



SUSTAINABILITY DAY - 4th November 2019

# Low Carbon Business: Can an old dog learn new tricks?



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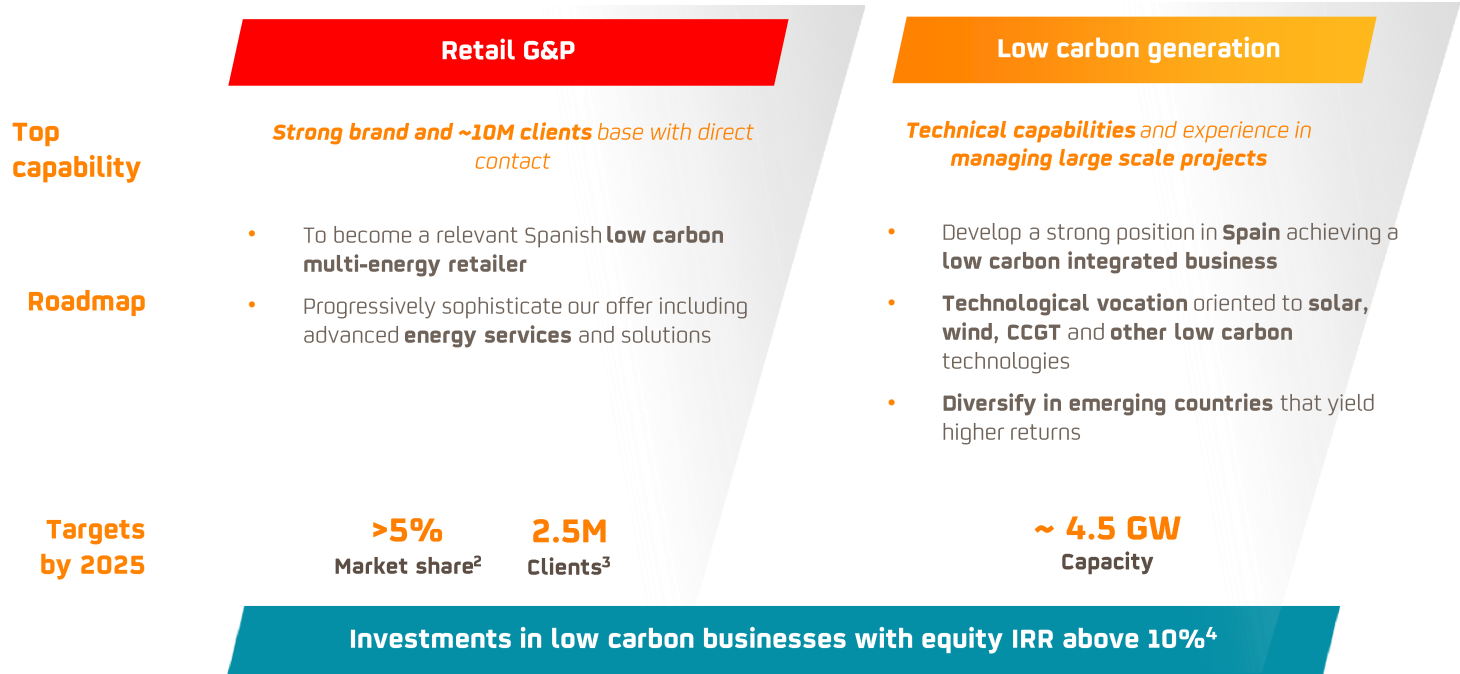
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# Strategic Update 2018 | ...we communicated a vision to develop a profitable low carbon generation business



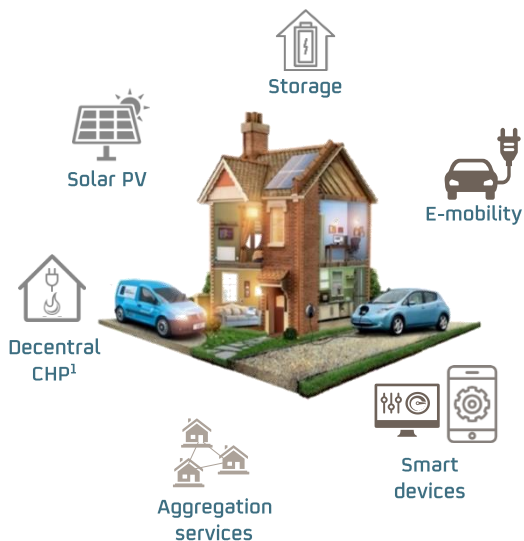
**We promised to do something about it. Did we?**

1. Spain market share including our refineries' consumption; 2. Spain market share in number of clients; 3. Not adjusted for dual clients. 4. Assuming financial leverage of ~50%

# Retail is not just an opportunity

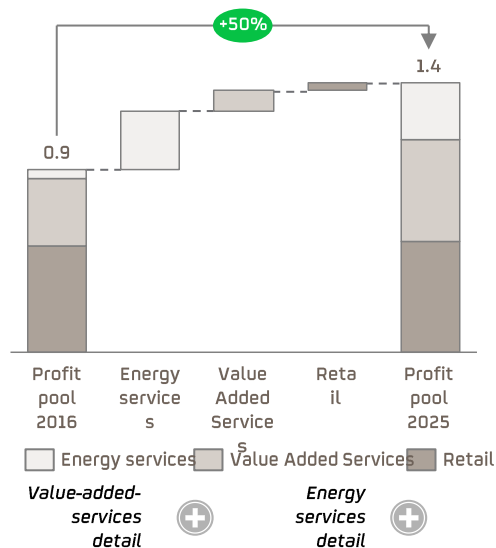
Here mobility – our core – meets utility, meets IoT, meets renewables, meets storage, meets “behind-the meter” ...

New energy services and solutions are developing around the client



Value of the profit pool expected to increase by ~50%

G&P Retail Profit Pool evolution - EBIT (B€)



1. Decentral combined heat and power. 2. Value Added Services Source: CNMC, company financials, DBK  
Note: 2017 figures not available

# Retail is the opportunity to deliver on our strengths

1

Leverage on our brand and channels to acquire customers and materialize our customer centric vision



**Largest service stations network**  
infrastructure allows high-value direct interactions



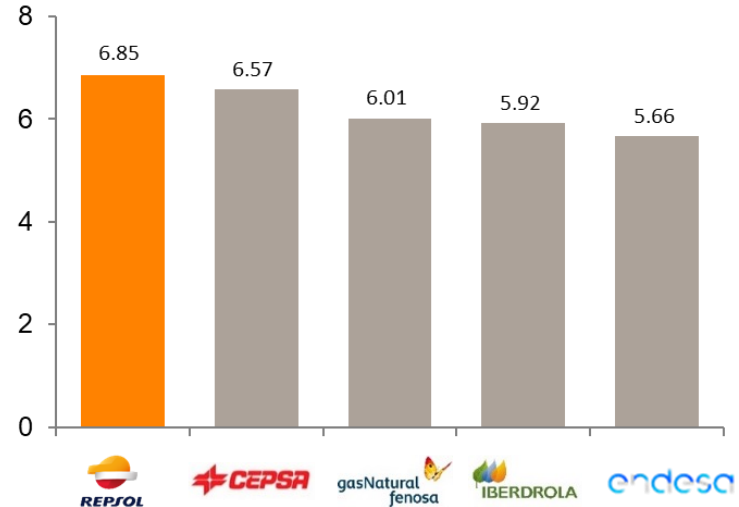
**Distribution channels** across Spain with loyalty, exclusivity and recurrent access to customer homes

- More than 200 bottled LPG distribution agencies
- Over 250 technical service partners for LPG
- Around 200 bulk diesel distributor



**Online channels** (e.g. Waylet) with a growing client base that is constantly connected to Repsol

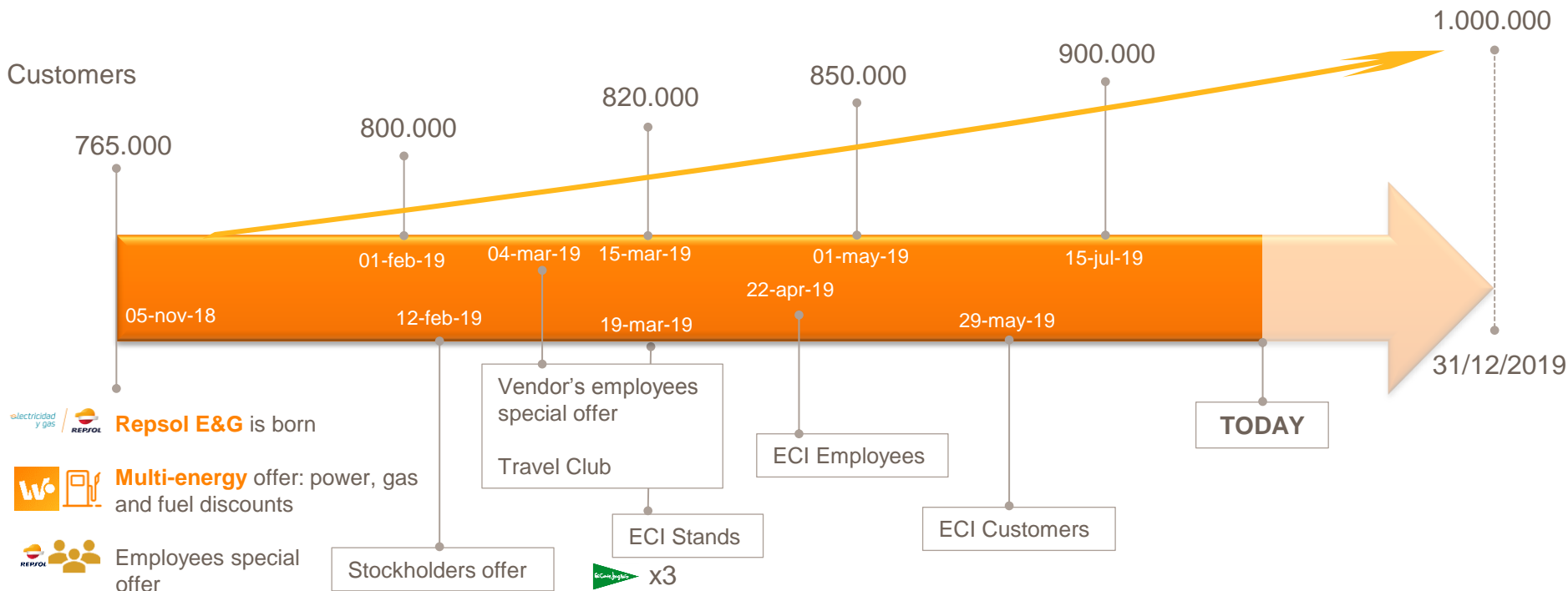
*On a 0-10 scale; how good is the image perception you have from these companies?*



In one year we reached 1 million E & G customers (33% growth)  
50% were already loyal customers from other Repsol channels  
15% of our Waylet customers have become Electricity & Gas customers

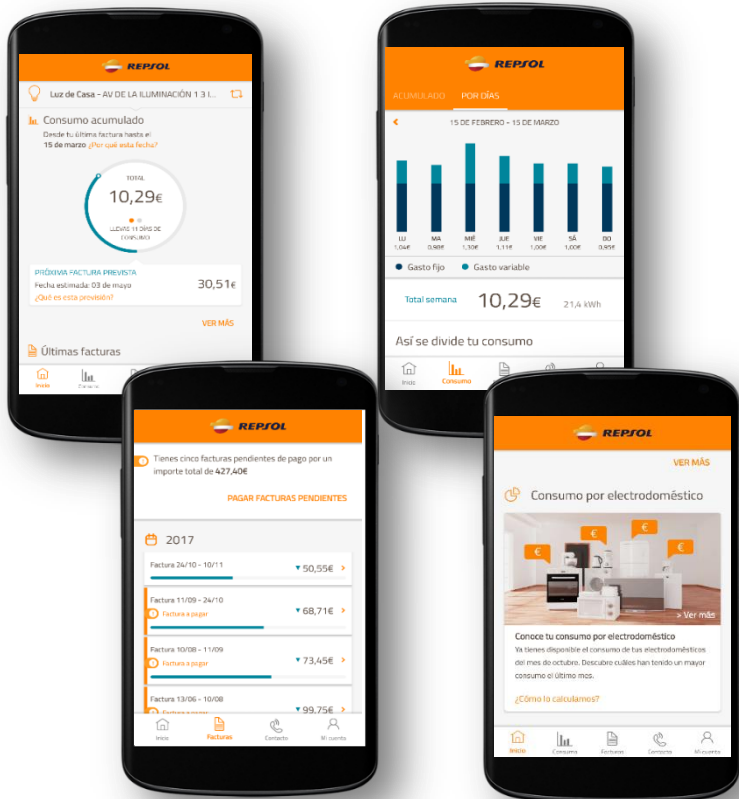
# Commercial creativity as main driver for growth

Our channels and brand are producing results with no signs of slow-down



# Technical Innovation Improving customer experience

One example: Repsol's IT capabilities deliver "Tu oficina Online" App



Check your **contracts**, **invoices** and **consumption**

- ✓ What you have consumed so far
- ✓ The details of your electricity & gas consumption in €: every day and every hour, **explained easily**.
- ✓ The estimated amount for your next invoice
- ✓ Your electricity consumption disaggregated by appliances
- ✓ If you do not have the **invoices payment** domiciled, you can pay them via bank card.
- ✓ You will **understand why your cost fluctuates**

# Technical Innovation Improving customer experience

Considered Best App by consumers



| Google Play Score | Apple Store Score |
|-------------------|-------------------|
| 4,4               | 4,0               |

Juana Diaz Sánchez

★★★★★ 3 de octubre de 2019



Esta muy bien detallado el consumo actual, la estimación es muy acertada y las facturas las tienes claras. Es lo que se espera de una app, clara y veraz.



| Google Play Score | Apple Store Score |
|-------------------|-------------------|
| 3,9               | 3,8               |
| 3,9               | 2,2               |
| 3,6               | 3,6               |

Silvia Hueros Garcia

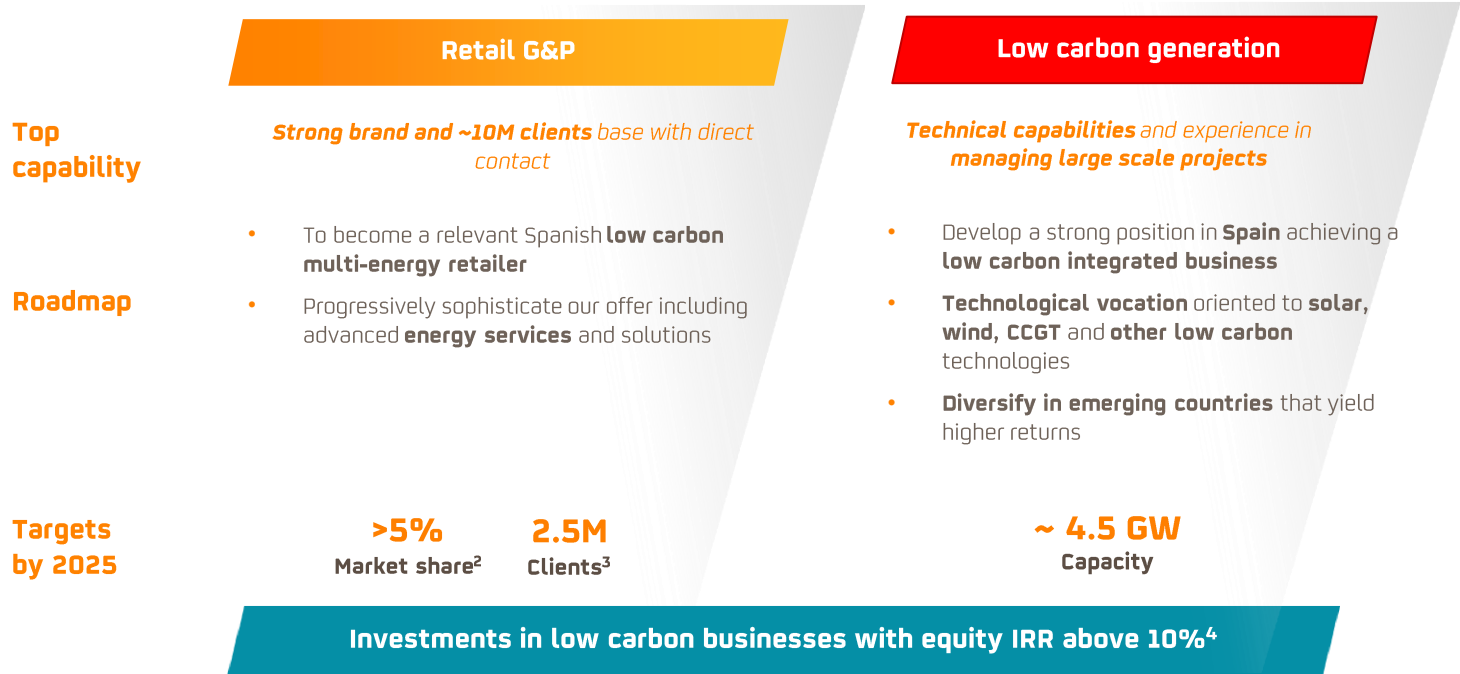
★★★★★ 6 de octubre de 2019



Te ayuda mucho a saber cuanto gastas y en qué lo gastas. Muchas gracias por la ayuda



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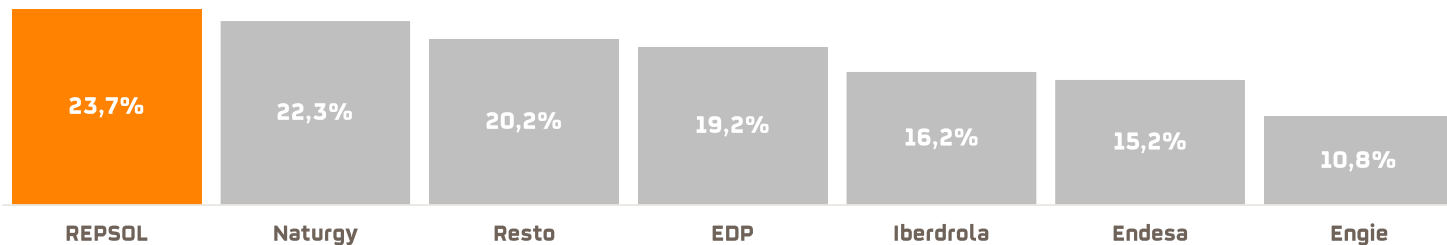
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# CCGT: Repsol leading in Capacity Factor in Spain<sup>1</sup>



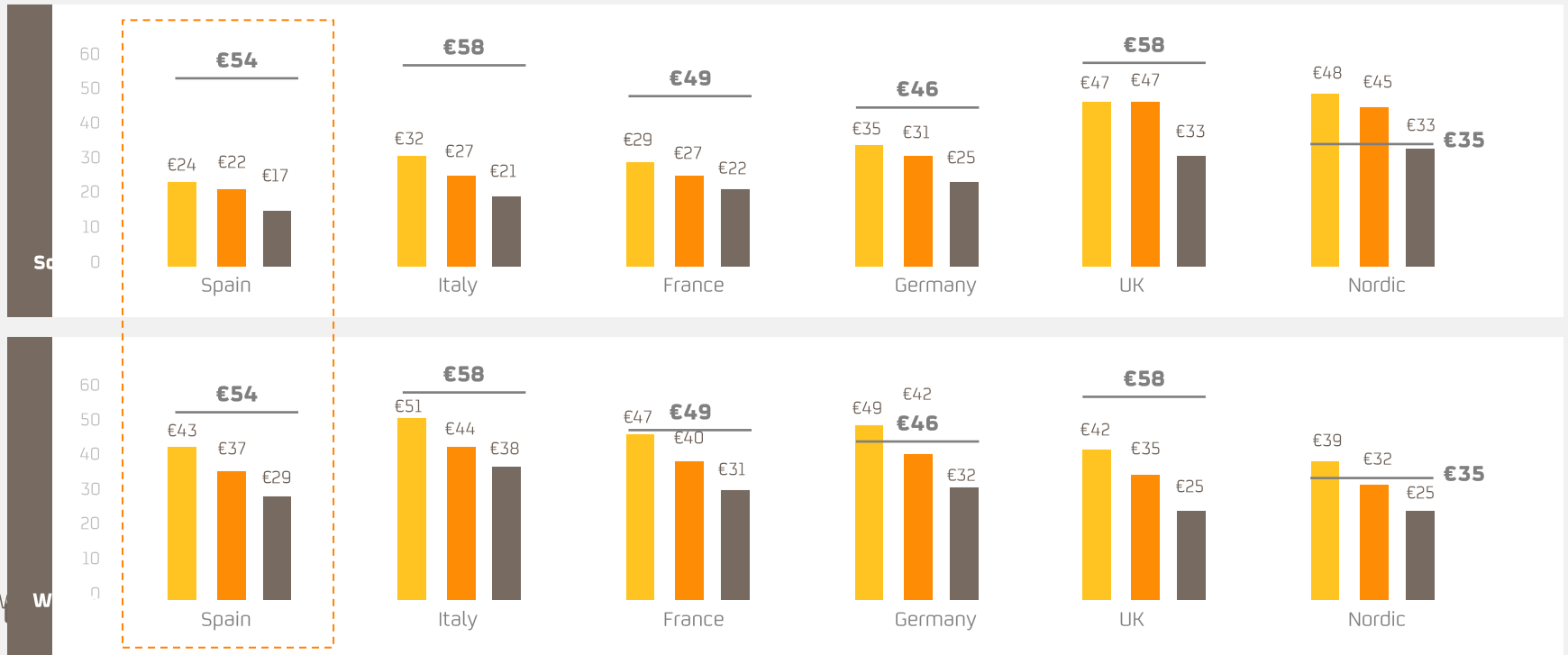
Capacity Factor (January to July 2019)



- The accumulated production of Repsol's CCGTs is the highest since 2009 due to:
  - *Contracting Forward Capacity, anticipating CCGT market recovery...*
  - *Over 100 operations of physical gas purchase, reducing supply costs*
  - *Operating in the Futures market for Power, CO2 and Gas*
  - *Capturing a premium over the daily market*

# Wind and solar don't need support.

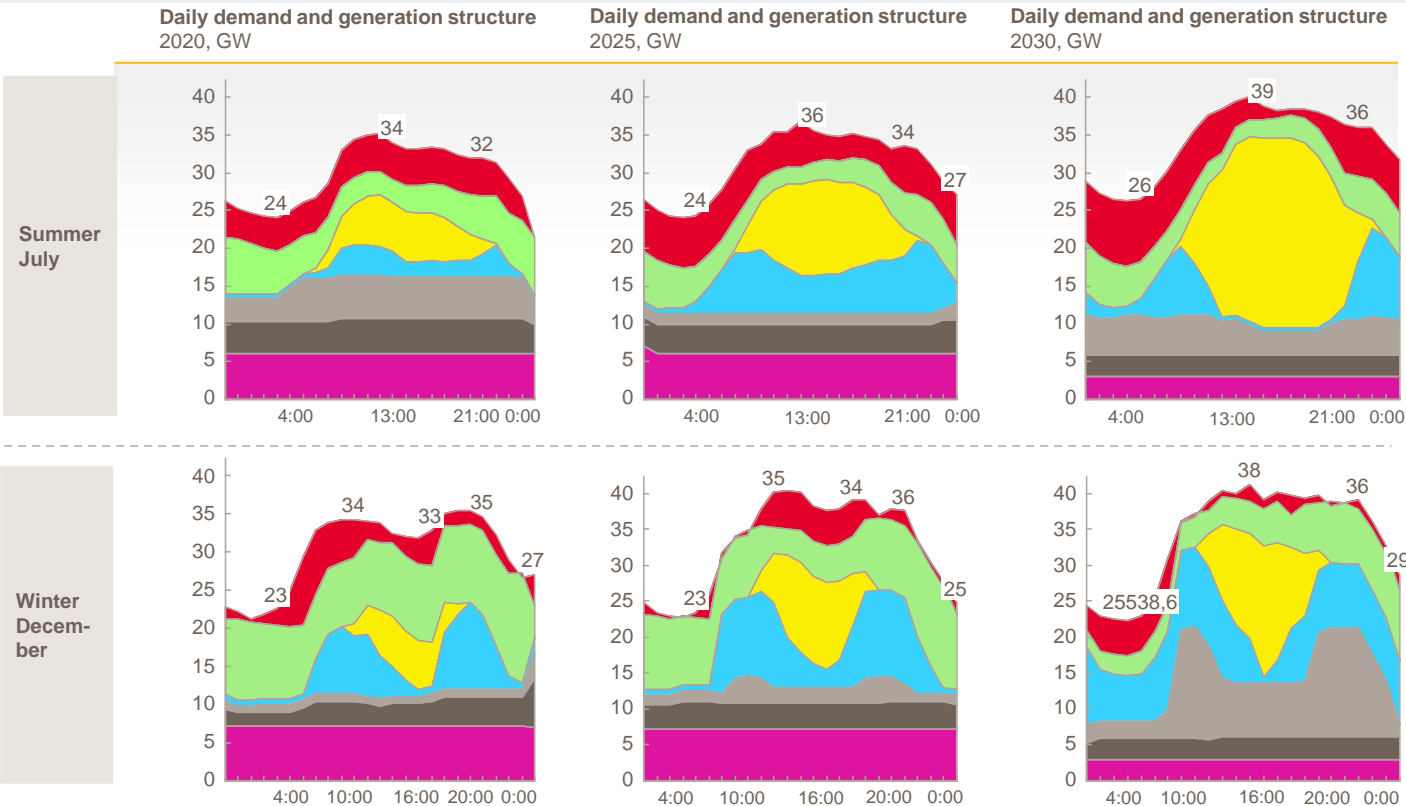
Both forms of energy are now cheaper than conventional and still have margin to improve



Source: Goldman Sachs (4 April 2019)

# Renewables are now market driven

Renewables must meet demand and not the other way around

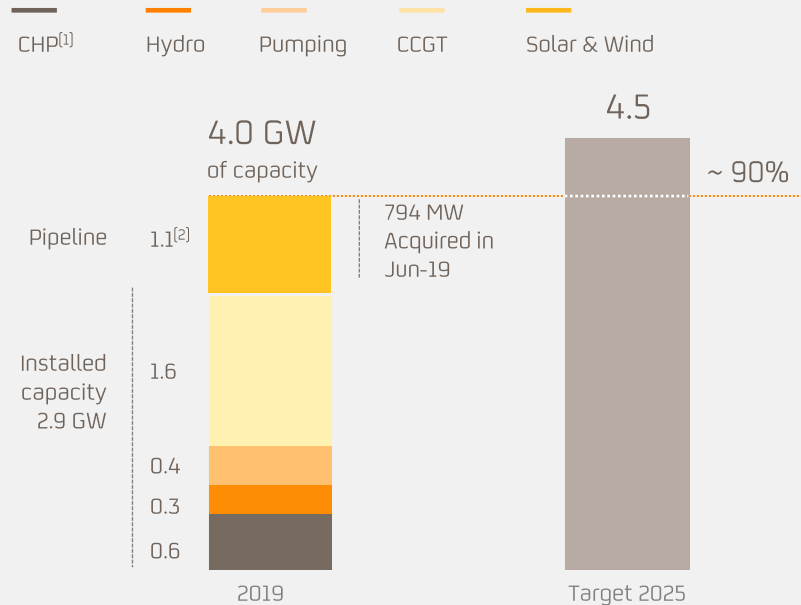


A diversified portfolio and the top energy management capabilities will enable Repsol to provide to its customers a tailor-made supply of low carbon energy

1 Others includes CHP, biomass, oil, importation / exportations

SOURCE: Mckinsey Power Model

# As promised, we are developing a relevant low carbon generation position in Iberia

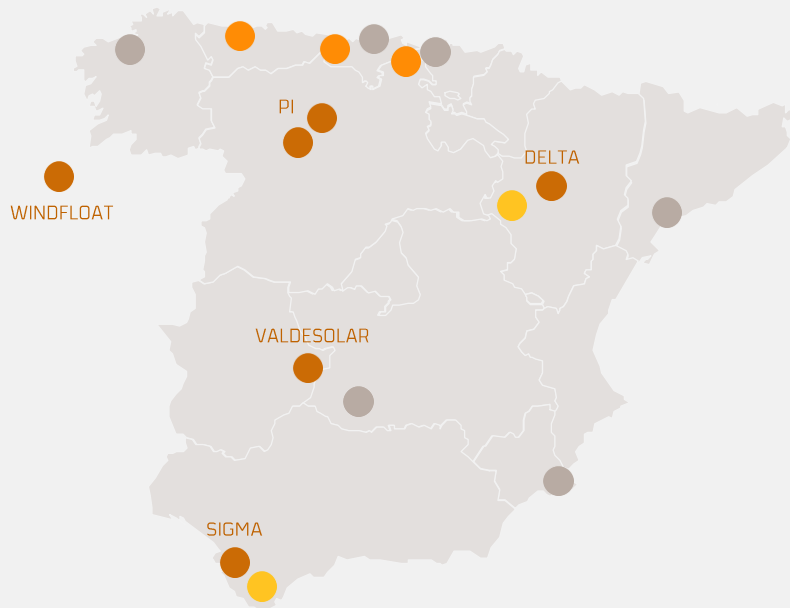


**Circa 90%** of Repsol's 2025 low carbon capacity target **will be achieved by 2022, 3 years ahead of schedule**

**Repsol's 2025 targets could be revised**

1. Combined Heat and Power plants ; 2. Valdesolar [264 MW], WindFloat Atlantic [25 MW], Sigma [204 MW], Delta [335 MW] and PI [255 MW]

# Not just relevant but diversified



Note: Gross capacity  
COD: Commercial Operation Date  
Source: Minetur; Repsol

CAPACITY

600  
MW

COGENERATIONS

## HYDRAULIC GENERATION UNITS

COD: 1910-2008

340 MW

## PUMPED STORAGE (AGUAYO)

COD: 1982

360 MW

700M  
W

HYDRO

## WIND (WINDFLOAT, DELTA & PI)

COD: 2019-2022



615 MW

## SOLAR (VALDESOLAR & SIGMA)

COD: 2020-2021



468 MW

1,083M  
W

RENEWABLES  
(Solar & Wind)

## ESCATRON

COD: 2008

820 MW

## BAHÍA ALGECIRAS

COD: 2011

830 MW

1,650  
MW

CCGT

# Delivering superior profitability in a heated market

|   |              |                        |   |                 |  |
|---|--------------|------------------------|---|-----------------|--|
| <br><b>VALDESOLAR</b><br>264 MW | 530 GWh/year | Q4 2020 COD expected   |  CO <sub>2</sub> emissions reduction | 70,353 ton/year | <br>Badajoz                 |
| <br><b>SIGMA</b><br>204 MW      | 410 GWh/year | Q4 2021 COD expected   |  CO <sub>2</sub> emissions reduction | 54,364 ton/year | <br>Cadiz                   |
| <br><b>DELTA</b><br>335 MW      | 993 GWh/year | Q4 2020 COD expected   |  CO <sub>2</sub> emissions reduction | 86,189 ton/year | <br>Zaragoza                |
| <br><b>PI</b><br>255 MW         | 798 GWh/year | 2021 2022 COD expected |  CO <sub>2</sub> emissions reduction | 65,607 ton/year | <br>Valladolid and Palencia |



Aggregated Equity IRR<sup>1</sup>

>10%

1. Assuming leverage of 50%, cost of debt 4.5%, expected timeline for debt repayment 18 years.

# Renewables business being developed with an industrial approach, acquiring new skills across value chain

Repsol leveraged on existing key capabilities and has already developed most of the new necessary ones...

DEVELOPMENT

ENGINEERING & CONSTRUCTION

OPERATION

PERFORMANCE MANAGEMENT

EXISTING

Investment analysis

Finance / Tax / HR / Legal

Energy Management

HSE

LEVERAGED

Procurement

Procurement

Pipeline management

Engineering

Analytics/Big Data

Construction

Control Center / Dispatching

ACQUIRED

Energy Assesment

Origination/Permitting

UNDER AQUISION

PPA origination

PV and wind O&M capabilities

New hires have an average of 10 year + experience in Renewables



# Renewables key risks identified and fully addressed, building capabilities that will allow for expansion.

Repsol project attracting highly qualified professionals from top renewable players

RISKS > CONSEQUENCES MITIGANTS IN PLACE > INTERNATIONAL ACTIONABILITY

Technological / Resource

- Energy Assessment Mistakes
- Sub performance / availability of equipment
- Cost / Time overruns

1. In-house teams with average 10+ years experience in:
  - Energy Assessment
  - Engineering & Construction
  - Operation & Maintenance
  - Procurement
2. Top tier suppliers both in Equipment and BoP/BoS
3. End to end process management and IT systems
4. State-of the art Control Center and Data Analytics under implementation

**1. Very High**

**2. Very High**

**3. Very High**

**4. Very High**

# Renewables key risks identified and fully addressed, building capabilities that will allow for expansion.

Repsol project attracting highly qualified professionals from top renewable players

RISKS



CONSEQUENCES

MITIGANTS IN PLACE



INTERNATIONAL  
ACTIONABILITY

Development &  
Interconnection

- Project Mortality Rate
- Costs/delays in Interconnection
- Reduced profitability
- Time-to-market

1. In-house Development and Grid analysis teams with average 10+ years experience
2. M&A or investment decision only after fatal flaw analysis both internal and from top consultants
3. Market studies performed by leading companies, leveraging Repsol's international footprint
4. End to end process management and IT systems

1. **Medium**

2. **High**

3. **Very High**

4. **Very High**

# Renewables key risks identified and fully addressed, building capabilities that will allow for expansion.

Repsol project attracting highly qualified professionals from top renewable players

RISKS



CONSEQUENCES

MITIGANTS IN PLACE



INTERNATIONAL  
ACTIONABILITY

Offtake / Energy  
management

- Unable to optimize road-to-market [Merchant/PPAs]
- Realized price below expectations

1. In-house Team and Systems from Viesgo Acquisition
2. Repsol experience in international Trading in key markets
3. Repsol perceived as an excellent counterpart in Spain and abroad
4. International Origination Team under recruitment

1. High

2. High

3. Very High

4. Low

# International plan will leverage Repsol's strengths and global footprint

Spanish situation not fully replicable so strategy should be adapted

## Select

- Strong Market Fundamentals:
  - Relevant need for new capacity
  - Enough resource for RES affordability
  - Rule of law allowing for long term investment
- Identification of the most recent market trends
- No legacy may not be a disadvantage

## Leverage

- Global footprint:
  - Shared corporate overhead
  - Understanding of local business culture
  - Potential tax optimization
  - Energy trading capabilities
  - Industrial connections for partners and counterparts.
  - Existing human capabilities
- Market position in Spain with international suppliers and partners.
- Financial firepower to go for large projects, with economies of scale
- Balance sheet solidity to be considered a partner of choice for local off takers and local developers.

## Establish

- Origination Teams to secure PPAs with International and Local Players
- Partnerships / M&A with companies with local presence to access better projects compensating for late entrance.
- Adapt central organization establishing deconcentrated teams while insuring best practices centrally

# Embracing the energy transition...

• **Excelling in Retail**

• **Optimizing Gas Operations**

• **Becoming a reference in the RES world**

