Low Carbon Day
Renewable Generation

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#RepsolLowCarbonDay
Introduction: Track record

Strategy: Fast-growth sustainable business model
- Strategic Guidelines
- Pipeline Characterisation
- Updated Targets
- Value addition & Targeted Returns
- Asset Rotation Rationale

Deep dive in Delta I Project
01. Introduction
Track record
01. Introduction Track record

What we have achieved so far: over delivering on our targets

Launch organic growth
- Build-up of a material portfolio of c.11 GW of wind and solar projects in Spain

Build and put in operation pipeline
- 1.7 GW operational by YE 2021 with a clearly defined operating model

Create international platforms
- Developed platforms in US and Chile with over 30 GW of projects in different stages of development

Develop capabilities
- Top talent hired from leading Renewables players and in-house top resources

1.7 GW
- Operating Capacity, 2021YE

4.7 GW
- Under construction, secured & high visibility projects

+20 GW
- Development pipeline with potential COD2 <2025YE

2501 Employees
- In renewables

20+ years experience
- Management team

+15,000 MW
- Developed

Management team

(1) As of July 2021
(2) Commercial Operation Date
De-risking the ambition

Hecate acquisition

Differential element to achieve Repsol’s long term objectives of generation capacity and internationalization of this business in one of the largest, fastest growing and most attractive markets at a relatively modest upfront capital commitment with significant option value and upside potential allowing Repsol to create a high growth renewable platform with strong development capabilities in the US.

Step into the USA Renewable Energy Market to become an integrated developer and operating player

- Represents the first step of Repsol into the US renewable market, complementing our Renewables’ strategy and paving the way the construct a Repsol OpCo in the U.S.

Disciplined Acquisition of a minority stake (40%) of Hecate Energy, leading independent developer with a portfolio of more than 40 GW of utility-scale PV solar and battery storage projects in the U.S.

- Experienced and proven management team
- One of the largest, and regionally diversified, solar PV portfolios in the U.S.
- 16.8 GW pipeline (Early and mid term projects) and 4.3 GW Storage Capacity through Hecate Grid

Participation in the development (being able to influence and decide EPC and PPA before the transfer) phase while maintaining preferential position to build the Renewable position in the USA

- Access to Hecate pipeline (at Repsol sole discretion)
- Parallel incorporation of Repsol OpCo to develop, construct and operate new GW in USA
- Potential full acquisition in year 3 at Fair Market Value
02.

**Strategy**: Fast-growth sustainable business model
Vision: To become a global leading integrated player in the renewable business targeting a size of 6 GW in 2025 and 20 GW by 2030 from a modest starting position.
Fast-growth sustainable business model

In line with our nature as an industrial company and supported by leading management team with robust track-record, the renewables business will be based on an integrated approach through the value chain based on top capabilities in operations and management.

02. Strategy: Fast-growth sustainable business model

Strategic Guidelines

Front-loaded value generation

Core decisions
- PPA¹ Origination
- Project Finance
- LCOE² Optimization
- Asset Rotation

Fast-growth sustainable model

Fast Growth
- Targeted OECD Countries
- Scalable platforms
- Asset Rotation

Pipeline availability to guarantee sustainability

(1) Power Purchase Agreement
(2) Levelized Cost of Energy
02. Strategy: Fast-growth sustainable business model

Supported by a sizeable and diversified pipeline of renewable projects …

Renewables operating + pipeline capacity (GW) September 2021
02. Strategy: Fast-growth sustainable business model

... Repsol was able to update the strategic growth targets

Notes: Assuming Hydro is entirely in Spain and considering 100% in Spain and International (excl. Chile) and 50% JV stake in Chile; US Solar includes Solar PV plus Battery Storage.
### 02. Strategy: Fast-growth sustainable business model

#### Value addition & Targeted returns: Strong capabilities through the value chain driving operational excellence resulting in superior value creation

<table>
<thead>
<tr>
<th>Original Project IRR</th>
<th>Project development</th>
<th>Energy &amp; risk management</th>
<th>Engineering, procurement &amp; construction</th>
<th>Structuring and financing</th>
<th>Operations</th>
<th>Portfolio management</th>
<th>Best-in-class IRR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>De-risked unlevered IRR</td>
<td>Land and interconnection fees management</td>
<td>Ability to sign long term PPAs with utilities and C&amp;I</td>
<td>Access to different debt and equity products at any point in time</td>
<td>Predictive maintenance</td>
<td>Rotation of stakes in selected projects to lower cost of capital investors, crystallizing value</td>
<td>Repsol Renewables target return</td>
</tr>
<tr>
<td></td>
<td>Unique access to early stage projects</td>
<td>Development of greenfield projects</td>
<td>Strategy focused on customer needs</td>
<td>Strategy focused on customer needs</td>
<td>Repowering</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internal energy assessment to de-risk projects</td>
<td></td>
<td>Strong management of merchant risk and ancillary services</td>
<td>Strong management of merchant risk and ancillary services</td>
<td>Asset life extension</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Centralised market team with presence in physical and financial markets</td>
<td>Centralised market team with presence in physical and financial markets</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: EPC - Engineering, Procurement and Construction; HSE - Health, Safety and Environment; C&I – Corporates and Industrials
02. Strategy: Fast-growth sustainable business model

Asset Rotation Rationale

Repsol will capture the yield compression between the development stage and fully commercial and operational projects by selling down stakes to low-cost-of-capital investors.

Substantial value creation over small period of time in the asset life-cycle

Core decisions
- PPA\(^1\) Origination
- LCOE\(^2\) Optimization
- Project finance
- Asset Rotation

Project Life-cycle
- Greenfield to Development
- Final Investment Decision (FID) / Ready to Build (RtB)
- Commercial Operation Date (CoD)

Time
- 3-5 years
- ~1 year
- > 30 years

Project risk (no PPA)
Project risk (with PPA)
Project cost
Project value

Identification and evaluation of opportunities to feed in the pipeline to guarantee sustainability

Adequate portfolio management to support the fast-growth sustainable model

Higher value addition & higher risk
Levered IRR levels ~ double digit

Lower value addition & lower risk
Levered IRR levels ~ single digit

Will maintain operation, with industrial vocation, to provide a high-quality service to the buyer of the cash flows

(1) Power Purchase Agreement
(2) Levelized Cost of Energy
03.
Deep Dive in Delta I Project
Location & Main Highlights

03. Deep dive in Delta I Project

Main highlights

- The wind portfolio includes 8 farms, with an installed capacity of 335 MW and fully operational since Mar-21. The portfolio is located in the Aragon region, a strategic area with abundant wind resources.
- Cash flows are secured through PPAs with highly competitive and attractive terms and conditions, with Repsol as the main off-taker.
- Wind farms in the Portfolio are in optimal conditions for hybridization with solar PV technology, estimated to be implemented by 2023.
- Top-tier suppliers and service providers such as General Electric, Elecnor or Eiffage, among others.

Location

- **Aguasvivas** (236 MW)
  - Located in Zaragoza
  - Number of projects: 6
  - Commercial Operation Date: Feb-21
  - Installed Capacity (MW): 236
  - Energy Production P50 (MWh): 651,463
  - Availability (%): 97%
  - Power Purchase Agreement: Yes

- **Montetorrero** (99 MW)
  - Located in Zaragoza
  - Number of projects: 2
  - Commercial Operation Date: Dec-20 – Mar-21
  - Installed Capacity (MW): 99
  - Energy Production P50 (MWh): 322,981
  - Availability (%): 97%
  - Power Purchase Agreement: Yes

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(1) Commercial Operation Date
(2) Power Purchase Agreement
Safety & Environment: Working to protect the safety of the People and the Environment in every phase of each and all projects

Safety Measures examples:

- Health and Safety Coordinator always on site to guarantee compliance with the Safety Plan and that the work is carried out with high safety standards
- Procedures for operational and risk control
- Control of protective equipment
- Emergency drills to be prepared for possible scenarios

Environment Measures examples:

- Implementation of bird detection and deterrence systems to avoid collisions with aero-generators
- Biodiversity protection measure: reintroduction of Bonelli’s eagle (a species in danger of extinction since 2005), in collaboration with the Biodiversity General Direction of the Government of Aragon and conservation associations
- Weekly monitoring of mortality and use of the birdlife space
- Restoration plan minimizing impact on flora
- Efficient control and management of waste, erosive processes and water regime
## Project Characterization

### Resource information

Project is located in a favourable resource area with higher equivalent hours than market average.

<table>
<thead>
<tr>
<th>Net equivalent hours</th>
<th>Delta I</th>
<th>Market Average</th>
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<tbody>
<tr>
<td></td>
<td>2,964</td>
<td>2,100</td>
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</table>

## Technical description

### Montetorrero Cluster

<table>
<thead>
<tr>
<th>COD</th>
<th>Dec-20 to Feb-21</th>
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</thead>
<tbody>
<tr>
<td>Number of plants</td>
<td>2</td>
</tr>
<tr>
<td>Peak capacity (MW)</td>
<td>98.8</td>
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<tr>
<td>Substation</td>
<td>SET Montetorrero</td>
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<tr>
<td>P50 Gross production</td>
<td>322.5 GWh</td>
</tr>
<tr>
<td>Turbine type</td>
<td>GE 130</td>
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<tr>
<td>Number of Turbines</td>
<td>26</td>
</tr>
<tr>
<td>Turbine Manufacturer and O&amp;M</td>
<td>GE</td>
</tr>
<tr>
<td>EPC and BoP O&amp;M</td>
<td>Elecnor</td>
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<tr>
<td>Asset Management and Market Access</td>
<td>Repsol</td>
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</table>

### Aguasvivas Cluster

<table>
<thead>
<tr>
<th>COD</th>
<th>Oct-20 to Jan-21</th>
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<tbody>
<tr>
<td>Number of plants</td>
<td>6</td>
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<tr>
<td>Peak capacity (MW)</td>
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<tr>
<td>Substation</td>
<td>SET Las Majas VII</td>
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<tr>
<td>P50 Gross production</td>
<td>669.1 GWh</td>
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<tr>
<td>Turbine type</td>
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<tr>
<td>Number of Turbines</td>
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<tr>
<td>Turbine Manufacturer and O&amp;M</td>
<td>GE</td>
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<tr>
<td>EPC and BoP O&amp;M</td>
<td>Eiffage</td>
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<td>Asset Management and Market Access</td>
<td>Repsol</td>
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</tbody>
</table>
03. Deep Dive in Delta I Project

Strategy & Profitability

Strategy progress

To date, it has been fully funded with equity and shareholder loans granted by Repsol.

Will be the first asset to fully implement this strategy.

Indicative Profitability

<table>
<thead>
<tr>
<th>Core decisions</th>
<th>Status</th>
</tr>
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<tbody>
<tr>
<td>PPA Origination</td>
<td>✔️ In progress</td>
</tr>
<tr>
<td>Project finance</td>
<td></td>
</tr>
<tr>
<td>LCOE Opt.</td>
<td>✔️ In progress</td>
</tr>
<tr>
<td>Asset Rotation</td>
<td></td>
</tr>
</tbody>
</table>

(1) Assuming Q2 2021 Batonga Central price scenario
Repsol has, in a short time, grown to a substantial business supporting energy transition ambitions

Geographical footprint of Repsol Renewables

Source: Company information
Notes:
(1) Greenfield projects with interconnection rights, including solar hybridization projects in wind portfolio
01. Introduction Track record

De-risking the ambition

Hecate acquisition

... allowing Repsol to create a high growth renewable platform with strong development capabilities in the US

Well-diversified footprint across the most attractive US energy markets...

- Solar PV 13.8 GWdc
- Batteries 3.0 GWdc

Early and mid term projects

- 16.8 GWdc

... and a strong track record developing and selling projects

- 2,837 MW Projects under negotiation PPA pending to be sold
- 1,997 Cumulative MW projects sold with PPA
- 631 Cumulative MW projects sold without PPA

1. As of May 2021