Low Carbon Day
Repsol decarbonization pathway: metrics & targets

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#RepsolLowCarbonDay
Decarbonization is in Repsol’s DNA

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Repsol’s 1st Climate Position</td>
</tr>
<tr>
<td>2006</td>
<td>1st O&amp;G to support the Kyoto Protocol</td>
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<tr>
<td>2007</td>
<td>1st GHG Emissions Reduction Plan 2006-2013</td>
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<td>2008</td>
<td>1st GHG emissions verification under ISO 14064-1 standard</td>
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<tr>
<td>2009</td>
<td>Repsol Clean Energy Ventures created</td>
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<tr>
<td>2010</td>
<td>Support Paris Agreement. Paris Pledge for Action</td>
</tr>
<tr>
<td>2011</td>
<td>Board Sustainability Committee</td>
</tr>
<tr>
<td>2012</td>
<td>OGCI</td>
</tr>
<tr>
<td>2014</td>
<td>1st O&amp;G company to commit to NZE 2050</td>
</tr>
<tr>
<td>2015</td>
<td>Methane Guiding Principles</td>
</tr>
<tr>
<td>2016</td>
<td>Internal carbon pricing</td>
</tr>
<tr>
<td>2017</td>
<td>1st O&amp;G company issuing a green bond</td>
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<tr>
<td>2018</td>
<td>ZRF by 2030 World Bank</td>
</tr>
<tr>
<td>2019</td>
<td>OGMP</td>
</tr>
<tr>
<td>2020</td>
<td>CII reduction targets (w/ Scope 3) 2020: 3% 2040: 40%</td>
</tr>
<tr>
<td>2021</td>
<td>SP2021-2025 (w/ reinforced decarb pathway)</td>
</tr>
<tr>
<td>2025</td>
<td>3rd GHG emissions reduction plan 2021-2025</td>
</tr>
</tbody>
</table>

Decarbonization pathway with interim targets
Leading ESG company

- Transition Pathway Initiative: Top grade (2020)
- Sustainalytics: 2/47 - ESG Risk Rating Ranking (Integrated O&G 2021)
- MSCI: ESG rating - 1st quintile (2021)
- CDP: Top grade (2020)

36.2%
Repsol's institutional shares managed by ESG investors...

16%
Global Oil and Gas average

ESG Reporting Roadmap

Legal requirements
- Spanish Law 11/2018
- EU Taxonomy on Sustainable Finance (3)
- Regulatory Technical Standards (4)
- Spanish Climate Change Law

Reporting frameworks
- GRI
- SASB
- TCFD
- SCM (WEF-IBC-Big4)

(1) More than 400 companies included in the average
(2) Non-financial information in annual Integrated Management Report to Repsol's AGM
(3) Mandatory reporting in IMR 2021 for taxonomy eligible activities, in IMR 2022 for taxonomy aligned activities
(4) Mandatory reporting in 2022 for financial entities
A science-based decarbonization pathway and methodology: a package of KPI’s with CII and more…

**Carbon Intensity Indicator (CII) as key KPI**

- Scope 3 based on primary energy
- In-house “substitution method” for renewables to account just for actual emissions avoided
- Interim CII targets, including short term (2020-2025-2030-2040)

- Other specific KPIs and targets: CO₂/barrel E&P, hydrogen & bio volumes, renewable GW, …
- Transparent additional reporting as requested to allow homogeneous benchmarking vs. peers

(1) New Ambition November 2020 to accelerate the path to Net zero emissions
Push (profitable) decarbonization to the limits

Metrics and targets

- Absolute emissions
- More detailed long-term scenario analysis
- Scope 3 methodology
- “Avoided” emissions

Capital allocation to low-carbon

Reinforced climate governance

What more do our ESG stakeholders request?
What may our ESG stakeholders expect from us? (I)

Metrics & Targets

A further reinforced decarbonisation pathway (CII), supported by business ambition

- Renewable H₂
- Renewable power generation

New absolute emissions targets 2030 and methane

- Scope 1+2 operated
- Scope 1+2+3 (net, equity)
- Methane emissions intensity E&P

More, better reporting

- Scenario analysis details
- Continue delivering on our reporting roadmap milestones
- Proactive participation: SBTi, Net Zero Standard for O&G (IIGCC), benchmarks (CA100+, …)
- CII based on sales
What may our ESG stakeholders expect from us? (II)

Metrics & targets: scenario analysis

**Central scenarios**

- Short-Medium term (2021-2030)
  - Strategic Plan
  - E&P
  - Industrial
  - Low Carbon Generation

- Long-term (2031-2050)
  - World oil & gas demand (SDS and NZE)
  - EU transportation (EU Green Deal)
  - Regional Renewable growth (SDS and NZE)

**Long-term Central Scenarios**

- Deep Oil Decarbonization Scenario (Low Carbon Fuels)
- Electrification Scenario
- Hydrogen Scenario
What may our ESG stakeholders expect from us? (III)

Metrics & targets: further reinforced decarbonization path (CII)

Carbon Intensity Indicator reduction targets [gCO₂/MJ]

CII reduction breakdown by lever 2030 vs. 2016 (%)
What may our ESG stakeholders expect from us? (IV)

New metrics & targets: absolute emissions

New target: 55% reduction operated emissions (scope 1+2) by 2030
New target: 30% reduction net emissions (scope 1+2+3) by 2030

Emissions Scope 1+2 reduction breakdown by decarbonization lever (MtCO₂e/y)

- 2016 Efficiency
- 2016 E&P Portfolio Transformation
- 2016 Renewable Hydrogen
- 2016 Legacy Activity
- 2016 CCGT
- 2016 Other
- 2030

Reduction 2025 vs 2017 (%)

* Operated methane emissions / marketed gas (% v/v)
Further reinforced climate governance

- The Board to submit climate strategy and targets to an advisory vote in the 2022 AGM
- Updated Association evaluation and report (July 2021)

Capital allocation

- In-house methodology for capex alignment guidance
  - In place since 2021 (as committed Dec.2019)
- Internal carbon price (Carbon incentive for new investments)

What may our ESG stakeholders expect from us? (V)
Climate governance & Capital allocation

<table>
<thead>
<tr>
<th>Baseline Worldwide</th>
<th>European Union*</th>
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<tbody>
<tr>
<td></td>
<td>2025</td>
</tr>
<tr>
<td>New ($/t)</td>
<td>60</td>
</tr>
<tr>
<td>Current ($/t)</td>
<td>40</td>
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</tbody>
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* Based on EU ETS projections. For other regulated markets that may evolve, a similar methodology would be applied.
Summary: Renewed decarbonization ambition

Carbon Intensity Indicator reduction targets [gCO₂/MJ]

<table>
<thead>
<tr>
<th>Year</th>
<th>OLD</th>
<th>NEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>-10%</td>
<td>-12%</td>
</tr>
<tr>
<td>2025</td>
<td>-20%</td>
<td>-26%</td>
</tr>
<tr>
<td>2030</td>
<td>-40%</td>
<td>-50%</td>
</tr>
<tr>
<td>2040</td>
<td>-55%</td>
<td></td>
</tr>
<tr>
<td>2050</td>
<td>0.20%</td>
<td></td>
</tr>
</tbody>
</table>

Reporting, Governance, Capital allocation

- Scenario analysis, benchmarkable metrics
- Advisory vote on climate strategy in the 2022 AGM
- Higher internal carbon price for new investments

Methane intensity reduction 2025 vs 2017 (%)

OLD | NEW
--- | ---
-25% | -85%

Target intensity* 0.20%

* Operated methane emissions / marketed gas (% v/v)
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