



# **ASSESSMENT OF REPSOL'S CLIMATE STRATEGY**

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# INTRODUCTION

In 2021, Repsol ranked as the 43rd biggest oil and gas producer and 39th biggest oil and gas upstream developers worldwide.<sup>1</sup>

As one of the main oil and gas companies and one of the largest greenhouse gas (GHG) emitters globally, Repsol is among the few companies in the world whose climate transition (or lack thereof) in the coming years will have a determining impact on our collective ability to limit global temperature rise to 1.5°C. In its 2019 earnings announcements, the company was the first big oil and gas company to pledge to achieve carbon neutrality by 2050 or sooner.<sup>2</sup>

Repsol's investors and other financial stakeholders have both a key interest and a crucial responsibility to ensure the company swiftly aligns with a 1.5°C pathway. In addition

to targeted restriction policies, shareholder engagement is an important tool to reach this objective.

## Key findings:

- Repsol does not provide sufficient information on its decarbonization plan to allow investors and other financial stakeholders to correctly assess its capacity to align with a 1.5°C pathway. Insufficient information is given on the company's capital expenditure (CAPEX) plan, as well as on the contribution of carbon capture along the company's value chain and of offsets to the emission reduction targets.
- Taking into account Repsol's oil and gas production from currently producing fields, plus its fields under development and field

evaluation, the company's production level in 2030 will be 33% higher than the level required to align with the International Energy Agency's (IEA) Net Zero Emissions by 2050 scenario (NZE).

- Repsol plans to increase its oil and gas production to 620 kboe per day by 2025 and stated that it will maintain this level of production until 2030. If it meets this target, its production will be 68% higher than the NZE.
- Repsol has not committed to stop developing new oil and gas projects beyond those already in development. Around 80% of its current expansion plans are in fracking, ultradeep water and Arctic activities.
- For every euro invested in renewable energy in 2022, Repsol invested more than 4 euros in oil and gas.
- For every euro invested in renewable energy in 2022, more than 3 euros were

distributed to shareholders through dividends and share buyback.

- Repsol's renewable energy development should not represent more than a quarter of the group's CAPEX by 2025.
- Repsol's targeted carbon intensity by 2030 is 30% higher than the NZE, and 16% more than in the IEA's Announced Pledges Scenario (APS) which covers commitments towards a below-2°C pathway. If Repsol meets these targets and reduces its energy supply in line with the IEA scenarios, by 2030 the company will have overshoot its share of the 2023-30 carbon budget by 30% under the NZE, and by 16% under the below 2°C.





# 1. REPSOL TODAY IN A NUTSHELL

Repsol accounts for 0.5% of global oil and gas production and 0.5% of short-term expansion plans.<sup>3</sup>

As of March 1st, 2023:<sup>4</sup>

- Repsol had 1,879 million barrels of oil equivalent (mmboe) of resources under production, including 715 million barrels (mmbbl) of oil and 1,164 mmboe of fossil gas. This represents the equivalent of 9.4 years of production at 2022 levels.
- Repsol had 1,093 mmboe of resources under development or field evaluation, including 660 mmbbl of oil and 433 mmboe of fossil gas. This represents 5.5 years of production at 2022 levels.
- Repsol holds 1,403 mmboe of oil and fossil gas discoveries, including 86127 mmbbl of oil and 542 mmboe of fossil gas. This

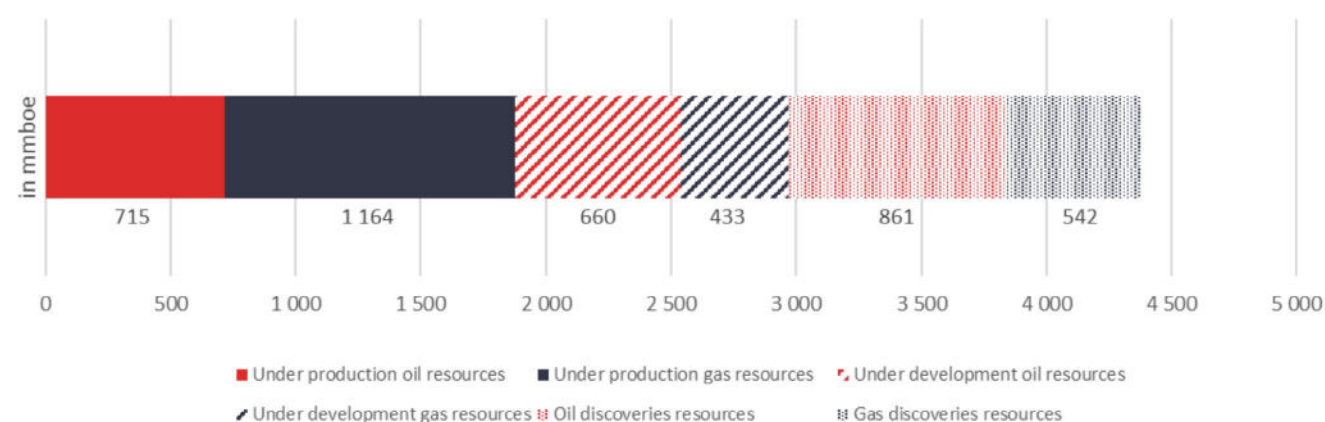
represents 7 years of production at 2022 levels.

In 2022, Repsol extracted 68 mmbbl of oil and 133 mmboe of fossil gas. Beyond exploration and production, Repsol is also active in other segments such as midstream, refining and processing, renewable and gas power, hydrogen, and retail.<sup>5</sup>

Repsol's renewable portfolio is composed mainly of hydroelectric, solar photovoltaic and wind energy. Repsol possesses 1.65 Gigawatt (GW) of renewable energy installed capacity, 2.6 GW of capacities under development<sup>6</sup> and 2.7 GW offtake secured renewable energy.

Repsol has 2.2 GW capacity of gas power installed capacity and has no gas plant under development.

## Repsol's oil and gas resources (based on current resources in million barrels of oil equivalent)



Source: Rystad Energy, accessed in March 2023

# 2. TRANSPARENCY OF REPSOL'S CLIMATE PLAN

The adoption and publication of sufficiently detailed targets and indicators are a prerequisite to assessing how a company's transition plan aligns with a 1.5°C trajectory.

The net zero pathway was detailed in its 2021 announcement<sup>7</sup> and updated in its 2022 announcement.<sup>8</sup>

**However, while Repsol provides information about its decarbonization targets, it does not include significant indicators, and the information provided lacks the granularity needed to allow investors and other financial stakeholders to correctly assess its capacity to align with a 1.5°C pathway. The information given does not allow investors to understand the company's trajectory for GHG emissions and its production model through to 2030, or the risks associated with financial exposure to the company.**

For example, Repsol discloses the avoided emissions due to offsets in its emission reduction pathway only with a 2026 target. Regarding its investments, Repsol does not disclose its 2030 forecasted total CAPEX further than what was disclosed in its 2023 guidance and 2021-2025 strategic plan. This type of information is key to identifying the company's planned energy transition strategy, and therefore the credibility of its emissions reduction goals.

The table below summarizes the level of disclosure by Repsol on a few key transition indicators by Repsol. It does not provide a comprehensive assessment of the transparency and completeness of Repsol's climate plan, but rather focuses on basic indicators that should be at the foundations of any oil and gas company's plan.

## Assessment of the transparency of Repsols climate plan

Does Repsol publish detailed information about the following indicators up to 2030?	Yes - No Partially	Comment
Absolute and relative GHG emissions reduction targets covering scope 1, 2 and 3.	Yes	
Contribution to emissions reduction targets of carbon capture and storage (CCS) along the company's value chain.	No	<ul style="list-style-type: none"> <li>Repsol plans to use CCS along its value chain but does not state any CCS target.<sup>10</sup></li> </ul>
Contribution to emissions reduction targets of offsets and offsetting approaches. <sup>11</sup>	No	<ul style="list-style-type: none"> <li>Repsol highlights the importance of offsetting and NBS<sup>12</sup> in their strategy without stating any target.</li> </ul>
CAPEX breakdown by activity, and by production maintenance and growth.	No	<ul style="list-style-type: none"> <li>Repsol discloses its 2021-2025 total CAPEX forecasts, with CAPEX dedicated to oil and gas and the share of growth CAPEX, but aggregates its renewable CAPEX at the "low carbon generation" level, that includes CCGT.<sup>13</sup></li> </ul>
2030 targeted energy mix and production volumes.	Partially	<ul style="list-style-type: none"> <li>Repsol does not report its 2030 total energy supply projections.</li> <li>Repsol discloses its forecasted oil and gas production in 2025<sup>14</sup> and informed previously that it aims to maintain its oil and gas production at current level.</li> <li>The breakdown between oil and gas is not reported.</li> <li>Repsol discloses its 2025 and 2030 renewable capacity target.<sup>15</sup></li> </ul>
Reference scenario used to define climate targets. <sup>15</sup>	No	<ul style="list-style-type: none"> <li>Repsol uses the IEA's SDS and NZE for its scope 3 carbon intensity targets, without clearly indicating in what extent these scenarios are considered.<sup>16</sup></li> </ul>

Source: Repsol FY2022 financial statements and annual report, 2021-2025 strategic plan, 2022 and 2023 investor presentations, 2022 integrated management report



# 3. QUALITY OF REPSOL'S CLIMATE PLAN

## a. Oil and gas trajectory

In May 2021, the IEA published its "Net Zero Emissions by 2050 scenario (NZE)" which provides a pathway to meet global energy needs while having a 50% chance of keeping global temperature increases below 1.5°C.<sup>17</sup> It was used as the reference scenario in the World Energy Outlook (WEO) 2021 and was updated in the WEO 2022 published in October 2022.<sup>18</sup> It projects a reduction in oil and gas production by 2030 compared to 2021 levels of 21.3% and 18.6% respectively and an end to the development of new oil and gas production projects and LNG terminals.

According to the Global Oil and Gas Exit List (GOGEL), Repsol is the 39th top global oil and gas upstream developer. 73% of its expansion plans did not obtain their Final Investment Decision (FID) before 2022 and are therefore overshooting the IEA's NZE. Repsol is increasingly tapping into unconventional oil and gas resources, mostly

fracking, ultradeep water oil and gas and Arctic drilling. Unconventional resources all together account for 82.5% of oil and gas resources currently being developed by the company.<sup>19</sup> Among the main projects under development today are offshore fields located in Guyana.<sup>20</sup>

Despite the disrupted energy environment caused by the invasion of Ukraine, the need to halt oil and gas expansion as soon as possible remains a key feature of the NZE. The May 2021 NZE projected a halt to the development of new oil and gas fields, for which a FID was not approved by January 1st, 2022. The updated WEO 2022 version of the NZE also highlights the need to also end the development of new LNG terminal, beyond those approved by January 1st, 2023.

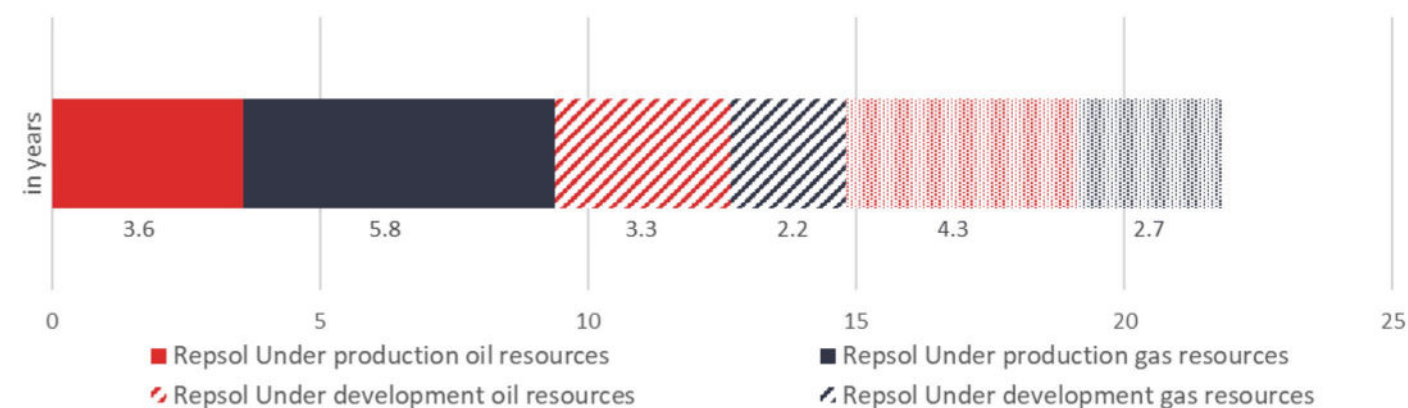
The completion of some projects that can swiftly enter production and operate for a limited time only – mainly shale oil and gas projects – is not expressly forbidden in the

**"I am also calling on CEOs of all oil and gas companies to be part of the solution. They should present credible, comprehensive and detailed transition plans in line with the recommendations of my High-Level Expert Group on net-zero pledges."**

**These plans must clearly detail actual emission cuts for 2025 and 2030, and efforts to change business models to phase out fossil fuels and scale up renewable energy."**

**Antonio Guterres,  
Secretary-General of the United Nations,  
March 2023**

**Repsol's oil and gas resources**  
(based on current resources and 2022 level of production)



Source: Rystad Energy, accessed in March 2023





WEO 2022 version of the NZE. However, the IEA notably stresses that the invasion of Ukraine cannot justify a “new wave of oil and gas infrastructure”, and that any new oil and gas fields will make it “even more challenging” to meet carbon neutrality targets and “creates the clear risk that [the 1.5°C] target moves out of reach”. Concretely, any such project will require even greater reduction efforts in other sectors and activities.

The IPCC also highlights the risks associated with the development of any new fossil fuel projects.<sup>21</sup> This concurs with a large and growing body of scientific evidence showing the need to immediately end fossil fuel development and a growing consensus on this in net-zero policy discussions.<sup>22</sup>

**Oil and gas production should decrease by 21% and 6% respectively during this decade according to the NZE.<sup>23</sup> However, without developing any new oil and gas fields and by only extracting resources that are already under production, Repsol has enough resources to produce the equivalent of 9.4**

**years of oil and gas production at its 2022 level. Repsol’s resources under development and field evaluation will provide the equivalent of another 5.5 years of production at its 2022 production level. Additionally, if the company exploits all its oil and gas discoveries, it will have enough resources to produce the equivalent of a further 7 years of production at its 2022 level.**

In the IEA’s NZE, the rate of oil and gas production declines due to the combination of the natural depletion of existing oil and gas fields and the absence of new fields to fill the gap. This decline happens even though the NZE relies on material levels of negative emissions, including through the deployment of technologies unproven at scale, and would be much faster without such a reliance. Other prominent 1.5°C scenarios with no or low overshoot also show oil and gas production declining by 2030. These include the One Earth Climate Model (OECM),<sup>24</sup> the Network for Greening the Financial System’s (NGFS) net zero climate scenarios, and the IPCC 1.5°C with no or low overshoot scenarios<sup>25</sup> filtered

to limit to reasonable volumes the reliance on negative emissions (CCS, NBS, etc.).<sup>26</sup>

The following chart compares Repsol’ planned oil and gas production level in 2030 with NZE alignment (the company plans to increase its oil and gas production to 620 kboe per day by 2025<sup>27</sup> and stated that it will maintain this level of production by 2030<sup>28</sup>). The level is an aggregate of both its producing fields and fields under development with a FID obtained before 2022.<sup>29</sup> The chart also indicates the level achieved from fields under production as well as those under development and under field evaluation. To reach its production target, Repsol will have to increase its oil and gas production beyond its current short-term expansion plans. This means that Repsol will have to develop part of its discoveries and/or buy new fields.

**In 2030, with Repsol’s oil and gas production from currently producing fields, plus fields under development and under evaluation, Repsol’s production will be 33% higher than the NZE.**

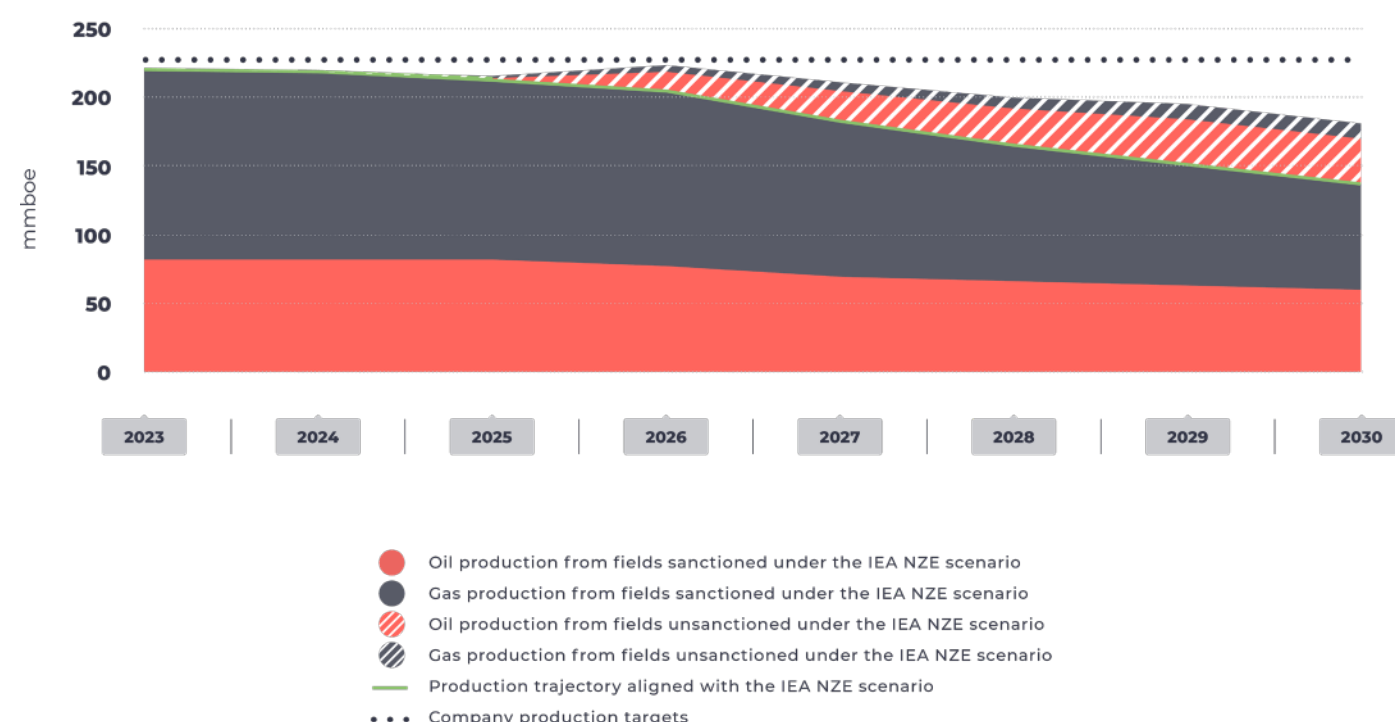
**Repsol’s 2030 production target for oil and gas will be 68% above NZE alignment.**

**Repsol has not committed to stop developing new oil and gas projects beyond those already in development and could review its production targets either up or down. Consequently, the level of field-based production indicated in the chart could be conservative and lower than Repsol’s own forecasts.** Repsol owns 1,403 mmbob of discovered hydrocarbon resources that have not yet entered the field evaluation or development stage. From 2020 to 2022, **Repsol spent on average US\$313 million per year on exploration.**<sup>30</sup>

Regarding oil and gas midstream infrastructure, Repsol is also developing 2.3 million tons per annum (Mtpa) of LNG terminal capacity.<sup>31</sup>



## Repsol's oil and gas trajectories (in million barrels of oil equivalent to 2030)



Source: Rystad Energy on oil and gas production and expansion, accessed in March 2023;  
Repsol reporting and investor presentations on company production plans

## b. Cash-flow allocation

The future energy mix of a company is determined by its current investment strategy. In the NZE, total energy investment needs to more than double by 2030, with a shift from high carbon energy to clean alternatives. Investment in clean energy, end-use and efficiency more than triple in the NZE, and nine dollars are spent on clean energy for each dollar spent on fossil fuels by 2030.<sup>32</sup> In its 2022 unaudited financial statement released in February 2023,<sup>33</sup> Repsol provides information that shows how the cash flows generated from its operational activities were spent in 2022:

1. Repsol operating investments in renewable energy amounted to €762 million.

2. Repsol allocated €3.2 billion to oil and gas, including €2.1 billion to oil and gas

upstream activities of which €319 million in exploration. €1 billion was dedicated to other oil and gas activities that include refining, petrochemical activities, and trading.<sup>34</sup>

In total, for every euro invested in renewable energy, more than 4 euros are invested in oil and gas.

**This means that for every euro invested in fossil fuels, less than 25 cents were invested in sustainable renewable energies.**

3. Repsol provided its shareholders with €2.7 billion, through dividend payment (€1 billion) and share buybacks (€1.7 billion).<sup>35</sup> In total, for every euro invested in renewable energy, more than three euros are distributed through dividends and share buybacks.

Repsol plans to invest in average €3.8 billion per year from 2021 to 2025, including €2.6

billion in oil and gas. €1.6 billion will be invested in its upstream segment, of which 71% will be dedicated to new fields or redevelopment and 9% dedicated to exploration. €1 billion per year is dedicated to low carbon generation that include renewables energy as well as CCGT. Through 2030, Repsol's growth CAPEX should be dedicated to the renewable part as Repsol plans to grow its renewable energy and to maintain its cogenerations and CCGT capacity.<sup>36</sup>

It is hard to assess the increase in CAPEX dedicated to renewables because of the lack of detail on Repsol's short-term CAPEX

disclosure. However it is clear CAPEX will mainly be dedicated to oil and gas, with renewables representing no more than 25% of CAPEX in total by 2025.

Due to its CAPEX strategy, Repsol aims to have a renewable capacity of 6 GW by 2025 and 20 GW by 2030. Its strategy relies on an acquisition strategy of assets and companies. Assuming the company meets its targets, **the maximum renewables share of the company's energy supply mix would remain in 2030 under 22%.**

## Breakdown of Repsol's 2022 Cash-flows



Source: Repsol 2022 unaudited financial results



c. Decarbonization targets and emissions trajectory

Repsol pledged mitigation targets for 2025 and 2030 using a 2016 baseline, measured in intensity terms, on scope 1, 2 and 3 for 2025 and targets measured in intensity and absolute terms on scope 1 and 2 and 3 for 2030.

Using the IEA energy supply data from the NZE and APS in the WEO 2022, Reclaim Finance has calculated Repsol's GHG emissions overshoot.

We have assumed that Repsol will follow the IEA scenario pathways for total global energy supply. In the NZE, total energy supply decreases by 9.1% between 2022 and 2030 while in the APS, it increases by 1.6% in the same period. Our analysis is likely to be conservative: Repsol does provide indications regarding its projection for its 2030 energy supply, aiming for an oil and gas production target significantly higher than what is forecasted in the NZE.

In our hypothesis, we assume that Repsol

Reaches its targets with a decrease of its scope 1, 2 and 3 carbon intensity emissions by 15% by 2025 and its scope 1, 2 and 3 carbon intensity emissions by 28% by 2030.

Repsol relies on CCS to support its decarbonization plan: 4% of the company carbon intensity reduction by 2030 would be achieved using them. As highlighted by the IPCC, CCS in the energy sector still has limitations to overcome before it can be scaled up and comes with limited potential and prohibiting costs. Too high a reliance

on such mitigation approaches represents a material risk factor for the company's ability to reach its decarbonization targets.<sup>37</sup>

**By 2030, Repsol's targeted carbon intensity would remain respectively 30.0% and 16.3% higher than in the NZE and APS. If it meets targets and reduces its energy supply in line with the IEA scenarios, Repsol will have overshoot its share of the 2023-30 carbon budget by 29.9% under the NZE, and by 16.3% under the APS.**

Repsol’s pledged mitigation targets

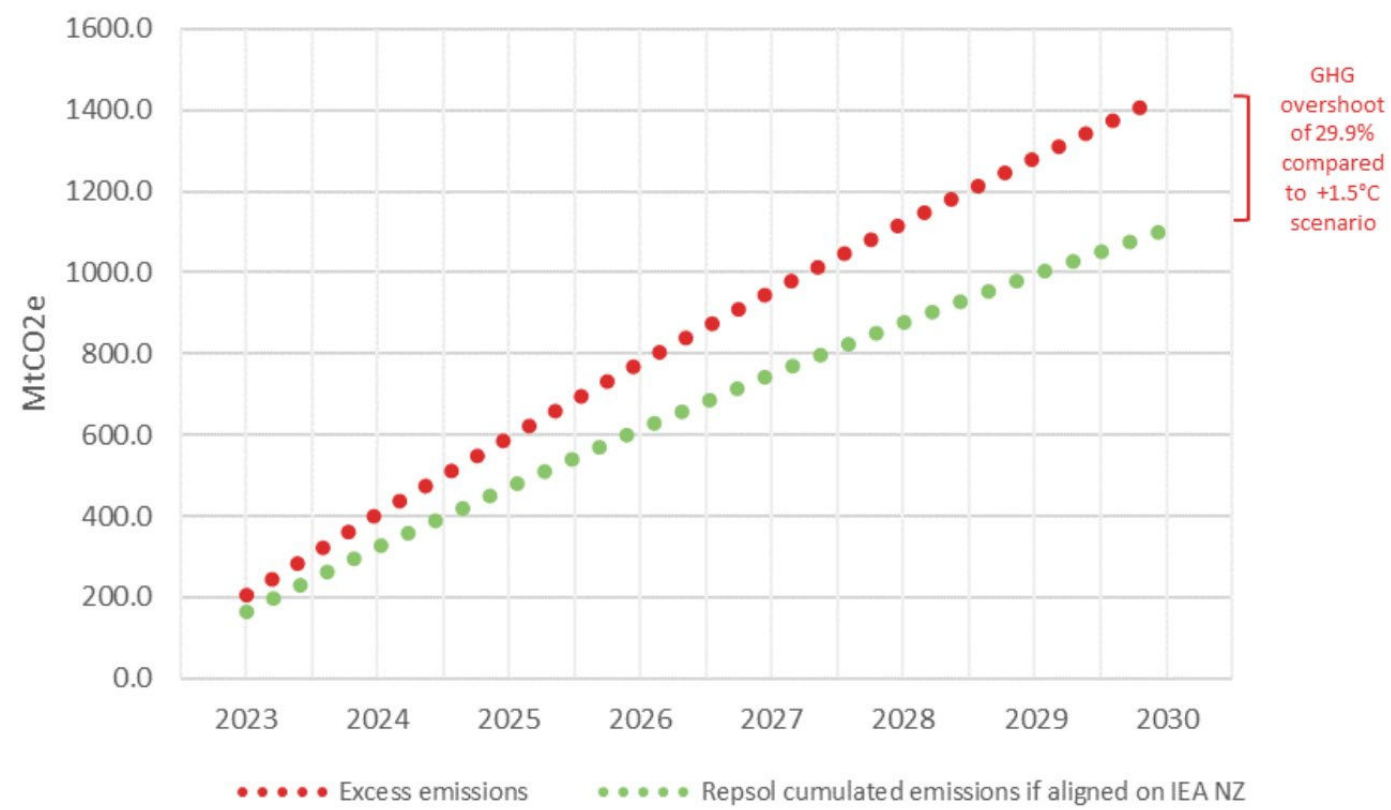
Base year	Target year	Reduction target	Net target	Geographical scope	Emission scope	Emission Type
2016	2025	-7%	Yes	World	1 & 2 & 3	Intensity
2016	2030	-55%	Yes	World	1 & 2	Absolute
2016	2030	-30%	Yes	World	1 & 2 & 3	Absolute
2016	2030	-14%	Yes	World	1 & 2 & 3	Intensity

Source: Repsol’s website and reports, as of end of 2022



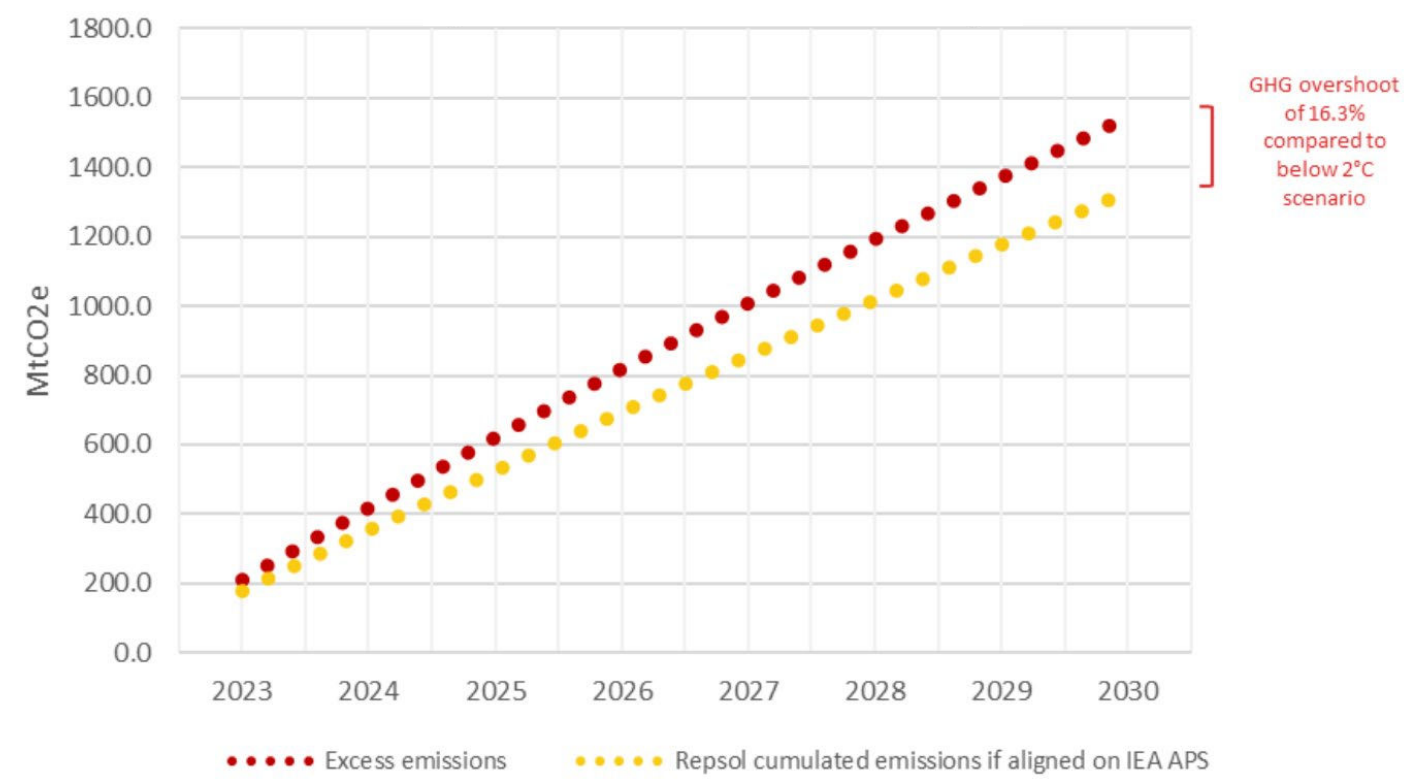


**2023-2030 Repsols GHG emissions compared to the NZE pathway**  
(in million tons of CO<sub>2</sub>e to 2030)



*Calculations based on data from company's disclosed data and scenario data taken from IEA's NZE and APS scenarios. See the methodology section below for more details on these calculations.*

**2023-2030 Repsol's GHG emissions compared to the below 2°C pathway**  
(in million tons of CO<sub>2</sub>e to 2030)



*Calculations based on data from company's disclosed data and scenario data taken from IEA's NZE and APS scenarios. See the methodology section below for more details on these calculations.*



## References

1. Using the Urgewald 2022 [Global Oil & Gas Exit List](#). The list was constructed based on September 2022 Rystad data.
2. Repsol, [Repsol adjusts its results to become a net zero emissions company by 2050](#), 2020.
3. Using the Urgewald 2022 [Global Oil & Gas Exit List](#). The list was constructed based on September 2022 Rystad data.
4. Calculations made using Rystad Energy Ucube with data from March 2023.
5. Repsol, [2022 Integrated management report](#), 2023
6. Defined as the sum of the assets under construction and the assets for which the FID has been reached.
7. Repsol, [Repsol increases its targets for renewable generation and emission reductions](#), 2021.
8. Repsol, [Delivering value through energy transition](#), 2022.
9. Repsol, [2021-2025 strategic plan presentation](#), 2021
10. Repsol stated that “We are currently pursuing new technological developments that will allow us to advance the energy transition in an orderly and sustainable manner: Carbon Capture, Storage and Use (CCUS) technology” on Repsol’s [Technology, one of the main ways to curb climate change](#) webpage.
11. IPCC estimates between 500 and 3,600 million metric tons of CO<sub>2</sub> could be removed annually through planting new forests by 2050. See Greenpeace, [Net expectations - Assessing the role of carbon dioxide removal in companies’ climate plans](#), 2021.
12. Nature-Based Solutions
13. Combined Cycle Gas Turbine
14. Repsol, [Stepping up the transition - Driving growth and value](#), 2023
15. To meet this criterion, the company must disclose the publicly available 1.5°C no or low overshoot pathway it uses to set its targets. While all oil and gas companies somewhat rely on 1.5°C pathways to conduct analysis and inform their decision making, this does not mean that the targets set are coherent with such a pathway.
16. Repsol indicates that “In this decade, until 2030, Repsol will follow a decarbonization pathway that is based on specific business targets proposed in its Strategic Plan (November 2020) and bolstered in October 2021. In the long term (2031-2050), the decarbonization pathway is built on Company projections considering the environmental conditions of the three IEA scenarios [NZE, SDS and APS]” in its [2022 Integrated management report](#), 2023.
17. IEA, [Net Zero by 2050](#), 2021.
18. IEA, [World Energy Outlook 2022](#), 2022.
19. Fracking, Ultradeep water and Arctic oil and gas respectively represent 38% and 24% and 16.7% of Repsol’s oil and gas resources currently being developed or under field evaluation. Find out issues related to some unconventional oil and gas in the [Five of the riskiest oil and gas sectors](#), 2021.
20. More details on the area detailed by Urgewald on the [Guyana offshore](#) webpage.
21. IPCC, [Climate Change 2022: Mitigation of Climate Change](#), 2022.
22. For example, the UN High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities, [Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions](#), November 2022; Race to Zero Expert Peer Review Group, [Interpretation Guide. Version 2.0](#), June 2022, para 5b; Net-Zero Asset Owner Alliance (NZAOA), [Position on the Oil and Gas Sector](#), March 2023.
23. IEA, [Net Zero by 2050 Data Explorer](#), 2021

24. OECM, [Limit global warming to 1.5°C](#), 2022

25. NGFS, [Climate scenarios](#)

26. The International Institute for Sustainable Development (IISD) filtered the various 1.5°C scenarios provided by the IPCC to ensure they do not rely on volumes of negative emission that are not coherent with the IPCC’s own realistic potentials. These “limited negative emissions” pathways are analyzed in the report [Lighting the Path](#).

27. Repsol, [Stepping up the transition - Driving growth and value](#), 2023

28. Repsol, [Stepping up the Transition, Driving growth and value](#), 2020

29. To model IEA NZE production trajectory and replicate it by company, we did not integrate merger and acquisition operations as it may increase the production rate due to acquisition of fields that have obtained their FID before 2022.

30. Urgewald, [Global Oil and Gas Exit List](#), November 2022.

31. Urgewald, [Global Oil and Gas Exit List](#), November 2022.

32. The IEA 9 for 1 ratio includes renewable energy, efficiency and end-use but also biomass and other activities (like CCS) that could lead to some environmental harm and/or raise sustainability questions. Relying on a different scope of clean energy investment, BloombergNEF estimates that \$4 must be spent on clean energy for every dollar spent on fossil fuels by 2030, based on energy supply only.

33. Repsol, [Q4 & FY 2022 Results](#), 2023

34. Repsol allocated €3.152 billion to oil and gas, including €2.127 billion to oil and gas upstream activities of which €319 million in exploration. €1.025 billion were dedicated to other oil and gas activities that include refining, petrochemical activities, and trading activities.

35. Repsol provided its shareholders with €2.741 billion, through dividend payment (€1.027 billion) and share buybacks (€1.714 billion).

36. Repsol, [Stepping up the Transition, Driving growth and value](#), 2020

37. IPCC, [Climate Change 2022, Mitigation of Climate Change, Summary for Policymakers](#), page 40, 2022.

## Useful links

[Methodology](#) - [Glossary](#)

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## **ASSESSMENT OF REPSOL'S CLIMATE STRATEGY**

Reclaim Finance is an NGO affiliated with Friends of the Earth France. It was founded in 2020 and is 100% dedicated to issues linking finance with social and climate justice. In the context of the climate emergency and biodiversity losses, one of Reclaim Finance's priorities is to accelerate the decarbonization of financial flows. Reclaim Finance exposes the climate impacts of financial players, denounces the most harmful practices and puts its expertise at the service of public authorities and financial stakeholders who desire to bend existing practices to ecological imperatives.

**[contact@reclaimfinance.org](mailto:contact@reclaimfinance.org)**

