD was dedicated to energy efficiency actions that allowed the reduction of 560.000 tCO <sub>2</sub> e at company level. One example of these actions is that we are carrying out an energy efficiency improvement project at the Crude-1 Industrial Complex in A Coruña that consists in the installation of two new heat exchangers that recover heat from products to be used to pre-heat crude oil being sent to the furnace, and thus reduce fuel consumption in the unit's furnace. This will lead to a reduction of 5,082 tons of CO <sub>2</sub> per year in one of the largest units at the refinery, which could mean an energy savings of 2.2341587 ktoe/year. In addition, in 2021 alone, during maintenance work on the lubricant units and the last scheduled shutdown carried out in the conversion and hydrotreating areas, Repsol invested 36.6 MUSD in projects to improve the energy efficiency of its facilities in Cartagena.
Internal price on carbon	Repsol has various internal mechanisms in place to promote the allocation of capital to low carbon investments, such as the carbon price and the methodology to gauge whether an investment is in line with the energy transition. The Company has set an internal carbon price for making investment decisions on new projects. It applies to all investments, including cases where there is no regulated carbon price, with the conviction that the cost of CO <sub>2</sub> emissions will be internalized through regulatory mechanisms in all geographical areas over the time horizon of the life of such investments. In October 2021, Repsol updated the internal carbon price, differentiating between the EU and the rest of the world with regard to the scope of application. Thus, new investments in the EU are assessed on the basis of 70 USD /t over the 2022-2025 period (or the regulated price if this is higher), rising to \$100/t in 2030. In the rest of the world, in countries without more stringent specific regulation, 60 USD /t is applied across the entire 2022-2030 period.
Compliance with regulatory requirements/standards	One example of regulatory requirements is the European Renewable Energy Directive which envisions a progressive increase in the use of liquid biofuels across all modes of transport, so all of us in the refining sector have set to work to produce it on a large scale. On the other hand, the Spanish National Integrated Energy and Climate Plan (PNIEC) sets an even more demanding target of 28% renewable energy in transportation by 2030. The PNIEC recognizes that biofuels are the most widely available and currently used renewable technology in transportation, especially in sectors such as heavy vehicles, aviation, and maritime, where electrification is currently not possible. In addition, the Climate Change and Energy Transition Law, approved by the Spanish Congress in May 2021, contains an article dedicated to sustainable alternative fuels in transportation, with special emphasis on advanced biofuels and other fuels of non-biological origin. At Repsol we are now adapting our industrial complexes to enable its manufacture, while also building Spain's first biofuel production plant in Cartagena, which will be operational in 2023. This project is also a prime example of the ongoing industrial transformation at our company, with the circular economy and the reuse of recycled raw materials being one of its cornerstones. Moreover, in 2021, we made several important breakthroughs in the reuse of recycled raw materials. The Petronor refinery in Bilbao produced the first batch of aviation biofuels to be made in Spain from waste, which Iberia would later use to complete the first flight of this kind in our country. Elsewhere, at our refinery in A Coruña, we are now able to process frying oil to produce hydrobiodiesel, a sustainable biofuel that can be used in today's vehicle engines. Our goal for 2030 is to use three million metric tons of waste per year and offset more than seven million metric tons of CO <sub>2</sub> . This will make us one of the leading producers of low-carbon fuels by the end of the decade, with two million metric tons per year.
Dedicated budget for low-carbon product R&D	Technological innovation is an essential driver for building more sustainable energy models and meeting the challenge of decarbonization in industrial production and transportation. Repsol Technology Lab is one of the most cutting-edge private R&D models in Spain. It supplements the Company's own research work with the Corporate Venturing investment fund and an open innovation strategy by establishing partnerships with technology centers, companies and universities around the world. In 2021, more than 64M€ (75,52 MUSD) were invested in R&D. Some examples of the activities carried out during 2021 are: • First pilot project in the field with Hydrotreated Vegetable Oil (HVO), a 100% renewable fuel with net zero emissions. • Development of a new fuel for race cars with a low carbon footprint, using 50% biofuel while maintaining optimum performance. This fuel was created specifically for the Toyota Hilux of driver Isidre Esteve, who tested it in the Morocco Rally with excellent results. • Development and patenting of a process to purify the products resulting from the pyrolysis of plastic waste that allows for their chemical recycling. The process ensures the supply of circular chemicals to the market and has been developed in state-of-the-art pilot plants at Repsol Technology Lab, in collaboration with Axens and IFPEN. • Development and optimization of waste recovery through the Perseo Biotechnology spin-off, which is owned by Repsol. Created in 2020, Repsol owns Perseo Bioethanol®, a patented technology that enables the cost-effective transformation of organic municipal solid waste into advanced bioethanol.
Employee engagement	The Company's climate change targets have a direct impact on employees' variable remuneration and in the emissions reduction of the Company. • Short-term variable remuneration is defined and reviewed on an annual basis. 25% of this remuneration is based on sustainability commitments, linked to the decarbonization pathway, which focus on the reduction of CO <sub>2</sub> emissions and megawatts of renewable energy in operation. • Repsol also has a long-term incentive in place for the 2021-2024 horizon. 30% of this incentive is linked to compliance with the CII reduction goal and 10% to compliance with renewable generation targets. This long-term variable remuneration applies to all executives and members of senior management, including the CEO, as well as a certain percentage of senior leaders.
Other	In 2021, Repsol developed its own methodology to assess whether an investment is in line and compatible with its path towards decarbonization. Any investment proposal submitted to the Executive Committee and the Board of Directors must include a report drawn up by the Sustainability Department that reflects the impact of the investment on the Company's CII. The investments can be categorized as follows depending on whether the impact is positive, neutral or negative: • Aligned with the energy transition, when it does not affect or facilitate the Company's CII reduction targets. • Enabling the energy transition, if it has a negative impact on the CII of less than 1% that can be offset by other initiatives. Additional conditions are also imposed on exploration and production investments (limited life of exploitable reserves and no investment in oil sands, extraheavy crude and Arctic offshore). • Misaligned, when it does not meet the requirements of either of the two previous categories.

**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
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**Description of product(s) or service(s)**

Repsol started its renewable generation with the acquisition of the unregulated low-emission electricity generation businesses from Viesgo in 2018, where hydropower stations are included. They are in the north of Spain with a total capacity about 700 MW and offer enormous potential for further organic growth, as it is planned to expand the capacity with a second reversible pumping plant, by leveraging the existing lower and upper reservoirs, with the aim of adding four generation unit of 250 MW each to achieve a total capacity of 1,361 MW. Furthermore, in line with the Company's renewables strategy, in 2021 wind and solar photovoltaic electricity generation increased significantly following the entry into commercial operation of projects in Spain and Chile. Wind power generation capacity in operation amounts to 430 MW, corresponding to the Delta I project (335 MW) and the Cabo Leones III wind farm located in Chile (94 MW pertaining to Repsol). Solar photovoltaic generation capacity amounts to 390 MW, corresponding to the Kappa photovoltaic project, with 127 MW of installed capacity, and the Valdesolar project, with 264 MW, both of which were put into production in 2021. In addition, international expansion began in the United States and the first rotation of assets in Spain was completed following the sale of 49% of the stake in the Delta I wind farm to the Pontegadea Group. Renewable power generation is under EU Taxonomy and classified as a low carbon product.

**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 (Methodology developed by Repsol)

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

Use stage

**Functional unit used**

1GWh generated through renewables vs. 1GWh generated through fossil fuels

**Reference product/service or baseline scenario used**

1GWh Electricity generation through fossil power mix

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

Use stage

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

450

**Explain your calculation of avoided emissions, including any assumptions**

The estimation of avoided emissions from our renewable power generation assets are based on the displacement of the marginal power mix in the country (coal, oil, and gas) where we install it. We calculate it each year against the generation mix of each country and that will reach zero when this mix is entirely renewable. By that time, there will be no displacement of emissions. That is to say, the avoided emissions are the ones that would have been taken place if fossil fuels were used for electricity generation instead of renewables. Hence, the considerations for the calculation are the following ones: zero CO2 emissions are released during electricity generation through renewables and CO2 is the only GHG considered due to complete combustion is assumed. Specifically, we get from the country's Transport System Operator (TSO) annual report, the generation through fossil fuels and the emissions associated. With this, we obtain the fossil fuel emission factor expressed in tCO2/GWh. So, the estimation of avoided emissions is equal to the multiplication of this last term to the electricity generated through renewables (GWh). The value added in the previous column (estimated avoided emissions) corresponds to the emissions associated to fossil fuels combustion for 1 GWh generation in Spain in 2021.

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

3.7

**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	Hydrogenated vegetable oil
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**Description of product(s) or service(s)**

Advanced biofuels are a sustainable solution for all segments of mobility, especially for those that have no other alternative to decarbonize their activity, such as maritime, long-distance road or aviation transport. They can reduce net CO2 emissions by 65% to 85% compared to the traditional fuels they replace. Repsol has been incorporating biofuels into its automotive fuels for more than two decades. Now the company is taking one step more and, using the circular economy as a tool, will be producing advanced biofuels from different types of waste from the agri-food industry and others, such as used cooking oils HVO. In this way, Repsol will give a second life to waste that would otherwise end up in a landfill by transforming it into products with a high added value. In 2021, we made several important breakthroughs in the reuse of recycled raw materials. The Petronor refinery in Bilbao produced the first batch of aviation biofuels to be made in Spain from waste, which Iberia would later use to complete the first flight of this kind in our country. Moreover, Repsol is building the first low-emissions advanced biofuels plant in Spain at our refinery in Cartagena. The plant will produce biofuels from recycled raw materials and have an annual production capacity of 250,000 tonnes of hydrobiodiesel, biojet, bionaphtha, and biopropane to be used in aircraft, trucks, or cars.

**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 (REDII)

**Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

Cradle-to-grave

**Functional unit used**

Energy in GJ of advanced biofuel used vs. Energy in GJ of fossil fuel used

**Reference product/service or baseline scenario used**

1 GJ of fossil fuel

**Life cycle stage(s) covered for the reference product/service or baseline scenario**

Cradle-to-grave

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

0.094

**Explain your calculation of avoided emissions, including any assumptions**

According to REDII Annex V, the greenhouse gas emissions savings from biofuels and bioliquids shall be calculated as the difference between the emissions released because of the fossil fuel lifecycle (including use) and the ones released by a biofuel. The total emissions from the fossil fuel are calculated through the comparator for transport which is 94 gCO2eq/MJ, and the total emissions for the biofuel are calculated as the sum of the emissions derived from the product use (tank-to-wheel), which corresponds to 0, and the ones related to well-to-wheel product lifecycle, which is approximately the 10% of the fossil fuel comparator. Therefore, the savings are calculated as follows: 1) Emissions from fossil fuels in the whole lifecycle: 94gCO2/MJ \* Product Energy (MJ) 2) Emissions from biofuels: 9,4 gCO2/MJ\* Product Energy (MJ) + 0 gCO2/MJ (Use stage) 3) Emissions savings = (1) - (2) For instance, 250,000 tonnes of advanced biofuel (HVO), which are equivalent to approximately 11,000,000 GJ, allows the avoidance of about 900,000 tonnes of CO2eq.

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

3.7

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

In 2021 Repsol announced its new objective to reach a methane intensity of 0.20% by 2025 for its operated assets at E&P, a value recognized as near zero for the oil and gas sector by international organizations such as the UNEP, and which is consistent with the commitment recently announced by OGCI.

Repsol is part of several global initiatives, such as OGCI, OGMP and MGP:

The [Oil and Gas Methane Partnership 2.0 \(OGMP 2.0\)](#) is the gold standard reporting framework that will improve the reporting accuracy and transparency of methane emissions in the oil and gas sector. The UN Environment Programme (UNEP), with support from the European Union, launched the International Methane Emissions Observatory (IMEO), that will produce a global public dataset of empirically verified methane emissions at an increasing level of granularity and accuracy by integrating data principally from four streams: reporting from the OGMP 2.0, direct measurement data from scientific studies, remote sensing data, and national inventories.

As a signatory of the initiative OGMP 2.0, Repsol is not only reporting annually its operated and non operated assets, but also submitting to the IMEO the methodology to report each source of emission, with the commitment to achieve the Gold Standard reporting in operated assets by 2023 and in non operated assets by 2025. European is actively promoting the widespread implementation of the measurement and reporting framework devised by the OGMP measurement and reporting framework.

In October 2021 the first [IMEO report](#) was published ahead COP26, and Repsol achieved a Gold Standard status with the presentation of its implementation plan. In this plan we are envisioning a combination of technologies depending the type of asset that will help us to achieve the Gold Standard reporting in our operated assets. To help us to decide what technologies may be applied we have been piloting emerging technologies in different assets, specifically we tested satellites detection technology, aircrafts and drones, followed by an extensive communication plan to test the applicability in other assets across Repsol's portfolio. With regards non operated assets, Repsol is deploying a tailored engagement plan.

Our work within **OGCI** includes specific focus on technologies to support methane detection, measurement and mitigation.. Besides that, Repsol is supporting the development of technologies for remote sensing (drones, aircrafts, satellites, etc.) through the OGCI-CI (Oil & Gas Climate Initiative – Climate Investments), and we are piloting these technologies in our facilities, which will help to improve the accuracy of monitoring.

Besides, Repsol continues its participation in **Methane Guiding Principles**, a multi-stakeholders partnership focused on ensuring robust methane emissions management through best practices in measurement, abatement, and transparent reporting. Through MGP Repsol has being working on engaging its partners in non-operated assets thanks to the effort through NOJV initiative.

There are several technologies for monitoring fugitive emissions and it would depend on the type of asset what is more feasible in each case. The most mature and consolidated technologies are the OGI cameras, based on infrared detection technology. In Repsol, we usually perform this kind of campaigns (LDAR campaigns) annually at least in each asset, and we always quantify the emissions. These campaigns help us monitor our fugitive emissions and increase the accuracy of our methane inventory thanks to quantification. If we don't quantify the emissions, our reporting would be based on emission factors, and we have observed that the fugitives usually are much lower than the emission factor calculations. The implementation of these LDAR program is a main lever of our target of 0.2% methane intensity.

Moreover, we are testing emerging aerial technologies, such as drones and aircrafts to be able to cover remote locations, which is specifically challenging. There are thousands of wells, and so it is possible to find thousands of tiny leaks. In this sense, in 2021 we are testing satellites detection technology in Eagle Ford and Lybia, aircrafts in Eagle Ford and Marcellus and drones in Marcellus. We plan to implement these kind of measurements regularly in order to better understand our emissions.

The important point of monitoring is to early detect super-emitters, quantify them and fix them as soon as possible. Monitoring will help to avoid "missed" emissions and to early detect super-emitters, so they can be mitigated. Increasing measurements (combination of top-down and bottom-up) will help the industry to have a clearer picture of their emissions, so it is easier to start proposing reduction actions.

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**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

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**C-OG4.7a**

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**(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.**

LDAR techniques allow the early detection and repair of leaks. These campaigns help us reduce our fugitive emissions and increase the accuracy of our methane inventory thanks to quantification.

**LDAR programs** are used to identify and support the repair of equipment or infrastructure that can be a source of emissions due to leaks from pressurized equipment. It is often accomplished by a periodic inspection survey to identify leaks, followed by repair of any found leaks.

Procedure:

Through implementation of the company Environmental Performance Practices (EPP) we have set Leak Detection and Repair (LDAR) programs in order to detect and repair methane leaks. These guidelines make up a set of common standards regardless of the geographical area where we are operating and local legislation in each country. We have also developed an internal guideline to carry out Hybrid LDAR campaigns. We have been implementing LDAR campaigns in our operated assets and execute similar in non operated assets where possible.

Technology:

Our internal guideline recommends the use of combining Optimal Gas Imaging (OGI) cameras for detection and field ionization flame devices (FID) for emission quantification of methane and other VOCs. Technologies are evolving fast, and conscious of the importance of monitoring, we are piloting different emerging technologies in our assets, such as drone technology and aircraft to detect and quantify methane emissions, but we are not including the results of these tests in our inventory at this stage.

Not all the technologies fits for all the cases and types of assets, and the sources of methane are different depending on each specific process. In general, the combination of technologies will deliver the perfect solution, that is why companies must perform a tailored plan in order to adapt to each situation.

For sure, the IOGP-OGCI-IPIECA Recommended Practices for detection and quantification will help Industry to have a reference about frequency and type of technology for each specific case.

Methodology:

The general procedure is to be conducted by a third party, for LDAR techniques skills and know-how is required. First, it is needed to perform the **inventory** of the potential points of leak, with a P&ID revision. The following equipment is monitored: valves, flanges, connectors, pressure Relief Devices, open-ended lines, storage vessels/storage tanks, compressor seals in natural gas or hydrocarbon liquids service and meters/instruments.

When the **monitoring** is performed, leaks are determined to be any of the following observations: a) Visible methane or hydrocarbon emissions when utilizing an optical gas imaging camera; or b) A concentration measured 500 ppmv volatile organic compounds (VOC) if using a gas leak detector instrument.

Our company attempts to **repair** the leaking components the day that the leak is detected. If this is determined to be infeasible, the leak repair deadline can be extended, with a maximum of 15 days after the leak is detected. After the repair, we always verify that the repair was successful.

Frequency:

As an average, we perform a LDAR campaign annually in each facility at least, including quantification, which is the recommended frequency in our guideline, but we are planning to increase the frequency where needed and in some assets we are performing the surveys quarterly. These campaigns help us monitor our fugitive emissions and increase the accuracy of our methane inventory thanks to quantification, we have observed that the fugitives usually are much lower than the emission factor calculations.

Coverage:

At this point we perform LDAR campaigns in our operated assets, and we are covering all the types of assets: onshore, offshore, conventional and unconventional. Our plan is to cover 100% of our operated assets in 2023 at the latest and extend this practice in our non operated assets as part of our commitment with OGMP 2.0.

Case Study:

In our asset in Margarita in Bolivia we have been performing annual LDAR campaigns since 2017, with a revision of 24718 points. As an average we usually found 20 points of leak, with a leak rate of 20000 kg/y. For this reason, Margarita received in 2022 the Sustainability Stamp, a prize received from the Private Entrepreneur Federation of Santa Cruz in collaboration with UNEP.

As another case study, in 2021 we implemented this campaign in our assets in Peru, with a reduction of 2000 tCH4/y.

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## 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.**

In 2021, Repsol flared a total amount of gas equivalent of 0.85 million tons of CO<sub>2</sub>eq, which accounts for 4.3 % of total Repsol Scope 1+2 CO<sub>2</sub>eq emissions. Approximately, 66% of the total CO<sub>2</sub>eq from flaring corresponds to E&P emissions.

In June 2016, Repsol joined the Zero Routine Flaring by 2030 initiative of the World Bank, in pursuit of technically and economically feasible solutions to minimize routine flaring as soon as possible and by no later than 2030 at its Upstream facilities. Since then, work has been done to improve the inventory of emissions due to gas flaring year by year, segregating this inventory into routine and nonroutine flaring, applying the definitions of the Global Gas Flaring Reduction initiative of the World Bank and ensuring a standard approach to the process among OGCI companies.

Repsol established a target of achieving a 50% reduction in CO<sub>2</sub>e emissions from routine flaring activity by 2025, in relation to E&P operated assets and with 2018 as the base year. In 2021, routine flaring emissions were roughly 40% down on 2020, largely due to quieter levels of activity. Overall, this represented a reduction of 5% in respect of the baseline year (2018).

Regarding downstream facilities, flaring is a loss of direct fuel and considering the importance of energy in their operation costs, reduction objectives have been part of the refineries energy targets for years. A "zero-flaring" strategy has been implemented in normal plant operation. Since design phases, both reuse and/or recovery of gas streams are considered before flaring. All Spanish refineries have one or more flare gas recovery compressors to reuse the gas as fuel in their processes.

## C5. Emissions methodology

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### C5.1

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**(C5.1) Is this your first year of reporting emissions data to CDP?**

No

### C5.1a

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**(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 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

24875372

**Comment**

**Scope 2 (location-based)**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

540563

**Comment**

**Scope 2 (market-based)**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

649743

**Comment**

**Scope 3 category 1: Purchased goods and services**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

7570444

**Comment**

**Scope 3 category 2: Capital goods**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

87496

**Comment**

**Scope 3 category 4: Upstream transportation and distribution**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

1291785

**Comment**

**Scope 3 category 5: Waste generated in operations**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

29098

**Comment**

**Scope 3 category 6: Business travel**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

21700

**Comment**

**Scope 3 category 7: Employee commuting**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

29722

**Comment**

**Scope 3 category 8: Upstream leased assets**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

59709

**Comment**

**Scope 3 category 9: Downstream transportation and distribution**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

605103

**Comment**

**Scope 3 category 10: Processing of sold products**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

1088187

**Comment**

**Scope 3 category 11: Use of sold products**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

175149264

**Comment**

**Scope 3 category 12: End of life treatment of sold products**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

74350

**Comment**

**Scope 3 category 13: Downstream leased assets**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

75136

**Comment**

**Scope 3 category 14: Franchises**

**Base year start**

January 1 2016

**Base year end**

December 31 2016

**Base year emissions (metric tons CO2e)**

88676

**Comment**

**Scope 3 category 15: Investments**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**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.**

American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009  
Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019  
European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations  
IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2nd edition, 2011  
ISO 14064-1  
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

**C6. Emissions data**

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**C6.1**

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## 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)

19486007

#### Start date

January 1 2021

#### End date

December 31 2021

#### Comment

It does not include the emissions of non-industrial facilities (Headquarters and TechLab), which are 3,571 tCO2eq. However, these emissions are annually verified under ISO-14064

### Past year 1

#### Gross global Scope 1 emissions (metric tons CO2e)

22377655

#### Start date

January 1 2020

#### End date

December 31 2020

#### Comment

Restatement: Eagle Ford asset inclusion. As stated in CDP 2021: "due to a recent acquisition Figures on scope 1 and 2 emissions for the Eagle Ford asset have not been included because they are currently being analyzed for adaptation to the ISO 14064-1 methodology used by Repsol for all of its inventory (non-material quantities below 5%)". On the other hand, it does not include the emissions of non-industrial facilities (Headquarters and TechLab), which are 3,597 tCO2eq. However, these emissions are annually verified under ISO-14064

## 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

We are reporting a Scope 2 location-based and a market-based figures following this criteria: The located based emission factor for the electricity purchased to third parties is calculated based on the 2020 published information by Red Eléctrica Española (REE) of Spain regarding national energy balances (located factors were needed prior to the publication of the 2021 report for ISO-14064 certification audits carried out between January and March of 2022). The located based emission factor is 0.144 metric tonnes CO2e per MWh. The market based emission factors for the electricity purchased to third parties is calculated based on the last published information by CNMC of Spain. The market based factors used depends on the electricity marketing company: Iberdrola: 0.142 metric tonnes CO2e per MWh, Repsol Client: 0 metric tonnes CO2e per MWh.

## C6.3

---

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?**

**Reporting year**

**Scope 2, location-based**

396059

**Scope 2, market-based (if applicable)**

367808

**Start date**

January 1 2021

**End date**

December 31 2021

**Comment**

Emissions from non-industrial facilities (Headquarters and TechLab), which are 0 tCO2eq (market based) and 3,800 tCO2eq (location based), are not included. However, these emissions are annually verified under ISO-14064

**Past year 1**

**Scope 2, location-based**

456509

**Scope 2, market-based (if applicable)**

246605

**Start date**

January 1 2020

**End date**

December 31 2020

**Comment**

Restatement: Eagle Ford asset inclusion. As stated in CDP 2021: "due to a recent acquisition Figures on scope 1 and 2 emissions for the Eagle Ford asset have not been included because they are currently being analyzed for adaptation to the ISO 14064-1 methodology used by Repsol for all of its inventory (non-material quantities below 5%)".

**C6.4**

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

Yes

**C6.4a**

**(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.**

**Source**

Offices located outside industrial sites

**Relevance of Scope 1 emissions from this source**

Emissions are not relevant

**Relevance of location-based Scope 2 emissions from this source**

Emissions are not relevant

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

Emissions are not relevant

**Explain why this source is excluded**

Scope 1 and 2 emissions from offices located outside industrial facilities are not included within the operational boundary based on the oil industry guidelines for the reporting of greenhouse gas emissions developed by IPIECA, IOGP and API. During 2021, Campus HQ, Tres Cantos building (where the Company's main Data Processing Center is located) and the Tecnology Lab verified their emissions following ISO 14064 standard.

**Estimated percentage of total Scope 1+2 emissions this excluded source represents**

0

**Explain how you estimated the percentage of emissions this excluded source represents**

Emissions from offices in regional units and outside industrial facilities were calculated and resulted less than 1% of scope 1&2 of each corresponding facility, so they represent a very small percentage of emissions of global scope 1&2

**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)

6071175

### Emissions calculation methodology

Average data method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

This category includes emissions associated with the purchased of crude oil and hydrogen used both as a feedstock in our facilities. The emission factor for hydrogen acquisition is 6.9 tCO<sub>2</sub>/tH<sub>2</sub> for Spain and Portugal (Average value taken from the BREF of refineries, reference document on best available techniques for mineral oil and gas refineries, February 2003). Perú buys H<sub>2</sub> from a dedicated plant, that provides S1 and S2 emission calculation. Repsol GHG inventory includes indirect S3 emissions resulting from the extraction of crude to be processed in our refineries (Cartagena, La Coruña, Puertollano, Tarragona, Petronor and La Pampilla) and the crude used in Asesa for asphalts production. The associated emissions to crude extraction are calculated by multiplying tonnes of oil imported to refineries by IOGP emission factors for the following geographic areas: Africa, Asia, Australasia, Europe, FSU, Middle East, North America, South America.

## 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

Capital goods are no likely to be material source of emissions in any given year for our company.

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

39821

### Emissions calculation methodology

Average data method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Emissions resulted from transmission and distribution losses from electricity purchased by our operated assets (Scope 2). Emission factor taken from DEFRA. The result of this calculation contributes less than a 1% to Scope 3 emissions, so Repsol considers this source as not relevant.

## Upstream transportation and distribution

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

1120937

### Emissions calculation methodology

Average data method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Based on Repsol trading files we consider a DEFRA emission factor for crude tanker between 100,000 < dwt < 170,000 metric tonnes and average distances from IOGP regions of departure to refinery port of arrival. The result of this calculation contributes less than a 1% to Scope 3 emissions, so Repsol considers this source as not relevant.

## Waste generated in operations

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

29834

### Emissions calculation methodology

Average data method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Calculation based on reported Hazardous waste, non hazardous waste and non hazardous soils sent to external treatment. DEFRA emission's factor have been considered. This calculation contributes less than a 1% to Scope 3 emissions , so Repsol considers this source as not relevant..

## Business travel

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

1446

### Emissions calculation methodology

Distance-based method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

90

### Please explain

CO2 emissions from Employee business travel due to flights are provided by our travel agencies using DEFRA emissions factors. Employee hotel nights and train travel data activity are also given by our travel agencies and DEFRA emission factors are used to calculate CO2 emissions. Travel agency contractors from Spain, Brasil, Canada, Colombia, Ecuador, Mexico, Perú, Singapur, USA, Canada, Vietnam and Trinidad Tobago have provided CO2 emissions from flights, number of hotel nights and distances travelled by train. The result of this calculation contributes to total Scope 3 emissions at a rate less than 1% and Repsol considers that they are not relevant to the company.

## Employee commuting

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

24334

### Emissions calculation methodology

Distance-based method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

A study of the home commuting distance based on our headquarters employees' postal codes has been carried out. As a result, an average car commuting distance of 15 km per trip has been calculated and extrapolated to the rest of Repsol offices and assets all over the world. Due to Covid 19, two different groups of employees have been establish, on one hand those who where able to telework and in the other hand those who required to do presential work (upstream assets, refineries service stations, etc). Emissions for each group has been calculated with a different number or trips by year in order to stablish distance travelled by car. Emissions are calculated by multiplying total the number of kilometers travelled by car using DEFRA emission factor, considering the way round This is a methodology conducted by Repsol for calculating these emissions The result of this calculation contributes to total Scope 3 emissions at a rate less than 1% and Repsol considers that they are not relevant to the company.

## Upstream leased assets

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

18182

### Emissions calculation methodology

Average data method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Repsol has obtained an average emission factor per sold m3 based on it's own service stations. The calculation of emissions in this category has been carried out with this average emission factor and the number m3 sold at service stations that are leased and operated by Repsol. The result of this calculation contributes to total Scope 3 emissions at a rate less than 1% and Repsol considers that they are not relevant to the company.

## Downstream transportation and distribution

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

425855

### Emissions calculation methodology

Distance-based method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Logistic department provides activity data on tonne-kilometres for road, train and sea distribution for the different types of freight vehicles used in Repsol so we can accordingly select DEFRA emission factor. This is a methodology conducted by Repsol for calculating these emissions. The result of this calculation contributes to total Scope 3 emissions at a rate less than 1% and Repsol considers that they are not relevant to the company.

## Processing of sold products

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

1022818

### Emissions calculation methodology

Average data method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

### Please explain

Repsol has calculated emissions that take place in our customer's facilities based on sold chemicals reported, which represent the greater number of sales for Repsol, excluding fuels. For calculations Repsol has emission factor provided on our polymerization process for obtaining polymers from sold monomers (basic petrochemicals processing), and an Ecoinvent emission factor polymer for extrusion process (derivative petrochemical processing), taking into account both estimated polymers from our sold monomers and our sold polymers as activity data. The result of this calculation contributes to total Scope 3 emissions at a rate less than 1% and Repsol considers that they are not relevant to the company.

## Use of sold products

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

150917139

### Emissions calculation methodology

Methodology for direct use phase emissions, please specify (We take into account the total equity gas production plus our downstream production from our refineries and the combustion factors from IPCC for each product)

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

### Please explain

We take into account the total equity gas production (from all operated and non-operated assets) plus our downstream production from our refineries (Cartagena, Petronor, Tarragona, A Coruña, Puertollano and La Pampilla, plus ASESA). The combustion emission factors used are from IPCC for each product category. Activity data are based on the same source used for our external financial statements.

## End of life treatment of sold products

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO<sub>2</sub>e)

47451

### Emissions calculation methodology

Average data method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Repsol has calculated emissions from end of life of plastic obtained from chemicals calculated for Category 10 "processing of sold products" which represent the greater number of sales for Repsol. Calculation is based on April 2022 circularity actual scenario in the study "Resaping plastics: pathways to a circular, climate neutral plastics system in Europe" by SYSTEMIQ (14% recycled, 50% incineration and landfill for the rest), and DEFRA emission factors. The result of this calculation contributes to total Scope 3 emissions at a rate less than 1% and Repsol considers that they are not relevant to the company.



## Downstream leased assets

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

24002

### Emissions calculation methodology

Average data method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Repsol has obtained an average emission factor per sold m3 based on it's own service stations. The calculation of emissions in this category has been carried out with this average emission factor and the number of m3 sold at service stations that are owned by Repsol and leased to other entities. The result of this calculation contributes to total Scope 3 emissions at a rate less than 1% and Repsol considers that they are not relevant to the company.

## Franchises

### Evaluation status

Not relevant, calculated

### Emissions in reporting year (metric tons CO2e)

28722

### Emissions calculation methodology

Average data method

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Repsol has obtained an average emission factor per sold m3 based on it's own service stations. The calculation of emissions in this category has been carried out with this average emission factor and the number of m3 sold at service stations that are not owned nor leased by Repsol but use a franchise scheme. The result of this calculation contributes to total Scope 3 emissions at a rate less than 1% and Repsol considers that they are not relevant to the company.

## 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

Repsol considers this category as not relevant since the company has not made significant investments that can be relevant in this category in 2021

## Other (upstream)

### Evaluation status

### 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

Repsol considers this category as not relevant since the company has not made significant investments that can be relevant in this category in 2020

## Other (downstream)

### Evaluation status

### 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

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1 2016

End date

December 31 2016

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

1291785

Scope 3: Waste generated in operations (metric tons CO2e)

29098

Scope 3: Business travel (metric tons CO2e)

21700

Scope 3: Employee commuting (metric tons CO2e)

29722

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

605103

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

175149264

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

C6.7

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(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**

0.00039

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**

19882066

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

51381000000

**Scope 2 figure used**

Location-based

**% change from previous year**

41

**Direction of change**

Decreased

**Reason for change**

Regarding the numerator, during 2021 our total Scope 1 and 2 (located based) emissions were restated (previous value was 22,372,792 t CO2e), the restated value is 22,834,164 which implies a decrease of our emissions. The main contribution to this decrease is the lower activity in our facilities, especially in E&P business & CCTG power generation. Another contribution to this decrease is the reduction actions implemented in our assets, very focused on energy efficiency activities and methane and flaring emissions reduction (as described in 4.3b). As an example on GHG reduction actions implemented, in the industrial complex of Puertollano, a new, more efficient deaerator that operates at very low pressure (0.2 kg/cm2g) has been installed, creating savings of 2 t/h of low pressure steam, which will lead to a thermal energy savings of 1.259 ktoe/year, thereby avoiding 3,679.95 tCO2/year of emissions into the atmosphere, a direct natural gas savings for the complex. With respect to the denominator, Repsol's revenues in term of sales for 2021 was USD 51.381.000.000, 51% higher than the previous year's result (USD 33.948.458.015). The decrease in the intensity figure is due the decrease of the numerator and increase of the denominator.

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**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)**

Thousand barrels of refinery throughput

**Metric tons CO2e from hydrocarbon category per unit specified**

0.2

**% change from previous year**

4

**Direction of change**

Decreased

**Reason for change**

The throughput in refining was higher in 2021 respect to 2020, but very similar. Several reduction actions have been implemented in our sites, resulting in a reduction of 114 kt CO2e. As an example, in the industrial complex of Puertollano, a new, more efficient deaerator that operates at very low pressure (0.2 kg/cm2g) has been installed, creating savings of 2 t/h of low pressure steam, which will lead to a thermal energy savings of 1.259 ktoe/year, thereby avoiding 3,679.95 tCO2/year of emissions into the atmosphere, a direct natural gas savings for the complex.

**Comment**

---

**Unit of hydrocarbon category (denominator)**

Thousand barrels of crude oil/ condensate

**Metric tons CO2e from hydrocarbon category per unit specified**

53.4

**% change from previous year**

4

**Direction of change**

Decreased

**Reason for change**

The restated value of E&P intensity is 55.66 tCO2e/kboe, considering Eagle Ford asset (previous value was 62.4). In 2021 the activity in our facilities was very low. The E&P facilities behavior in a very different way compared to Refining facilities, due to the nature of the emissions (with a high influence of methane and flaring). The operational impact of lower activity, together with the contribution of the reduction actions in our operated assets have made the intensive value decrease. As an example of reduction actions, in our asset in Margarita in Bolivia we have been performing annual LDAR campaigns since 2017, with a revision of 24718 points. As an average we usually found 20 points of leak, with a leak rate of 20000 kg/y. For this reason, Margarita received in 2022 the Sustainability Stamp, a prize received from the Private Entrepreneur Federation of Santa Cruz in collaboration with UNEP. As another case study, in 2021 we implemented this campaign in our assets in Peru, with a reduction of 2000 tCH4/y.

**Comment**

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**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**

0.77

**Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division**

0.77

**Comment**

Our methane intensity is expressed as m3 CH4 /m3 product

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	17099271	IPCC Fourth Assessment Report (AR4 - 100 year) <i>It doesn't include the emissions of non-industrial facilities and Technology Center, which are 3571 tCO2eq</i>
CH4	2281033	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	105702	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**

Combustion (excluding flaring)

**Value chain**

Upstream

**Product**

Oil

**Gross Scope 1 CO2 emissions (metric tons CO2)**

790661

**Gross Scope 1 methane emissions (metric tons CH4)**

132

**Total gross Scope 1 emissions (metric tons CO2e)**

798113

**Comment**

**Emissions category**

Combustion (excluding flaring)

**Value chain**

Upstream

**Product**

Gas

**Gross Scope 1 CO2 emissions (metric tons CO2)**

1627696

**Gross Scope 1 methane emissions (metric tons CH4)**

1014

**Total gross Scope 1 emissions (metric tons CO2e)**

1674575

**Comment**

---

**Emissions category**

Combustion (excluding flaring)

**Value chain**

Downstream

**Product**

Oil

**Gross Scope 1 CO2 emissions (metric tons CO2)**

8596205

**Gross Scope 1 methane emissions (metric tons CH4)**

23

**Total gross Scope 1 emissions (metric tons CO2e)**

8623630

**Comment**

It includes emissions from Refining, Chemicals, Customer businesses

---

**Emissions category**

Flaring

**Value chain**

Upstream

**Product**

Oil

**Gross Scope 1 CO2 emissions (metric tons CO2)**

316419

**Gross Scope 1 methane emissions (metric tons CH4)**

1314

**Total gross Scope 1 emissions (metric tons CO2e)**

388327

**Comment**

---

**Emissions category**

Flaring

**Value chain**

Upstream

**Product**

Gas

**Gross Scope 1 CO2 emissions (metric tons CO2)**

137576

**Gross Scope 1 methane emissions (metric tons CH4)**

1466

**Total gross Scope 1 emissions (metric tons CO2e)**

174380

**Comment**

---

**Emissions category**

Flaring

**Value chain**

Downstream

**Product**

Oil

**Gross Scope 1 CO2 emissions (metric tons CO2)**

292392

**Gross Scope 1 methane emissions (metric tons CH4)**

25

**Total gross Scope 1 emissions (metric tons CO2e)**

293314

**Comment**

It includes emissions from Refining, Chemicals, Customer businesses

---

**Emissions category**

Venting

**Value chain**

---

Upstream

**Product**

Oil

**Gross Scope 1 CO2 emissions (metric tons CO2)**

246

**Gross Scope 1 methane emissions (metric tons CH4)**

4558

**Total gross Scope 1 emissions (metric tons CO2e)**

114189

**Comment**

---

**Emissions category**

Venting

**Value chain**

Upstream

**Product**

Gas

**Gross Scope 1 CO2 emissions (metric tons CO2)**

2257810

**Gross Scope 1 methane emissions (metric tons CH4)**

73692

**Total gross Scope 1 emissions (metric tons CO2e)**

4100104

**Comment**

---

**Emissions category**

Fugitives

**Value chain**

Upstream

**Product**

Oil

**Gross Scope 1 CO2 emissions (metric tons CO2)**

4

**Gross Scope 1 methane emissions (metric tons CH4)**

1639

**Total gross Scope 1 emissions (metric tons CO2e)**

40990

**Comment**

---

**Emissions category**

Fugitives

**Value chain**

Upstream

**Product**

Gas

**Gross Scope 1 CO2 emissions (metric tons CO2)**

59

**Gross Scope 1 methane emissions (metric tons CH4)**

5821

**Total gross Scope 1 emissions (metric tons CO2e)**

145572

**Comment**

---

**Emissions category**

Fugitives

**Value chain**

Downstream

**Product**

Oil

**Gross Scope 1 CO2 emissions (metric tons CO2)**

0

**Gross Scope 1 methane emissions (metric tons CH4)**

1543

---

**Total gross Scope 1 emissions (metric tons CO2e)**

38574

**Comment**

It includes emissions from Refining, Chemicals, Customer businesses

**Emissions category**

Process (feedstock) emissions

**Value chain**

Downstream

**Product**

Oil

**Gross Scope 1 CO2 emissions (metric tons CO2)**

2021013

**Gross Scope 1 methane emissions (metric tons CH4)****Total gross Scope 1 emissions (metric tons CO2e)**

2021013

**Comment****Emissions category**

Combustion (excluding flaring)

**Value chain**

Other (please specify) (Power generation)

**Product**

Unable to disaggregate

**Gross Scope 1 CO2 emissions (metric tons CO2)**

1059191

**Gross Scope 1 methane emissions (metric tons CH4)**

15

**Total gross Scope 1 emissions (metric tons CO2e)**

1073224

**Comment****C7.2****(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
Europe	11629614
Latin America (LATAM)	1207234
North America	1397859
Asia Pacific (or JAPA)	5251301

**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)
E&P	7436258
Refining	7647927
Chemicals	3319855
Customer	8743
Low Carbon Generation (power generation)	1073224

**(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>	
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)	10976524	<Not Applicable>	Includes the emissions caused for all the upstream activities (exploration, development and production of oil and gas) of the company.
Oil and gas production activities (midstream)		<Not Applicable>	
Oil and gas production activities (downstream)	8509482	<Not Applicable>	Includes the emissions caused for all the downstream activities (refining, processing, distribution and marketing of products derived and the manufacture, distribution and marketing of chemical products derived from oil and gas) of the company. It does not include the emissions of non-industrial facilities and Technology Center, which are 3571 tCO2eq. Electric utility activities are included: 1.073.224 tCO2eq (Includes the emissions derived from low emissions power generation in our Low Carbon Generation business)
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/region.**

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Europe	276721	248470
Latin America (LATAM)	27171	27171
North America	92031	92031
Asia Pacific (or JAPA)	135	135

**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)
E&P	93413	93413
Refining	146206	142561
Chemicals	52151	44171
Customer	19127	5002
Low Carbon Generation (power generation)	85162	82661



**(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			
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)	93413	93413	Includes the emissions caused for all the upstream activities (exploration, development and production of oil and gas) of the company.
Oil and gas production activities (midstream)			
Oil and gas production activities (downstream)	302646	274395	Includes the emissions caused for all the upstream activities (exploration, development and production of oil and gas) of the company. Includes the emissions caused for all the downstream activities (refining, processing, distribution and marketing of products derived and the manufacture, distribution and marketing of chemical products derived from oil and gas) of the company. It doesn't include the emissions of non-industrial facilities and Technology Center, which are 3800 tCO2eq (location based and 0 market based). Electric utility activities are included: 85162 tCO2eq (Low Carbon Generation business)
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>

**C-CH7.8**

**(C-CH7.8) Disclose the percentage of your organization’s Scope 3, Category 1 emissions by purchased chemical feedstock.**

Purchased feedstock	Percentage of Scope 3, Category 1 tCO2e from purchased feedstock	Explain calculation methodology

**C-CH7.8a**

**(C-CH7.8a) Disclose sales of products that are greenhouse gases.**

	Sales, metric tons	Comment
Carbon dioxide (CO2)		
Methane (CH4)		
Nitrous oxide (N2O)		
Hydrofluorocarbons (HFC)		
Perfluorocarbons (PFC)		
Sulphur hexafluoride (SF6)		
Nitrogen trifluoride (NF3)		

**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?**  
Decreased

**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	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	In 2019 Repsol started commercializing electricity 100% renewable, thanks to the acquisition of guarantees of origin certificates. This makes that the sites in Spain that consume this electricity is 100% renewable, but this does not imply a change since last year.
Other emissions reduction activities	560000	Decreased	2.5	The change in emissions has been calculated considering the total avoided emissions associated to quantified reduction activities carried out by the company during 2021 included in our reduction plan 2021-2025. Emissions value (percentage) has been calculated dividing 560000 metric tons CO2e and the emissions Scope 1+Scope 2 (location based) of the company in 2020: 22.834.164 metric tonnes CO2e. As a case study, is that we are carrying out an energy efficiency improvement project at the Crude-1 Industrial Complex in A Coruña that consists in the installation of two new heat exchangers that recover heat from products to be used to pre-heat crude oil being sent to the furnace, and thus reduce fuel consumption in the unit's furnace. This will lead to a reduction of 5,082 tons of CO2 per year in one of the largest units at the refinery, which could mean an energy savings of 2.2341587 ktoe/year
Divestment		<Not Applicable >		
Acquisitions		<Not Applicable >		
Mergers		<Not Applicable >		
Change in output	2392099	Decreased	10.5	The decrease in emissions derived of the decrease of activity, specially in E&P business, has been estimated in 2,400,00 excluding other reduction activities. Emissions value (percentage) has been calculated dividing 2,400,000 metric tons CO2e and the emissions Scope 1+Scope 2 (location based) of the company in 2020: 22.834.164 metric tonnes CO2e.
Change in methodology		<Not Applicable >		
Change in boundary		<Not Applicable >		
Change in physical operating conditions		<Not Applicable >		
Unidentified		<Not Applicable >		
Other		<Not Applicable >		

## 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?**

Location-based

## C8. Energy

### C8.1

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 5% but less than or equal to 10%

### 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	Yes
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	66155307	66155307
Consumption of purchased or acquired electricity	<Not Applicable>	577944	778080	1356024
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	423461	423461
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>	577944	67356848	67934792

C-CH8.2a

**(C-CH8.2a) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.**

**Consumption of fuel (excluding feedstocks)**

**Heating value**

**MWh consumed from renewable sources inside chemical sector boundary**

**MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)**

**MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary**

**Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary**

**Consumption of purchased or acquired electricity**

**Heating value**

<Not Applicable>

**MWh consumed from renewable sources inside chemical sector boundary**

**MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)**

**MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary**

**Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary**

**Consumption of purchased or acquired steam**

**Heating value**

<Not Applicable>

**MWh consumed from renewable sources inside chemical sector boundary**

**MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)**

**MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary**

**Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary**

**Consumption of self-generated non-fuel renewable energy**

**Heating value**

<Not Applicable>

**MWh consumed from renewable sources inside chemical sector boundary**

**MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)**

**MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary**

**Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary**

**Total energy consumption**

**Heating value**

<Not Applicable>

**MWh consumed from renewable sources inside chemical sector boundary**

**MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)**

**MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary**

**Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary**

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	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
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**

**Total fuel MWh consumed by the organization**

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

**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**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

**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**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

**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**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

**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**

1978997

**MWh fuel consumed for self-generation of electricity**

1452274

**MWh fuel consumed for self-generation of heat**

10289

**MWh fuel consumed for self-generation of steam**

516434

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

**Comment**

**Gas**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

64176310

**MWh fuel consumed for self-generation of electricity**

18285005

**MWh fuel consumed for self-generation of heat**

32621112

**MWh fuel consumed for self-generation of steam**

78051

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

13192142

**Comment**

**Other non-renewable fuels (e.g. non-renewable hydrogen)**

**Heating value**

**Total fuel MWh consumed by the organization**

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**MWh fuel consumed for self-generation of steam**

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

**Comment**

**Total fuel**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

66155307

**MWh fuel consumed for self-generation of electricity**

19737279

**MWh fuel consumed for self-generation of heat**

32631401

**MWh fuel consumed for self-generation of steam**

594485

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

13192142

**Comment**

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	25383861	23713329	1670531	0
Heat	32631401	32631401	0	0
Steam	9679139	9679139	0	0
Cooling	0	0	0	0

C-CH8.2d

(C-CH8.2d) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.

**Electricity**

Total gross generation inside chemicals sector boundary (MWh)

Generation that is consumed inside chemicals sector boundary (MWh)

Generation from renewable sources inside chemical sector boundary (MWh)

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

**Heat**

Total gross generation inside chemicals sector boundary (MWh)

Generation that is consumed inside chemicals sector boundary (MWh)

Generation from renewable sources inside chemical sector boundary (MWh)

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

**Steam**

Total gross generation inside chemicals sector boundary (MWh)

Generation that is consumed inside chemicals sector boundary (MWh)

Generation from renewable sources inside chemical sector boundary (MWh)

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

**Cooling**

Total gross generation inside chemicals sector boundary (MWh)

Generation that is consumed inside chemicals sector boundary (MWh)

Generation from renewable sources inside chemical sector boundary (MWh)

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

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.**

**Sourcing method**

Unbundled energy attribute certificates (EACs) purchase

**Energy carrier**

Electricity

**Low-carbon technology type**

Renewable energy mix, please specify (100% renewable)

**Country/area of low-carbon energy consumption**

Spain

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

133217

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Spain

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

2020

**Comment**

In 2019 Repsol started commercializing electricity 100% renewable, thanks to the acquisition of guarantees of origin certificates, 2020 was the first complete year with this procedure

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**C8.2g**

**(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.**

**Country/area**

Spain

**Consumption of electricity (MWh)**

577944

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

577944

**Is this consumption excluded from your RE100 commitment?**

<Not Applicable>

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**C-CH8.3**

**(C-CH8.3) Does your organization consume fuels as feedstocks for chemical production activities?**

**C9. Additional metrics**

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**C9.1**

**(C9.1) Provide any additional climate-related metrics relevant to your business.**

**C-OG9.2a**

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**(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	64.85	Estimated amounts. The natural gas liquids are produced or sold together with the condensates, in some assets. Due to this casuistry, we can't provide the exact amount of crude oil and condensates and the exact amount of natural gas liquids separately. The production is provided in official Company reports is the sum of Crude oil and condensate and Natural gas liquids, CDP categories: 75.32 Mboe.
Natural gas liquids, million barrels	10.46	Estimated amounts. The natural gas liquids are produced or sold together with the condensates, in some assets. Due to this casuistry, we can't provide the exact amount of crude oil and condensates and the exact amount of natural gas liquids separately. The production is provided in official Company reports is the sum of Crude oil and condensate and Natural gas liquids, CDP categories: 75.32 Mboe.
Oil sands, million barrels (includes bitumen and synthetic crude)	0	
Natural gas, billion cubic feet	749.57	

**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, please explain this.**

For the estimation of proven and unproven oil and gas reserves, Repsol uses the criteria established by the system "SPE / WPC / AAPG / SPEE Petroleum Resources Management System", usually referred to by its acronym SPE-PRMS (SPE - Society of Petroleum 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				confidential information

**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	32	33	46	
Natural gas	68	67	54	
Oil sands (includes bitumen and synthetic crude)	0	0	0	

**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**

Onshore

**In-year net production (%)**

59

**Net proved reserves (1P) (%)**

68

**Net proved + probable reserves (2P) (%)**

66

**Net proved + probable + possible reserves (3P) (%)**

66

**Net total resource base (%)**

70

**Comment**

The breakdown includes only onshore and offshore categories, as most of the listed development types can be included in both categories

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**Development type**

Other, please specify (Offshore)

**In-year net production (%)**

41

**Net proved reserves (1P) (%)**

32

**Net proved + probable reserves (2P) (%)**

34

**Net proved + probable + possible reserves (3P) (%)**

34

**Net total resource base (%)**

30

**Comment**

The breakdown includes only onshore and offshore categories, as most of the listed development types can be included in both categories

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C-CH9.3a

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(C-CH9.3a) Provide details on your organization's chemical products.

**Output product**

High Value Chemicals (Steam cracking)

**Production (metric tons)**

2068000

**Capacity (metric tons)**

2603000

**Direct emissions intensity (metric tons CO2e per metric ton of product)**

**Electricity intensity (MWh per metric ton of product)**

**Steam intensity (MWh per metric ton of product)**

**Steam/ heat recovered (MWh per metric ton of product)**

**Comment**

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C-OG9.3a

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(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	1013

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C-OG9.3b

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(C-OG9.3b) Disclose feedstocks processed in the reporting year in million barrels per year.

	Throughput (Million barrels)	Comment
Oil	257.4	Density: 0,881 t/m3 (average density of all kinds of oils processed)
Other feedstocks	52.73	Density: 0,881 t/m3
Total	310.13	

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
Gasolines	63.4
Fuel oils	15.19
Asphalt and tar	4.89
Lubricants	2.72
Other, please specify (Intermediate distillates)	158.61
Other, please specify (Others (including petrochemical products))	62.17
Liquified petroleum gas	9.3

C-OG9.3e

(C-OG9.3e) Please disclose your chemicals production in the reporting year in thousand metric tons.

Product	Production, Thousand metric tons	Capacity, Thousand metric tons
High value chemicals (Steam cracking)	2068	2603

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	

C-CH9.6a

(C-CH9.6a) Provide details of your organization's investments in low-carbon R&D for chemical production 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 (optional)	Comment
Please select	<Not Applicable>	Please select		

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 (optional)	Comment
Renewable energy	Applied research and development	≤20%		Repsol is developing off-shore wind energy as well as first generation and advanced biofuels (we follow OGCI classification for renewable energy technologies)
Other, please specify (CCUS, Energy efficiency or sustainable mobility)	Applied research and development	≤20%		Repsol is making developments in multiple low carbon technologies: CCUS, Energy efficiency or sustainable mobility.

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.**

30

C-OG9.8

**(C-OG9.8) Is your organization involved in the sequestration of CO2?**

Yes

C-OG9.8a

**(C-OG9.8a) Provide, in metric tons CO2, gross masses of CO2 transferred in and out of the reporting organization (as defined by the consolidation basis).**

	CO2 transferred – reporting year (metric tons CO2)
CO2 transferred in	0
CO2 transferred out	26412

C-OG9.8b

**(C-OG9.8b) Provide gross masses of CO2 injected and stored for the purposes of CCS during the reporting year according to the injection and storage pathway.**

Injection and storage pathway	Injected CO2 (metric tons CO2)	Percentage of injected CO2 intended for long-term (>100 year) storage	Year in which injection began	Cumulative CO2 injected and stored (metric tons CO2)

C-OG9.8c

**(C-OG9.8c) Provide clarification on any other relevant information pertaining to your activities related to transfer and sequestration of CO2.**

Part of the CO2 emissions generated at Petronor Refinery are transferred to an external enterprise that use it as a raw material. The CO2 flow transferred is registered with ultrasonic flow meters located in the refinery to calculate the amount sold.

In addition, Repsol is developing a project to build one of the largest net zero emissions synthetic fuel production plants in the world, based on green hydrogen generated with renewable energy. This plant will be located near our facilities in Bilbao (Spain). The main feature of these new fuels is that they are produced using water and CO2 as the only raw materials. They can be used in the combustion engines that are currently installed in automobiles in Spain and the rest of the world, as well as in airplanes, trucks, and other machinery.

Repsol also participates in the development of these technologies as a member of the OGCI with the investments made by the OGCI Climate Investments fund, and related to carbon capture, use and storage (CCUS) the following portfolio has being developed:

- Solidia: a company dedicated to the production of cement and concrete, which has patented a technology that allows the use of CO2 in the setting of concrete instead of water.
- Econic: a pioneering company in the development of catalytic systems, which has been able to incorporate up to 50% in weight of CO2 as a raw material in the production of polyols, the basis of all polyurethanes.
- Svante: a company that has developed a process for capturing CO2 which uses a patented architecture of solid adsorbent structures that avoids the high costs associated with other conventional processes
- Net Zero Teesside: a CCUS project, located in the North East of England, which aims to deliver the UK's first zero-carbon industrial cluster
- WV Resources: Wabash Valley Resources are developing a project that will capture and sequester 1.5-1.75 million tons of CO2 annually from their co-located ammonia plant, to create the world's first ammonia produced with near zero carbon footprint
- Elk Hills Carbon LLC: is a CCUS project led by California Resources Corporation (CRC), the largest oil and natural gas producer in California, which will capture CO2 from a natural gas power plant
- Starwood Energy Elysian Ventures Carbon Capture Project: This joint venture is one of the world's first large-scale commercial projects to capture CO2 from a natural gas power plant and will qualify for carbon capture incentives.
- **NextDecade**, the developer of Rio Grande LNG, plans to capture and permanently store more than 5 million tonnes of carbon dioxide per year – over 90% of its emissions – making it one of North America's largest US CCS projects in development.

## C10. Verification

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### C10.1

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**(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

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**(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**

Limited assurance

**Attach the statement**

CCGT - Escatron- repsol escatron avr\_verification\_report\_en 21.pdf  
repsol Malaysia 14064 declaración-2021.pdf  
repsol bolivia 14064 declaración-2021.pdf  
repsol Marcellus 14064 declaración-2021.pdf  
repsol Canada 14064 declaración-2021 v1.pdf  
CCGT - Bahía - avr\_verification\_report\_en Rev 1.pdf  
Declaracion HCO Repsol DG Patrimonial 2021\_signed.pdf  
L57\_REPSOL 14064 declaración Lote 57 2021- sp.pdf  
repsol Eagle Ford 14064 declaración-2021 v1.pdf  
Declaración ISO 14064-1\_La Pampilla\_INV 2021.pdf  
Declaracion Verificación Repsol Quimica 2021\_signed.pdf  
Declaración de Verificación de AENOR para REPSOL PETROLEO Área de Refino\_signed\_signed.pdf

**Page/ section reference**

Information to meet the required information can be found in all documents: Verificación de AENOR para REPSOL PETROLEO HCO Repsol DG Patrimonial ISO 14064-1\_La Pampilla\_INV Verificación Repsol Quimica L57\_REPSOL 14064 declaración Lote 57 Eagle Ford 14064 declaración Bolivia 14064 declaración Canada 14064 declaración Malaysia 14064 declaración Marcellus 14064 declaración Marcellus 14064 declaración CCGT - Bahía CCGT - Escatron

**Relevant standard**

ISO14064-1

**Proportion of reported emissions verified (%)**

90

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**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**

Integrated management Report 2021.pdf

**Page/ section reference**

Attached the Integrated Management Report. The verified data is in page 75 The verification statement is at the end of the document, pages 223-225

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

100

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### C10.1b

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**(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 location-based

**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**

CCGT - Escatron- repsol escatron avr\_verification\_report\_en 21.pdf  
repsol Malaysia 14064 declaración-2021.pdf  
repsol bolivia 14064 declaración-2021.pdf  
repsol Marcellus 14064 declaración-2021.pdf  
repsol Canada 14064 declaración-2021 v1.pdf  
CCGT - Bahía - avr\_verification\_report\_en Rev 1.pdf  
Declaracion HCO Repsol DG Patrimonial 2021\_signed.pdf  
L57\_REPSOL 14064 declaración Lote 57 2021- sp.pdf  
repsol Eagle Ford 14064 declaración-2021 v1.pdf  
Declaración ISO 14064-1\_La Pampilla\_INV 2021.pdf  
Declaracion Verificación Repsol Quimica 2021\_signed.pdf  
Declaración de Verificación de AENOR para REPSOL PETROLEO Área de Refino\_signed\_signed.pdf

**Page/ section reference**

Information to meet the required information can be found in all documents: Verificación de AENOR para REPSOL PETROLEO HCO Repsol DG Patrimonial ISO 14064-1\_La Pampilla\_INV Verificación Repsol Quimica L57\_REPSOL 14064 declaración Lote 57 Eagle Ford 14064 declaración Bolivia 14064 declaración Canada 14064 declaración Malaysia 14064 declaración Marcellus 14064 declaración Marcellus 14064 declaración CCGT - Bahía CCGT - Escatron

**Relevant standard**

ISO14064-1

**Proportion of reported emissions verified (%)**

72

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**Scope 2 approach**

Scope 2 location-based

**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**

Integrated management Report 2021.pdf

**Page/ section reference**

Attached the Integrated Management Report. The verified data is in page 75 The verification statement is at the end of the document, pages 223-225

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

100

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C10.1c

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**(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**

Integrated management Report 2021.pdf

**Page/section reference**

Attached the Integrated Management Report. The verified data is in page 75 The verification statement is at the end of the document, pages 223-225

**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
C4. Targets and performance	Emissions reduction activities	ISO 14064-1 (reasonable assurance)	During 2021, we implemented actions that reduce our CO2 emissions in 560 ktons. All the initiatives have been verified according to ISO14064, the same standard used to verify the GHG inventory. The reduction was a result of different investment and operating improvement actions across all the Company's operations. These verifications are carried out with annual frequency. To ensure transparency in the management of GHGs it is important for the company that a third party certifies this type of actions. These actions mainly include improvements in energy efficiency through projects such as energy unit integration, steam consumption optimization, improvements in isolation, furnace modifications, residual heat recovery, technological updating of the equipment, installation of variable speed motors, as well as actions to reduce the amount of flared and vented gas.
C6. Emissions data	Year on year change in emissions (Scope 1)	ISAE3000 (limited assurance).	The change in Scope 1 emissions between years 2006 and 2021 has been reported in our Integrated Management Report. In 2021 PwC has verified 100% Scope 1 GHG emissions. The data has been verified according to ISAE3000, the standard used to verify the 2021 Integrated Management Report. These verifications are carried out with annually. To ensure transparency in the management of GHGs it is important for the company that a third party certifies the data of the company reports.
C6. Emissions data	Year on year change in emissions (Scope 2)	ISAE3000 (limited assurance).	The change in Scope 2 emissions between years 2006 and 2021 has been reported in our Integrated Management Report. In 2021 PwC has verified 100% Scope 2 GHG emissions. The data has been verified according to ISAE3000, the standard used to verify the 2021 Integrated Management Report. These verifications are carried out with annually. To ensure transparency in the management of GHGs it is important for the company that a third party certifies the data of the company reports.
C6. Emissions data	Year on year emissions intensity figure	ISAE3000 (limited assurance).	The change in our emission intensity figure between years 2017 and 2021 has been reported in our Integrated Management Report. In 2021 PwC has verified the emission intensity figures reported. The data has been verified according to ISAE3000, the standard used to verify the 2021 Integrated Management Report.

**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.**

Alberta TIER - ETS  
EU ETS

TIER (Technology Innovation and Emissions Reduction)

**C11.1b**

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**(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.**

**Alberta TIER - ETS**

**% of Scope 1 emissions covered by the ETS**

1.9

**% of Scope 2 emissions covered by the ETS**

7.8

**Period start date**

January 1 2021

**Period end date**

December 31 2021

**Allowances allocated**

288731

**Allowances purchased**

98940

**Verified Scope 1 emissions in metric tons CO2e**

382966

**Verified Scope 2 emissions in metric tons CO2e**

31008

**Details of ownership**

Facilities we own and operate

**Comment**

The % of scope 1 emissions has been calculated based on the verified scope 1 emissions 382,966 t CO2 in our facilities in Alberta under TIER related to the global scope 1 emissions of the company reported in C6.1: 19,486,007 t CO2e. The % of scope 2 emissions has been calculated based on the verified scope 2 emissions 31,008 t CO2 in our facilities in Alberta under TIER related to the global scope 2 emissions of the company reported in C6.3: 396,059 t CO2.

**EU ETS**

**% of Scope 1 emissions covered by the ETS**

59.3

**% of Scope 2 emissions covered by the ETS**

0

**Period start date**

January 1 2021

**Period end date**

December 31 2021

**Allowances allocated**

7600000

**Allowances purchased**

3958467

**Verified Scope 1 emissions in metric tons CO2e**

11558467

**Verified Scope 2 emissions in metric tons CO2e**

0

**Details of ownership**

Facilities we own and operate

**Comment**

The % of Scope 1 emissions has been calculated based on the verified scope 1 emissions 11,558,467 t CO2 in our refineries, chemical plants and CCGT in Europe under EU ETS related to the global scope 1 emissions of the company reported in C6.1: 19,486,007 t CO2e

**C11.1d**

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**(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?**

**1. Manage EU ETS positions of Repsol's installations as a single integrated position to reduce emission costs and minimize market risk:**

Repsol manages deficit positions of all affected business units (in Spain the Refining and Chemicals Business Units and in Portugal the Chemicals Business Units) in the EU ETS. We are committed to reducing energy use and GHG emissions in all our operations. Our energy management systems enable us to establish energy efficiency plans and emissions reduction targets, both annually and in the long-term. These plans led to a reduction of 5.5 million tons over the period spanning 2006 to 2020. Repsol has initiated a new plan for the 2021-2025 horizon in order to achieve a further reduction of 1.5 Mt of CO<sub>2</sub> by 2025. This will include, among other measures, electrification projects, energy integration of units, process optimization, efficient operation of plants and facilities and reduction of methane emissions. In 2021, Repsol achieved a reduction of 0.56 Mt CO<sub>2</sub>e. In energy terms, this is equivalent to a reduction of 9 million GJ.

Case study: in the industrial complex of Puertollano, a new, more efficient deaerator that operates at very low pressure (0.2 kg/cm<sup>2</sup>) has been installed, creating savings of 2 t/h of low pressure steam, which will lead to a thermal energy savings of 1.259 ktoe/year, thereby avoiding 3,679.95 tCO<sub>2</sub>/year of emissions into the atmosphere, a direct natural gas savings for the complex.

On the other hand, we participate in IETA (International Emission Trading Association) emerging trading markets working group following the new carbon market developments wherever introduce national trading systems could have implications for Repsol's upstream or downstream assets.

**2. New market-based Mechanism:**

Valuing carbon (including through carbon pricing) is recognized as one of the most cost-efficient ways to achieve a low carbon transition, as early as possible.

Article 6 of the Paris Agreement aims to assist governments in implementing their Nationally Determined Contributions (NDCs) through voluntary international cooperation compatible carbon markets, that allows countries to achieve net-zero targets with greater economic efficiency. If properly designed, cooperation mechanisms should make it easier to achieve reduction targets and raise ambition, by linking of domestic/regional ETS or bilateral exchanges of Internationally Transferred Mitigation Outcomes (ITMOs). This cooperation should ensure environmental integrity, transparency, consistency and rules to avoid double counting of mitigation.

These decisions on Article 6 may also impact the Voluntary Carbon Market (VCM), (it does not directly regulate the VCM, but it is conducive to increased convergence of the Paris and voluntary markets).

Both Decision A6.2 and A6.4 reference each Party's ability to authorize ERs (Emissions Reductions) to be used toward (a) an NDC (**NDC ERs**) or (b) for international mitigation purposes (which may include the CORSIA scheme) or other purposes (which may include the VCM), collectively referred to as other international mitigation purposes (**OIMP ERs**). It is entirely up to the host country to decide whether or not to authorise ERs to be OIMP ERs or NDC ERs. Parties agreed that OIMP ERs also need CAs and the rules for the OIMP ER CAs are different than CAs for NDC ERs. The decision on whether an ER is authorised sits solely with the host country. There are therefore potential Article 6 impacts on the VCM that are likely to be observed in the future.

UNFCCC (United Nations Framework Convention on Climate Change) will be responsible for developing rules as well as for the governance of mechanisms. Repsol is supporting those measures, monitoring and participating in industrial associations and think tanks in order to define the modalities and procedures of NMM.

**C11.2**

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**(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

Yes

**C11.2a**

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**(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.**

**Credit origination or credit purchase**

Credit purchase

**Project type**

Forests

**Project identification**

MADRE DE DIOS AMAZON REDD PROJECT

**Verified to which standard**

CCBS (developed by the Climate, Community and Biodiversity Alliance, CCBA)

**Number of credits (metric tonnes CO2e)**

14406

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

14406

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

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**Credit origination or credit purchase**

Credit purchase

**Project type**

Forests

**Project identification**

CORDILLERA AZUL NATIONAL PARK REDD PROJECT

**Verified to which standard**

CCBS (developed by the Climate, Community and Biodiversity Alliance, CCBA)

**Number of credits (metric tonnes CO2e)**

6500

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

6500

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

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**C11.3**

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**(C11.3) Does your organization use an internal price on carbon?**

Yes

**C11.3a**

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**(C11.3a) Provide details of how your organization uses an internal price on carbon.**

**Objective for implementing an internal carbon price**

- Navigate GHG regulations
- Stakeholder expectations
- Change internal behavior
- Drive energy efficiency
- Drive low-carbon investment

**GHG Scope**

Scope 1

**Application**

All business units in all countries where the company operates.

**Actual price(s) used (Currency /metric ton)**

70

**Variance of price(s) used**

In 2020 our carbon price for new investments (NICI) pathway started with 25 USD\$/t CO2 and this value increased to 40 \$/t CO2 in 2025. In 2021 Repsol has updated the internal carbon price, differentiating between the EU and the rest of the world with regard to the scope of application. • Thus, new investments in the EU are assessed on the basis of \$70/t CO2 over the 2022-2025 period (or the regulated price if this is higher), rising to \$100/t CO2 in 2030. • In the rest of the world, in countries without more stringent specific regulation, \$60/t CO2 is applied across the entire 2022-2030 period

**Type of internal carbon price**

Shadow price

**Impact & implication**

In Repsol we believe that a carbon price must be set for all productive sectors worldwide as a key element in policies to fight climate change, therefore Repsol has set an internal carbon price for making investment decisions on new projects to promote the allocation of capital to low carbon ones. The internal carbon price applies to all investments, including cases where there is no regulated carbon price, with the conviction that the cost of CO2 emissions will be internalized through regulatory mechanisms in all geographical areas over the time horizon of the life of such investments. Furthermore, Repsol has one more internal mechanism which is the methodology to gauge whether an investment is in line with the energy transition. It consists of the evaluation by the Sustainability Division of any investment proposal submitted to the Executive Committee and the Board of Directors, to classify it as: aligned, energy transition enabler or misaligned considering the impact that the investment proposal has in the Company's CII. Moreover, is also evaluated the internal carbon price implementation in the investment proposal.

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**C12. Engagement**

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**C12.1**

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**(C12.1) Do you engage with your value chain on climate-related issues?**

- Yes, our suppliers
- Yes, our customers/clients
- Yes, other partners in the value chain

**C12.1a**

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**(C12.1a) Provide details of your climate-related supplier engagement strategy.**

**Type of engagement**

Innovation & collaboration (changing markets)

**Details of engagement**

Run a campaign to encourage innovation to reduce climate impacts on products and services

**% of suppliers by number**

0.1

**% total procurement spend (direct and indirect)**

0.4

**% of supplier-related Scope 3 emissions as reported in C6.5**

**Rationale for the coverage of your engagement**

Regeneration of catalyst in our refineries. Repsol produces oil products in its industrial complexes (6 in Europe and 1 in Peru). As part of the refining process, there are Hydrodesulfurization (HDS) units to remove sulfur from the oil products through a catalytic process. Catalysts degrade over time, which means that they lose catalytic activity or selectivity due to a variety of aging processes, and so they must be replaced by fresh catalysts or regenerated catalysts. Repsol engages with its suppliers for catalysts regeneration and rejuvenation, instead of fresh production. Their role is to collect the waste, take it to its plant, treat the waste to make it useful again, and recycle what cannot be treated. The use of a regenerated catalyst results in a ~73% reduction in CO2 emissions vs fresh production. The use of a rejuvenated catalyst results in a ~65% reduction in CO2 emissions. Benefits: 1. Reduction of Carbon Footprint 2. European based solution / European standards 3. Technology-driven recycling approach 4. Best Available Technique (BAT) 5. Value creation 6. Waste reduction 7. Circular Economy

**Impact of engagement, including measures of success**

The described engagement action impact in Repsol decarbonization strategy as the emissions reduction contributes to the reduction of the scope 3 emissions of our refineries. For each ton of regenerated catalyst used, refineries avoid generating ~7 kt of CO2 as compared to purchasing fresh catalyst for one-time use. In 2021, that means 5,446 tons of CO2 reduction in our refineries. For each ton of rejuvenated catalyst used, refineries avoid generating ~6 kt of CO2 as compared to purchasing fresh catalyst for one-time use. In 2021, that means 10,639 tons of CO2 reduction in our refineries.

**Comment**

**C12.1b**

**(C12.1b) Give details of your climate-related engagement strategy with your customers.**

**Type of engagement & Details of engagement**

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts
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**% of customers by number**

98

**% of customer - related Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**

Repsol markets fuels that generate scope 3 emissions due to the use of the products and as we are committed to reach net zero net emissions by 2050, we have different action lines focused on our own operations and value chain. As use of products GHG emissions are our main source of emissions the NZE initiative was launched in 2020, allowing 100% of Waylet customers to voluntarily offset the emissions derived from the use of products refueled. This initiative is extended to natural gas residential customers in 2021. Waylet is a mobile app for the payment of refueling, implemented in 3210 of the gas stations in Spain (98%) and by the end of 2021 it had +1.4 million users. After each refueling and using Waylet, either on a specific or automatic basis or even for past refueling, customers can choose to collaborate in any of the forestry projects that have been selected by Repsol. Repsol Vivit is a new application for residential gas customers to offer them individualized management of their energy consumption, by the end of 2021 it had +128,000 users with a gas contract. Repsol Vivit users can select the option to offset their bills by collaborating in any of the forestry projects selected. The first 2 projects selected are Cordillera Azul and Madre de Dios National Park, both in the Peruvian Amazon and framed in the international REDD+ mechanism developed by the UNFCCC. REDD+ projects are projects aimed at reducing emissions due to deforestation and forest degradation, as well as supporting their sustainable management, conservation and improvement of their carbon stocks. Depending on the volume and the type of fuel used by the customers, and in accordance with the emission factors established by different official bodies, (including the Spanish Ministry for the Ecological Transition and the Demographic Challenge), Repsol calculates the scope 3 emissions linked to their consumption. Customers contribute with 50% of the amount to offset and Repsol with the remaining 50%. Repsol is responsible for managing and guaranteeing the traceability of the process and has established a procedure and a methodology validated by an external auditor, Lloyd's Register. Customers can track their compensations in the apps themselves.

**Impact of engagement, including measures of success**

This initiative is one of the many actions that Repsol has implemented to face the energy transition and to contribute to our Net Zero Emissions by 2050 commitment, in this case the initiative is focused on the use of products scope 3 emissions, which is the main contributor in the Oil & Gas sector. Besides, it has been launched in Spain, which is our biggest retail market. It was launched on Waylet in 2020 and rolled out to Repsol Vivit in 2021. By deploying this initiative, Repsol allows more customers to participate and promotes more engagement with them. The impact and success of this initiative is measured by customer participation and the tons of CO2 offset. The threshold that was defined to measure the success was to reach a 50% increase in CO2 emissions offset vs 2020. This was included as a commitment in our 2021 Global Sustainability Plan Since the initiative was launched, 19,104 customers have participated offsetting 11,029 tons of CO2 (cumulative data 2020+2021). - Waylet: 17,234 users have participated offsetting 10,630 tons of CO2. -Repsol Vivit: 1,870 users have participated offsetting 399 tons of CO2. In 2020, 4,017 tons of CO2 were offset while in 2021, 7,012 tons of CO2 have been offset. Thus, in 2021 there was a 75% increase in CO2 tons offset vs 2020, surpassing the threshold that had been defined.

**C12.1d**

## **(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

Repsol has an ongoing engagement on environmental, social and governance (ESG) issues with our stakeholders, to learn first-hand their opinion on these matters and explain the Company's practices. Climate change is a key topic of this engagement strategy, as Repsol is committed to be a net zero emissions company in 2050 and the 21-25 strategy is strongly focused on energy transition. Methods of engagement include dedicated channels on the company's website, surveys, roadshows and workshops, dissemination campaigns, bulletins and advertising among others. The Integrated management report is another important means of engaging with all our stakeholders, accounting for the sustainability performance of the reporting year.

At Repsol, we identify and prioritize our stakeholders and its expectations through materiality analysis that are annually carried out, involving all areas that interact with stakeholders and incorporating the results as key input into sustainability strategy. In 2021 we have updated our 2020 materiality analysis. The materiality analysis at Repsol is a process with 4 phases:

**1. Stakeholder analysis and relations:** the stakeholders (other agents in the value chain) that we consider are those included in our stakeholder map. We evaluate the channels and frequency of communication as well as their expectations for information regarding our management to ensure that the engagement process is adequate. We measure the success of the engagement consulting the management areas and groups on the effectiveness of the communication. The stakeholder map is structured into 8 stakeholder groups (1.Shareholders, investors and financial institutions, 2.Employees, 3. Society, 4.Partners, competitors and business associations, 5.Public institutions and organizations, 6.Media, 7. Suppliers and contractors and 8.Customers). Information on engagement with suppliers and customers is given under question C.12.1a and b).

**2. Identification of potentially material topics:** 34 sustainability-related topics with the were identified, grouped into 10 pillars.

**3. Prioritization of material topics:** topics are prioritized both applying the double materiality concept. The methodology has been based on interviews, surveys and the analysis of documents and an artificial intelligent tool. In 2021, more than 2,700 interviews and surveys were conducted, with a participation rate of 40%.

**4. Construction of materiality matrixes:** materiality matrixes are calculated and thresholds are designated in order to determine the material topics. In 2021, 21 material topics were identified. A global company-wide matrix and 8 specific stakeholder matrices were obtained.

### **5. Validation & communication of results**

The 2020 results of the materiality analysis show that climate change issues ("GHG emissions and energy transition strategies" and "Energy and climate policies and regulation") are the highest ranked in the materiality matrix, being considered of critical importance both for Repsol and for its stakeholders.

The findings of the materiality analysis are embedded in the Sustainability Strategy and deployed downstream through the Global Plan and Local Sustainability Plans. The actions under the plans, locally and globally, are aimed at improving performance and minimizing the impact of identified sustainability risks. This enables the Company to think strategically and take decisions to evolve the business model to ensure economic, environmental and social sustainability.

**Case study:** Shareholders, investors and financial institutions are a key stakeholder group for Repsol. Repsol engages in continuous communication and dialogue with them and in different ways: roadshows, events, calls, reports... The CEO of the Company directs and leads senior management roadshows with socially responsible investors to respond to their requests for information on climate change. At year-end 2021, ESG investors accounted for 40% of shares held by institutional shareholders (vs 32% in 2020). The increase is a measure of success of our ESG communication efforts with investors.

Repsol published in 2021 the 7th ESG engagement report where we summarize the communication activities that we have held with our investors during 2020 and the first half of 2021. The publication of an annual report of interaction with ESG investors is further proof of our commitment to transparency in communication with our investors.

Repsol held in October 2021 the "Low Carbon Day", an event led by our CEO and dedicated to explaining and detailing its energy transition to analysts and investors. Our CEO announced more ambitious targets that will accelerate its energy transition to become a net zero emissions company by 2050: an increase in the company's renewable generation and emission reduction targets, as well as an increase in investments in low-carbon solutions to accelerate the transformation until 2030.

## **C12.2**

### **(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?**

Yes, climate-related requirements are included in our supplier contracts

## **C12.2a**

### **(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.**

#### **Climate-related requirement**

Complying with regulatory requirements

#### **Description of this climate related requirement**

Procurement document DC12 "General Conditions for Services Procurement" sets a series of requirements to be fulfilled by our suppliers. Specifically, the document indicates explicitly that suppliers must: • Settle energy efficiency measures. • Make a correct waste management, including waste segregation

#### **% suppliers by procurement spend that have to comply with this climate-related requirement**

63.3

#### **% suppliers by procurement spend in compliance with this climate-related requirement**

63.3

#### **Mechanisms for monitoring compliance with this climate-related requirement**

First-party verification

Other, please specify (Compulsory requirements during contract negotiation )

**Response to supplier non-compliance with this climate-related requirement**

Exclude

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**Climate-related requirement**

Implementation of emissions reduction initiatives

**Description of this climate related requirement**

EURO VI engine renewal This initiative focuses on reducing emissions of road transportation of our products, by engaging with our transport providers in order to improve the efficiency of trucks. This is done through fleet renewal with EURO VI engines in trucks. Our Safety and Environment Specifications for Transport include a compulsory requisite to renew every truck with 10 years of age, substituting it with a new vehicle with the most efficient engine in the market at that time.

**% suppliers by procurement spend that have to comply with this climate-related requirement**

6.7

**% suppliers by procurement spend in compliance with this climate-related requirement**

6

**Mechanisms for monitoring compliance with this climate-related requirement**

Supplier self-assessment

First-party verification

Supplier scorecard or rating

**Response to supplier non-compliance with this climate-related requirement**

Other, please specify (Weighting bids in the tender, rewarding suppliers with better compliance with a better score)

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**Climate-related requirement**

Complying with regulatory requirements

**Description of this climate related requirement**

ISO 14001 compliance Suppliers to be hired by Repsol for the Logistics category must comply with international standard on environment management systems ISO 14001. The ISO 14000 is an environmental management standard developed by the International Organization for Standardization (ISO). It specifies requirements of an environmental management system (EMS) and it is used by companies of any industry to manage and improve their environmental performance. The ISO 14001 standard uses a systemic approach to controlling environmental issues within a company and it's based on the Plan-Do-Check-Act cycle (PDCA), focusing on the continuous improvement of the system. It covers all environmental aspects, throughout their life cycle, that are able to be controlled or influenced by the organisation. Therefore, implementing a EMS under ISO 140001 can help companies to manage climate-related risks.

**% suppliers by procurement spend that have to comply with this climate-related requirement**

6.7

**% suppliers by procurement spend in compliance with this climate-related requirement**

6.7

**Mechanisms for monitoring compliance with this climate-related requirement**

Certification

On-site third-party verification

**Response to supplier non-compliance with this climate-related requirement**

Exclude

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**Climate-related requirement**

Other, please specify (Energy efficiency requirements)

**Description of this climate related requirement**

Energy efficiency is a key lever for reducing emissions and so, some our refineries, chemical facilities and other assets are certified under the international standard ISO 50001 that establishes an energy management system. This certification implies an ongoing commitment to energy management. To this end Repsol, as part of its commitment to achieving excellence in energy performance at our facilities, has established action plans to address the sufficient, safe, and sustainable supply of energy, working daily to reduce our emissions. As part of this commitment, suppliers that deliver products or services in those assets that are certified under ISO5001 need to meet an energy efficiency requirement for all equipment and services contracted.

**% suppliers by procurement spend that have to comply with this climate-related requirement****% suppliers by procurement spend in compliance with this climate-related requirement****Mechanisms for monitoring compliance with this climate-related requirement**

First-party verification

Other, please specify (Requirements and clauses during contract negotiation)

**Response to supplier non-compliance with this climate-related requirement**

Exclude

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C12.3

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**(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

**Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate**

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly 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)**

[https://www.repsol.com/content/dam/repsol-corporate/en\\_gb/sostenibilidad/reports/2021/repsol-participation-industry-associations-2021.pdf](https://www.repsol.com/content/dam/repsol-corporate/en_gb/sostenibilidad/reports/2021/repsol-participation-industry-associations-2021.pdf)  
repsol-participation-industry-associations-2021.pdf

**Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy**

At Repsol, we share society's concern about the effects that human activities cause on the climate and we are firmly committed to an energy transition towards a low-emission future. We have set ourselves ambitious targets in the fight against climate change as we are convinced that only by tackling the great challenges, we can turn them into opportunities. In December 2019, Repsol was the first company in its sector to announce its commitment to become a net zero emissions company by 2050. It aims to contribute to the goal set by the Paris Agreement of limiting the increase in the global average temperature of the planet to well below 2 degrees Celsius above pre-industrial levels by the end of the century, and if possible, not exceed 1.5 degrees. In November 2020, Repsol unveiled its new Strategic Plan which is committed to operational excellence, innovation and investment in new low-carbon energy solutions to become a decarbonised company. With the technological advances now foreseeable, we anticipate that we can achieve at least 80% net emissions reductions by 2050 and commit to applying the best technologies to raise this figure. If that is not enough, we will offset emissions through natural climate solutions to achieve net zero emissions by 2050. All of our engagement activities are aimed at achieving these objectives. At Repsol we have an internal area that is responsible for coordinating all of the company's engagement initiatives, whether they are carried out directly or through associations. In addition, since 2020, we have been updating a report every year that analyzes the associations we are part of and assesses their degree of alignment with our strategy. Since the publication of this report, we have added new associations and revised those included in the initial list, eliminating groups of a highly technical scope, think tanks, and non-aliated relationships such as those of NGOs or investor groups, as well as government initiatives and committees. We collaborate in these associations and initiatives and encourage the development of their lines of action by paying membership fees and supporting and participating in the working groups and events they organize. In the European Union and the United States, we also report on costs related to lobbying activities in accordance with the requirements and guidelines set out in the EU Transparency Register and the US Lobbying Disclosure Act. All information reported by the company is public.

**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?**

**Focus of policy, law, or regulation that may impact the climate**

Renewable energy generation

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Renewable Energy Directive (REDIII)

**Policy, law, or regulation geographic coverage**

Regional

**Country/region the policy, law, or regulation applies to**

Europe

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

Responding to a consultation

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

The proposed REDIII will be a key instrument to support the uptake of clean, low-carbon and renewable energy carriers. We see as a very positive element that the supply mandates for advanced biofuels and renewable fuels of non-biological origin (RFNBOs) have been strengthened in the proposal. These fuels will undoubtedly contribute to a reduction of emissions in transport in the short term, ensuring progress while other technologies (such as electrification) mature. However, the proposed revision of RED introduces an anti-residue provision (Annex V, part C, point 18), which will compromise the availability of waste and residue based renewable fuels, rather than allowing them to deliver further GHG benefits. Moreover, the proposal still limits the use of waste-based feedstocks for the production of sustainable biofuels, such as used cooking oils (UCOs, Annex IX, part B). This sets a contradiction with the above-mentioned supply mandate. Furthermore, the Directive should consider renewable hydrogen from biological origin also when it is used as intermediate in the production of conventional fuels.

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

**Focus of policy, law, or regulation that may impact the climate**

Emissions trading schemes

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Emissions Trading System (ETS) reform

**Policy, law, or regulation geographic coverage**

Regional

**Country/region the policy, law, or regulation applies to**

Europe

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

Responding to a consultation

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

Repsol firmly believes that carbon pricing, together with measures of direct support for the uptake of renewables (e.g. supply mandates or emissions intensity reduction mandates) must remain the cornerstone of climate action. The combination of these two elements will play a key role in decarbonising industry and help create a market for low carbon products. However, an ambitious reform delivering higher emission prices must be accompanied by an increased protection against the risk of carbon leakage. The proposed reform includes a drastic reduction of free allowances allocated to sectors exposed to carbon leakage. This, together with, the conditionality to access free allowances could end up penalizing the best-in-class installations, and by extension discouraging investments into more emission-efficient operations

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Focus of policy, law, or regulation that may impact the climate**

Energy attribute certificate systems

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Regulation for CO2 standards for light-duty vehicles

**Policy, law, or regulation geographic coverage**

Regional

**Country/region the policy, law, or regulation applies to**

Europe

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

Responding to a consultation

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

Repsol support great ambitions in rendering transport cleaner, achieving net zero emissions cannot afford to artificially exclude any technology that can significantly reduce CO2 emissions. Greater flexibility on the paths for accomplishing these objectives should be implemented, to allow all technologies to contribute to this challenge: electricity, hydrogen, renewable low-carbon fuels, etc.

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Focus of policy, law, or regulation that may impact the climate**

Carbon tax

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Energy Taxation Directive (ETD)

**Policy, law, or regulation geographic coverage**

Regional

**Country/region the policy, law, or regulation applies to**

Europe

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

responding to a consultation

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

The proposed reform of the ETD is very much needed, as the current EU taxation framework is obsolete. However, for the sake of legal certainty on incentivizing all kind of renewable energy, the ETD should align the definition of advanced and other sustainable biofuels, alternative fuels, e-fuels, etc. with all the measures included in the Fit for 55 Package, including the definitions included in the RED III and in the Regulation on Alternative Fuels Infrastructure. Renewable hydrogen and advanced sustainable fuels should be treated in a similar way as electricity in the new Directive, and longer transitional periods should be granted to the application of the lower rates of low carbon fuel.

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Focus of policy, law, or regulation that may impact the climate**

Minimum energy efficiency requirements

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Energy Efficiency Directive (EED)

**Policy, law, or regulation geographic coverage**

Regional

**Country/region the policy, law, or regulation applies to**

Europe

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

responding to a consultation

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

Repsol welcomes the European Commission proposal on the revision of the Energy Efficiency Directive (EED), in particular the efforts to encourage energy efficiency in the EU. All energy savings should be encouraged, regardless of the technology or the energy carrier used, particularly as energy savings on fossil fuels provide a cost-effective pathway to reduce energy consumption and GHG emissions.

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Focus of policy, law, or regulation that may impact the climate**

Emissions trading schemes

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Carbon Border Adjustment Mechanism (CBAM)

**Policy, law, or regulation geographic coverage**

Regional

**Country/region the policy, law, or regulation applies to**

Europe

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

responding to a consultation and meeting directly with policy makers

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

We appreciate the efforts and approach of the EC on reducing CO2, and we also welcome the proposed Carbon Border Adjustment Mechanism (CBAM) Regulation's intention of ensuring that the EU's climate ambition is not undermined by 3rd country market players subject to less stringent environmental requirements. In the absence of a global approach to carbon prices, the CBAM could be tested as a tool to fight carbon leakage and level the playing field. However, it must be very well designed considering the whole carbon footprint of all products, with a global value chain vision.

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Focus of policy, law, or regulation that may impact the climate**

Renewable energy generation

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

ReFuelEU Aviation

**Policy, law, or regulation geographic coverage**

Regional

**Country/region the policy, law, or regulation applies to**

Europe

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

responding to a consultation

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

The ReFuelEU Aviation proposal represents a step in the right direction to support the development and the deployment of sustainable aviation fuels across the EU. Further alignment is needed between the Renewable Energy Directive (RED) and this proposal. In particular, ReFuelEU Aviation should also explicitly include the possibility to take into account renewable liquid and gaseous transport fuels of non-biological origin when they are used as intermediate products for the production of conventional aviation fuels for compliance with the Regulation's targets.

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Focus of policy, law, or regulation that may impact the climate**

Adaptation and/or resilience to climate change

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Ley de Cambio Climático y Transición Energética (Climate Change and Energy transition Law)

**Policy, law, or regulation geographic coverage**

National

**Country/region the policy, law, or regulation applies to**

Spain

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

responding to a consultation and meeting directly with policy makers

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

Repsol defends that any regulatory development aimed to fight climate change must guarantee respect for the principle of technological neutrality, i.e., allow the entry into the market of all decarbonizing options so that we can achieve climate neutrality objectives. For this reason, the company advocated for the need to include the criterion of measuring net emissions (generated in the full life cycle of the vehicle), rather than direct (or produced at the tailpipe). In addition, Repsol called for the incorporation of an explicit mention for renewable gases to be used for mobility. The company also requested that the scope of use of biofuels be extended to all means of transport (not just those considered hard to electrify). With regard to the installation of recharging points, the company's position called for the criterion to be distance, rather than sales volume.

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**



Yes, we have evaluated, and it is aligned

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**Focus of policy, law, or regulation that may impact the climate**

Circular economy

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Proyecto de Ley de Residuos y Suelos Contaminados ( Waste and Contaminated Soil Law Project)

**Policy, law, or regulation geographic coverage**

National

**Country/region the policy, law, or regulation applies to**

Spain

**Your organization's position on the policy, law, or regulation**

Support with minor exceptions

**Description of engagement with policy makers**

responding to a consultation and meeting directly with policy makers

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

Repsol is committed to the development and promotion of the circular economy. The company applies the circular economy in all countries where it operates throughout the value chain. For this reason, responding to this consultation was considered of particular interest. Thus, in order to promote the effective and rapid implementation of the circular economy in industrial processes, it was requested that the timescales be shortened and the administrative burden be lightened for a given waste to cease to be considered waste and become a secondary raw material. The same consideration for by-products. The recognition of chemical recycling in the calculation of recycled plastic was requested in order to encourage its development, since through this process it is possible to recover plastic waste where mechanical recycling is not technically or economically viable. The extension of the period for carrying out soil decontamination and recovery was also advocated. The Law establishes a limit of three years, which may not be technically feasible and/or penalize techniques that, in terms of sustainability, could be more effective (e.g. bioremediation).

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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## C12.3b

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**(C12.3b) Provide details of the trade associations your organization 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 (Spanish Confederation of Employers' Organizations (CEOE) )

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

CEOE is committed to sustainability and decarbonization. It is very important to achieve environmental objectives and maintain the competitiveness of Spanish companies, the challenge of climate change and competitiveness must be addressed together and must be mutually reinforcing. (more info: <https://www.ceoe.es/es/conocenos/areas-de-trabajo/comision-de-desarrollo-sostenible-y-transicion-ecologica>)

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

FuelsEurope

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

CEOE is committed to sustainability and decarbonization. It is very important to achieve environmental objectives and maintain the competitiveness of Spanish companies, the challenge of climate change and competitiveness must be addressed together and must be mutually reinforcing. (more info: <https://www.ceoe.es/es/conocenos/areas-de-trabajo/comision-de-desarrollo-sostenible-y-transicion-ecologica>)

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

Other, please specify (Oil & Gas Climate Initiative (OGCI))

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

OGCI has a set of guiding principles to help member companies contribute towards achieving a low carbon future. • Support the Paris Agreement and its aims • Seek to reduce the methane and CO2 intensity of our operations towards net zero • Seek to be a catalyst for reducing emissions in our industry and the wider economy • Assess climate change risks and opportunities in our business planning • Publish accurate and consistent indicators and utilize third-party data review • Support government policies that consider a value for carbon, explicitly or implicitly • Support the implementation of regulations tackling methane emissions reduction • Engage responsibly with stakeholders • Foster candid and constructive dialogue with a broad range of stakeholders

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

Other, please specify (Asociación Española de Operadores de Productos Petrolíferos (AOP))

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

We in the industry are firmly convinced that we must participate in the energy transition to achieve a significant and immediate reduction in greenhouse gas emissions, particularly CO2, through complementary solutions to electrification. AOP's proposal to contribute to the fight against climate change involves research and development of emission-neutral alternatives to internal combustion engines: ecofuels. Ecofuels are low-carbon liquid fuels that come from alternative raw materials to petroleum, such as forest and agricultural residues or captured CO2. Our goal is to reduce the emissions intensity of products manufactured in refineries by 80%.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

Other, please specify (Plastics Europe)

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

Please select

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

PlasticsEurope is one of the leading industrial trade associations in Europe. It gathers 55 industrial companies, which produce nearly 90% of all polymers across the EU28 member states plus Norway, Switzerland and Turkey. Plastics Europe promotes the positive contributions of plastics by communicating plastics contribution to sustainable development, innovation and quality of life. The association highlights the material's beneficial properties throughout its life cycle, making relevant contributions to sustainable welfare by facilitating resource efficiency and climate protection: Not only most plastics products require less energy for their production if compared to alternative materials but also many of them help saving significant amounts of energy during their lifespan use (lightweight materials for transport, insulation for building and construction, energy savings in packaging, etc). Plastics Europe promotes the use of Life Cycle Thinking (LCT) to improve understanding about product benefits and to take more informed decisions. As a scientific method, Life Cycle Assessment (LCA) is a technique to analyze the potential environmental impacts associated with a product, process or service.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

Canadian Association of Petroleum Producers

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

CAPP's Climate Change Policy Principles Canada's oil and natural gas producers are ready and willing to do their part to contribute to the overall Canadian plan on climate

change. Collaborative and solutions-oriented • Given Canada's climate commitments and industry impacts, CAPP will proactively collaborate with governments and stakeholders towards appropriate policy solutions. • Policy solutions need to be adaptive and carefully consider environmental, economic, and social outcomes. Efficient, effective & predictable • Climate policy should target reductions where they are most efficient and effective right across the entire energy value chain from production to end use and considering fairly all sectors and jurisdictions. • Climate change policies should achieve emissions reductions at the least cost to Canadians, the economy and industry. • Revenues from climate policy should be fully recycled back into the economy to incent innovation, assist transition or reduce other taxes and levies. Technology and innovation focused • Policy should incent technology and innovation to address climate change, and capture the opportunity to export solutions to the world. • Considerable future emissions reductions will stem from improving the hydrocarbon energy sector requiring continuing strong innovation and policy effort in these areas. Globally competitive • Canada's climate policies must ensure Canada's resource development is cost and carbon competitive with other jurisdictions, especially the U.S. as Canada's largest trading partner. • Canada's climate policy leadership should bring proportionate benefits to Canada, including ensuring the industry receives full value for Canadian energy products through effective access to global markets. • Canada is highly dependent on the development and trade of its natural resources, and on its ability to attract foreign investment. Canada's climate policies must be designed to maintain Canada's ability to raise global investment capital. "

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

European Chemical Industry Council (CEFIC)

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

CEFIC is one of the leading industrial trade associations in Europe, and acts as the voice of the chemical industry in Europe. It represents 29,000 large, medium and small chemical companies in Europe, which directly provide 1.2 million jobs and account for 17% of world chemical production. The chemical industry is committed to contributing to the agreed EU targets of reducing greenhouse gas emissions, including the Clean Energy Package proposal of the European Union and its ambitions to reform and harmonise energy markets in Europe and to pioneer the low-carbon economy for the benefit of all its citizens. In December 2015, the European Chemical Council publicly backed the Paris Climate Agreements with their strong global commitments, and applauded the diplomatic efforts to achieve an ambitious and globally-binding agreement, as stated again on a press release in June 1st 2017. With the strong belief that the EU chemical industry is a pillar for tomorrow's low carbon economy, the association reminds that Chemical innovations enable current and future climate change solutions, including renewable energy, energy storage and thousands of products to improve energy efficiency, such as in vehicles and buildings.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

Other, please specify (IPIECA)

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

IPIECA works with the oil and gas industry to develop and deliver solutions to the global challenge of Climate Change. Our dedicated, long-standing Climate Change Group, set up in 1988, acts as a catalyst; bringing experts together to work on issues such as reducing greenhouse gas (GHG) emissions, enhancing energy efficiency and improving operational performance. IPIECA helps the oil and gas industry be part of the climate change solution and ultimately play their important role in the achievement of the goals of the Paris Agreement. IPIECA develops industry guidance and good practice documents, alongside hosting expert workshops and webinars, that all explore key climate-related issues and inform industry and stakeholders. Additionally, IPIECA also has a long-standing engagement with United Nations Framework Convention on Climate Change (UNFCCC) and the Inter-governmental Panel on Climate Change (IPCC). Over the past two decades, IPIECA has acted as an official observer for both organizations, whilst also hosting events at UNFCCC COPs and providing technical input on IPCC reports.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

Other, please specify (International Emissions Trading Association (IETA))

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

Please select

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

IETA encourages carbon pricing of many forms, but its primary focus is on emissions trading because of its environmental assurance and economic advantages. Its vision

is a single global carbon price produced by linked trading systems of high environmental integrity, to ensure efficient and competitive GHG markets. In Europe, IETA supports the EU emissions trading system (ETS) as the central policy instrument and EU's principal decarbonization instrument of the revised 2030 Climate and Energy package and the broader 2050 climate neutrality objective. IETA highlights the importance of efficient functioning of the market, with predictable rules, greater policy coordination and appropriate measures to address ETS impacts on trade-exposed sectors. One of its priorities is to form a vision on longer-term strategic issues, such as extending the scope of the ETS to new sectors, investment incentives for low-carbon technologies and use of markets adjusted in accordance with the increase 2030 targets, with the overall objective to minimize cumulative emissions in the atmosphere. IETA also promote the private sector as a critical stakeholder in NCS and believes that market-based approaches are essential for ensuring that natural CO2 removal plays the fullest role possible in delivering the goal of Paris Agreement.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

Other, please specify (Liquid Gas Europe )

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

Climate change constitutes a problem of unprecedented scope, complexity and importance for humanity in general and for the policy community in particular. Achieving a global consensus on how and when to act while balancing competing environmental, social, political and economic imperatives is a challenge but it is a challenge that must be met. As citizens and as representatives of a clean and relatively low carbon gaseous fuel, the European LPG industry strongly supports the emergence of an ambitious EU climate strategy, and is committed to optimizing LPG's role in the transition towards a more climate friendly energy model. Combining an established market presence with CO2 emission advantages over more carbon intensive alternatives such as coal, oil and conventionally generated electricity, LPG can and should be part of the solution. LPG's climate credentials are significantly enhanced by the emerging evidence regarding the role of black carbon in global warming. Due to the clean combustion typically associated with gaseous fuels, LPG generates extremely low levels of black carbon, making it an ideal component of any global warming reduction strategy. Moreover, its portability makes it an ideal auxiliary fuel for systems based on renewable energy such as solar thermal and photovoltaic, particularly in areas beyond the reach of the natural gas network. Finally, as Europe's leading alternative fuel (see the transport section of the website for details), LPG is helping to tackle the particularly persistent challenge of reducing CO2 and black carbon emissions in the European road transport sector.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

BusinessEurope

**Is your organization's position on climate change consistent with theirs?**

Please select

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

Climate change is a global challenge that requires global actions. BUSINESSEUROPE is committed to and aware of the challenges that climate change presents as well as the impacts of human activities. This is why they firmly expect an ambitious legally binding global agreement, which reflects the long-term objective of limiting global warming below 2°C. The Paris Agreement is the single most important tool in providing clarity on the direction that society must take to tackle climate change. It is equally important to provide a global level playing field, as reaching the Paris Agreement requires all countries (especially major economies) to make significant efforts to bring down emissions. BusinessEurope is fully committed to implementation of the Agreement, and the companies it represents invest billions in low-carbon innovation, as well as in the development and deployment of low-carbon technologies for the future. The EU's ambitious climate targets require all sectors to make efforts to reduce their emissions, including transport. In addition to the EU ETS (emission trading scheme), BusinessEurope fully supports Europe's intentions to move to a healthy, competitive economy that is driven by low-carbon modes of transport. It is however important that this support is given from a technology and fuel-neutral point of view, so that all technologies are able to compete. Massive investment will be made in the coming years in new technologies, fuels and efficiencies, and it is important that a significant share of it is made in Europe.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

International Association of Oil and Gas Producers (IOGP)

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

Please select

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

IOGP supports the Paris Agreement and the EU's objective of climate neutrality by 2050. We call for the implementation of much-needed enabling measures and an inclusive policy framework. Our industry is committed to reduce its own emissions, supply cleaner energy, and develop long-term solutions for other sectors of the economy. Greenhouse gas emissions come from a variety of sources, including agriculture and hydro-carbon-fueled transport and industrial activity that the world still needs to drive economic growth and improve living conditions in developing nations. IOGP supports the international community's commitment to address the global challenge of climate change and also believes that the oil and gas industry is very much a part of the solution to this challenge, which can be addressed while meeting society's future energy needs. The long-term objective of climate change policy should be to reduce the risk of serious impacts on society and ecosystems, while recognizing the importance of reliable and affordable energy to society

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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**Trade association**

WindEurope

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

WindEurope mission and vision: Vision: Windenergy will be the leading technology in transforming the global energy supply structure towards a truly sustainable energy future based on indigenous, non-polluting and competitive renewable technologies. Mission Through effective communication and its engagement in the political decision-making processes, WindEurope seeks to facilitate national and international policies and initiatives which strengthen the development of European and global wind energy markets, infrastructure and technology. In doing so, we achieve a more sustainable and cleaner energy future.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

**Describe the aim of your organization's funding**

<Not Applicable>

**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

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C12.3c

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**(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.**

**Type of organization**

Private company

**State the organization to which you provided funding**

OGCI Climate Investments (OGCI CI)

**Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)**

12900000

**Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate**

The Oil and Gas Climate Initiative (OGCI) is an initiative of O&G companies accounting for almost 30% of global operated oil and gas production. OGCI aims to accelerate the industry response to climate change and its member companies support the Paris Agreement and its aims. OGCI Climate Investments is a US\$1B+ investment fund that was set up by members to invest in technologies and projects that accelerate decarbonization in oil and gas, industry and commercial transport. OGCI CI invests in start-ups with solutions that focus on reducing CO2 and CH4 emissions, and recycling or storing CO2 (CCUS). Repsol is a member of OGCI and provides funding to OGCI CI (12.9 million \$ in 2021). The aim of this funding is to develop technologies that can achieve emissions reduction and help Repsol become a net zero emissions company by 2050. It could influence policy, law or regulation that may impact the climate because some of the investments focus on emerging technologies (for example CCUS) which currently have little regulation and accelerating its deployment could lead to new policies and regulation in those fields. Some of the startups that were invested in 2021 are: Andium is an Industrial Internet of Things company providing remote-field monitoring and communications technology that allows oil and gas companies to continuously monitor flaring activity and reduce greenhouse gas emissions. NextDecade, the developer of Rio Grande LNG, plans to capture and permanently store more than 5 million tonnes of carbon dioxide per year – over 90% of its emissions – making it one of North America's largest US CCS projects in development. METRON is a French cleantech company that uses AI technology to increase energy efficiency and productivity for industrial facilities while also delivering substantial cost savings. Urbint's methane abatement technology leverages AI in predicting and stopping threats to critical infrastructure and workers. Qnovo is a battery management pioneer providing software that manages Li-ion batteries, enabling greater capacity utilization, extended battery life, faster charging and predictive analytics for battery recall avoidance and failure prevention.

**Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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**Type of organization**

Start-up company

**State the organization to which you provided funding**

Sunrgyze

**Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)**

700000

**Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate**

Hydrogen is a key element for Repsol, as we use it in our refineries to reduce the Sulphur content of our fuels, contributing to the reduction of sulphur oxides emissions. This Hydrogen is produced using the conventional steam reforming process and natural gas as feedstock. As a Company committed with decarbonization, we believe that we have to promote H2 production technologies with a low carbon footprint and in that sense, Repsol has an ambitious strategy for developing renewable hydrogen, with targets of 550 MWeq by 2025 and 1,900 MWeq by 2030. To succeed, more mature electrolysis technologies that allow for early development and disruptive ones to improve the efficiency of this process in the mid run will be needed. Repsol is working on both time horizons. Sunrgyze is a start-up company (spin-off of a collaboration between Repsol and Enagas) working in a disruptive technology based on photoelectrocatalysis. To help develop this technology, Repsol has provided 700 k\$ funding to Sunrgyze in 2021, as in the next few years the technology will have to be demonstrated, scaled up and optimized to become an operational reality. As there are currently several emerging technologies regarding renewable hydrogen, there is a need for funding and regulation to accelerate their development. This funding could influence policy, law or regulation that may impact the climate because in case the technology scales up and becomes commercial, it could lead to new policies, laws or regulation regarding renewable Hydrogen.

**Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is aligned

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## 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**

Please select

**Attach the document**

Integrated management Report 2021.pdf

**Page/Section reference**

Pages 57-58 Section 6.1 Climate change (pages 59-78) Section 6.3 Technology for decarbonization (pages 89-93) Pages 151-153 (Sustainability Indicators- Climate Change)

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

**Comment**

**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

consolidated-financial-statement-2021.pdf

**Page/Section reference**

Pages 74-77: (30) Climate change and environmental information /30.1) CO2 emission allowances. / 30.2 Environmental investment, Expenses &provisions Appendix IV-Regulatory Framework – Environmental Regulation (page 109), Climate change and alternative fuels (page 110)

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Other metrics

**Comment**

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**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

repsol-participation-industry-associations-2021.pdf

**Page/Section reference**

All pages of the document

**Content elements**

Strategy  
Other, please specify (Participation in industry initiatives and associations)

**Comment**

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**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

annual-esg-engagement-report-2020-2021.pdf

**Page/Section reference**

Pages 6-13, 28-31

**Content elements**

Governance  
Strategy  
Emission targets  
Other, please specify (engagement on climate change with ESG investors)

**Comment**

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**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

2021-global-sustainability-plan.pdf

**Page/Section reference**

Pages 10-15

**Content elements**

Emission targets  
Other, please specify (Climate Change Targets & Ambitions)

**Comment**

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## C15. Biodiversity

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### C15.1

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**(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, executive management-level responsibility	We have an internal regulation "Environmental aspect management" which apply to all Business Units. According to this regulation, all business should incorporate specific criteria related to biodiversity in their management systems. Regarding biodiversity, they should define management plans to minimize the impact on each of the protected habitats or species. Business Unit Directors have the final decision over the business strategy, major action plans, and annual budgets, regarding all environmental aspects. They decide over the actions plans and the mitigations actions that will be implemented during the operation in each place where we operate.	<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	Adoption of the mitigation hierarchy approach Commitment to respect legally designated protected areas Commitment to secure Free, Prior and Informed Consent (FPIC) of Indigenous Peoples	SDG Other, please specify (Repsol joined Natural Capital Coalition in 2017. We support the Natural Capital Protocol and contributed to the development of its Biodiversity Guidance in 2020. Transparent and Align project)

**C15.3**

**(C15.3) Does your organization assess the impact of its value chain on biodiversity?**

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	No, but we plan to assess biodiversity-related impacts within the next two years	<Not Applicable>

**C15.4**

**(C15.4) 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	Species management Education & awareness Law & policy

**C15.5**

**(C15.5) 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 Pressure indicators Response indicators Other, please specify (We use READS, a digital tool to value and account impacts on natural capital. READS enables improved management by providing several nature-based KPIs grouped by: ecosystem services, water resources, climate change and social well-being.)

**C15.6**



**(C15.6) 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 mainstream financial reports	Content of biodiversity-related policies or commitments Impacts on biodiversity Details on biodiversity indicators Biodiversity strategy	Integrated management Report - Chapters: 6.2 Environment - introduction 6.2.2. Natural Capital and Biodiversity Appendix V. b. Sustainability indicators. Environment -Biodiversity Integrated management Report 2021 .pdf
Other, please specify (Repsol website)	Impacts on biodiversity Biodiversity strategy Other, please specify (Biodiversity projects)	Repsol website. Biodiversity protection <a href="https://www.repsol.com/en/sustainability/environment/biodiversity-protection/index.cshtml">https://www.repsol.com/en/sustainability/environment/biodiversity-protection/index.cshtml</a> Repsol website- Protecting biodiversity - Mitigating environmental impacts - Repsol_ - www.repsol.com.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	Repsol Chief Executive Officer	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

**(SC0.0) If you would like to do so, please provide a separate introduction to this module.**

SC0.1

**(SC0.1) What is your company's annual revenue for the stated reporting period?**

	Annual Revenue
Row 1	

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
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	

SC1.4

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**(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?**

Yes

SC1.4a

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**(SC1.4a) Describe how you plan to develop your capabilities.**

The development of the plan is underway during this year

SC2.1

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**(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.**

SC2.2

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**(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?**

SC4.1

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**(SC4.1) Are you providing product level data for your organization's goods or services?**

Submit your response

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**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

The European Climate Pact Submission

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**Please indicate your consent for CDP to showcase your disclosed environmental actions on the European Climate Pact website as pledges to the Pact.**

Yes, we wish to pledge to the European Climate Pact through our CDP disclosure

**Please confirm below**

I have read and accept the applicable Terms