



Repsol's 5th Sustainability Day

London, 5 November 2018

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1. Entering in Gas & Power Business

Embracing the energy transition, making Repsol the preferred multi-energy supplier

2. REGGANE PROJECT

The energy of the Desert

3. Safety, Environment and Climate

Strategy 2025



Entering in to the Gas & Power Business

Repsol Sustainability Day

Embracing the energy transition, making Repsol the preferred multi-energy supplier



/ Our ambition

Why does Repsol enter G&P?



New trends impacting energy markets

Regulation & decarbonization

- Emissions reduction
- Energy efficiency

New entrants

- Alternative business models
 - Data, digitalization, EMS

Technology

- Cost reduction
 - Renewables
 - Batteries

Consumer

- Digital technologies
- Mobility alternatives
- Environmental concern



New energy consumption model

Electrification

Renewables

Distributed generation

Convergence of mobility & home energy

New services & business models for customers



Threat



Opportunity



**Repsol
Ambition**



To make the most of our opportunities, transforming Repsol into the preferred multi-energy supplier

Threats & opportunities

Repsol has already taken a proactive approach, developing strategies for its commercial businesses



Marketing – Transforming while Performing

- Strengthen differentiation, customer focus, segmentation, and personalized offer
- International expansion in key markets (Mexico, Peru)



Lubricants and Specialties

- International growth of lubricants business
- High return specialties projects



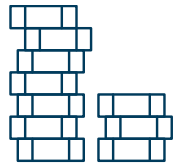
LPG – New Commercial Strategy

- Strengthen client orientation
- Ensure commercial network efficiency

O&G commercial businesses will still be fundamental in the future, and Repsol has sound strategies to defend its position

/ Threats & opportunities

Energy transition brings many opportunities to Repsol's commercial businesses



Gain Share of Wallet

Participate in G&P Businesses to offer a more integrated positioning



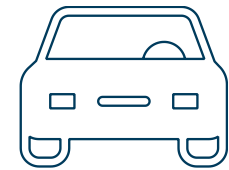
Strengthen client relationship

Add new recurrent touch points from subscription based business models



Manage energy migration proactively

Be active in shaping transition to G&P



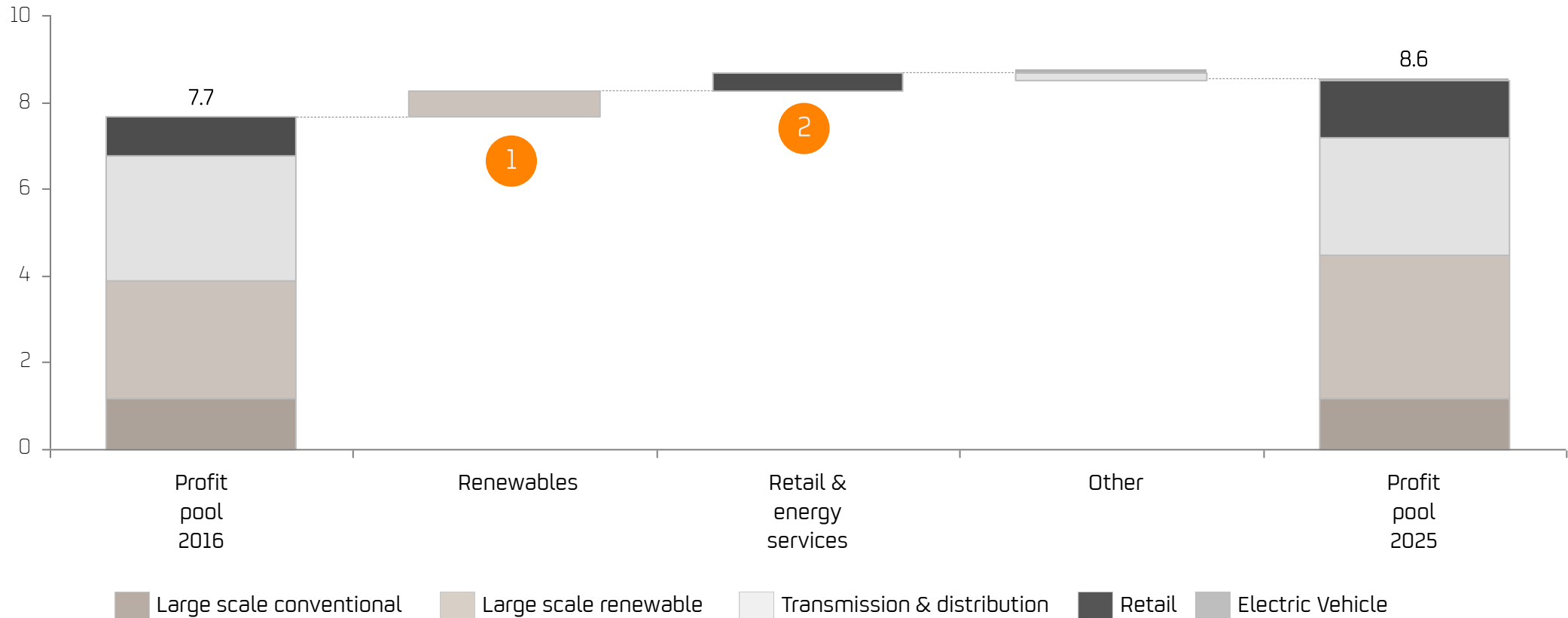
Access growing profit pools

E.g. Distributed generation, Energy Services and E-mobility

Threats & opportunities

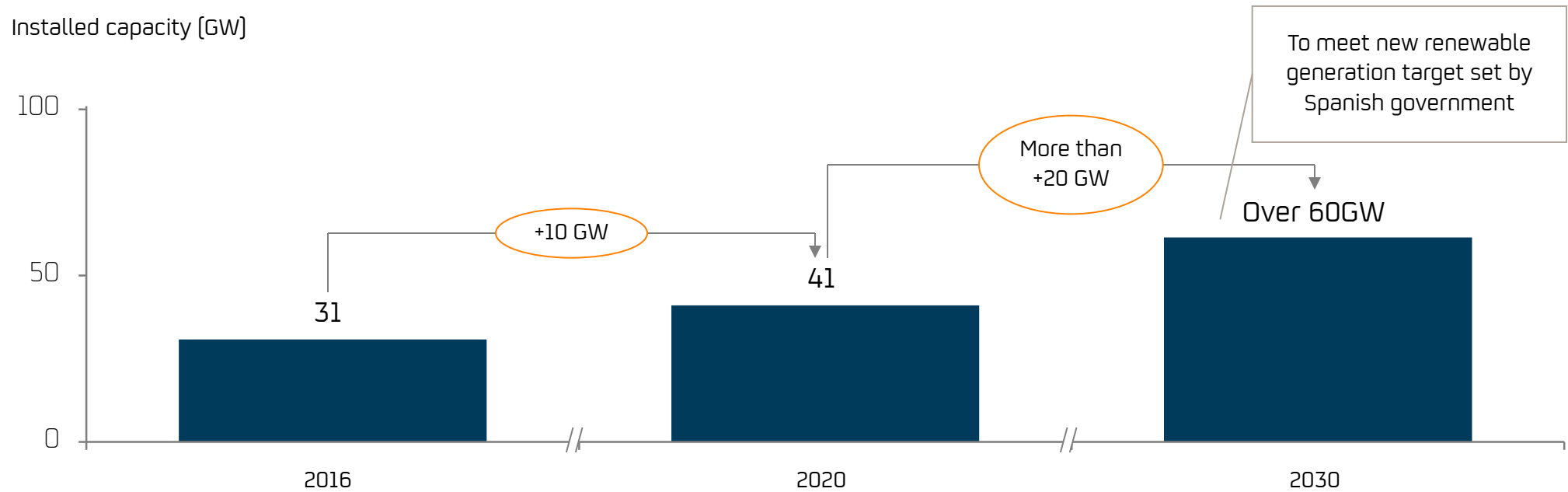
Spanish power value pool will increase based on a push for renewable generation and customer centric retail and services activities...

Spanish profit pool evolution (EBIT - B€)



Threats & opportunities

1 Renewable generation will double till 2030 to meet environmental targets...

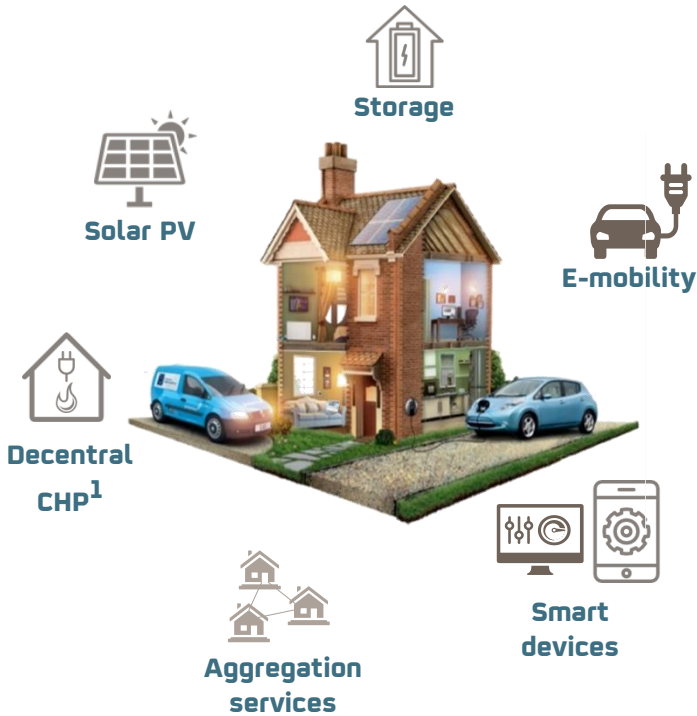


Note: Capacity of national system
Source: REE

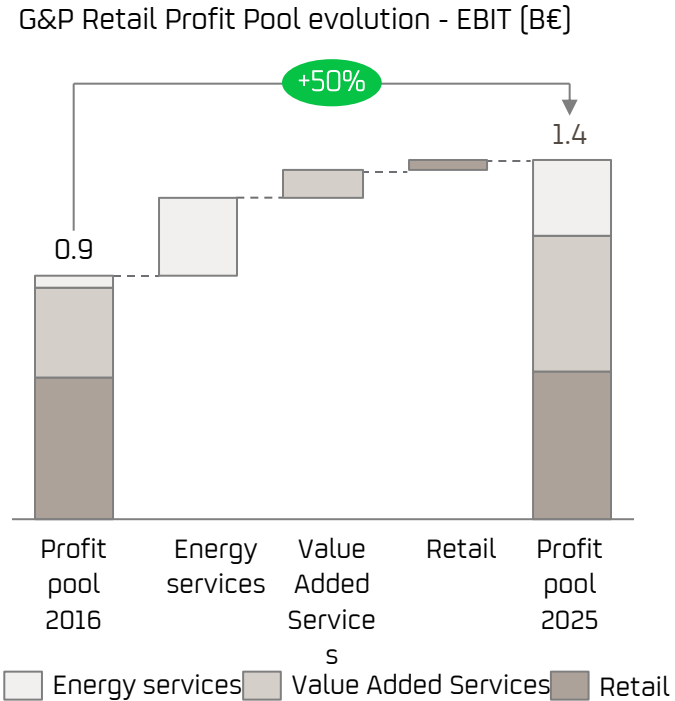
Threats & opportunities

2 The development of new energy services will grow profit pool for G&P retail business...

New energy services and solutions are developing around the client



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

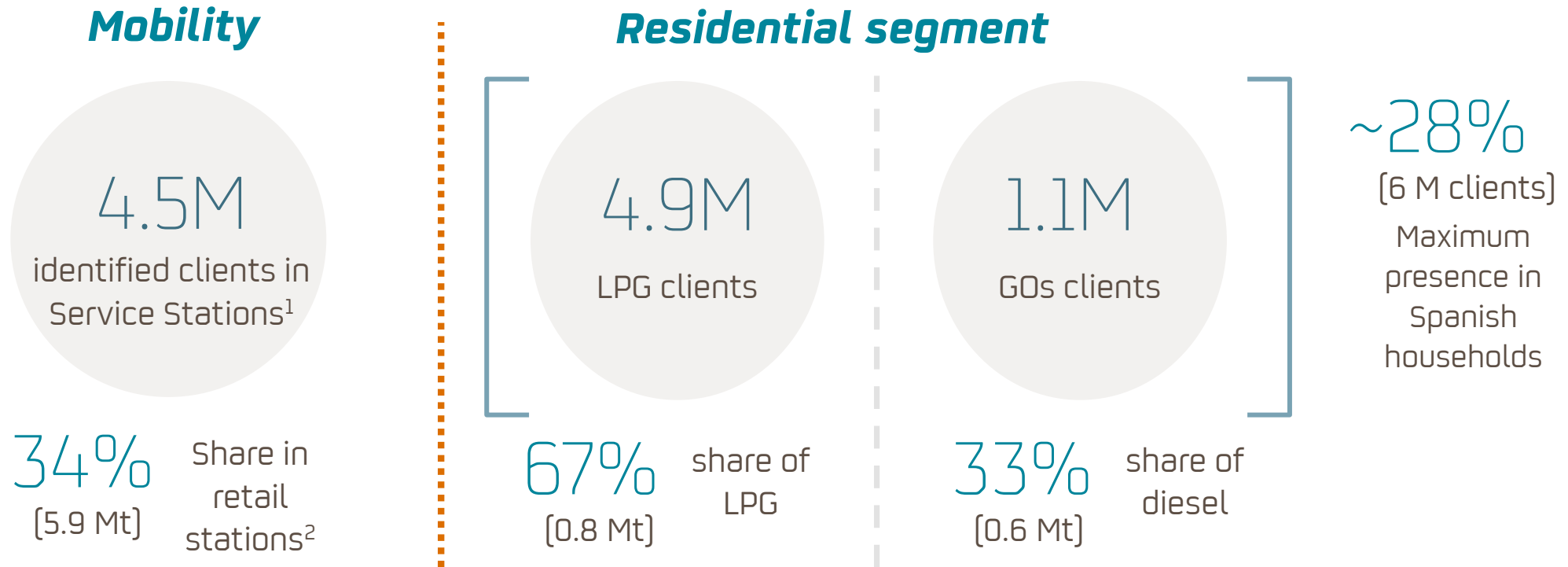


Attractive opportunity for Repsol to expand its commercial footprint and serve its clients in these new products

1. Decentral combined heat and power
Source: CNMC, company financials, DBK

Repsol's ambition in Gas and Power

Repsol has a leadership position in energy retail market with a customer base of more than 10M clients



1. Includes clients with Repsol Mas Travel, Travel Club, Repsol Mas Visa, Iberia and Autoclub 2. All Repsol Service Stations considered (COCOs, CODOs and DODOs)

Repsol's ambition in Gas and Power

We have distinctive channels to be leveraged in G&P retail

Key Repsol retail channels



Largest service stations

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 bottled and bulk LPG
- Around 200 bulk diesel distributor



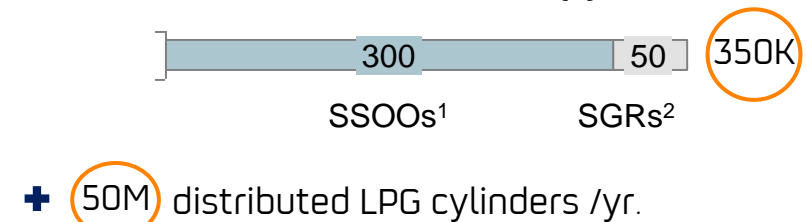
Online channels (e.g. Waylet) with a growing client base that is constantly connected to Repsol

Relevant metrics

3.4k Service stations

1M Face to face interactions every day

Annual visits to client households (k)



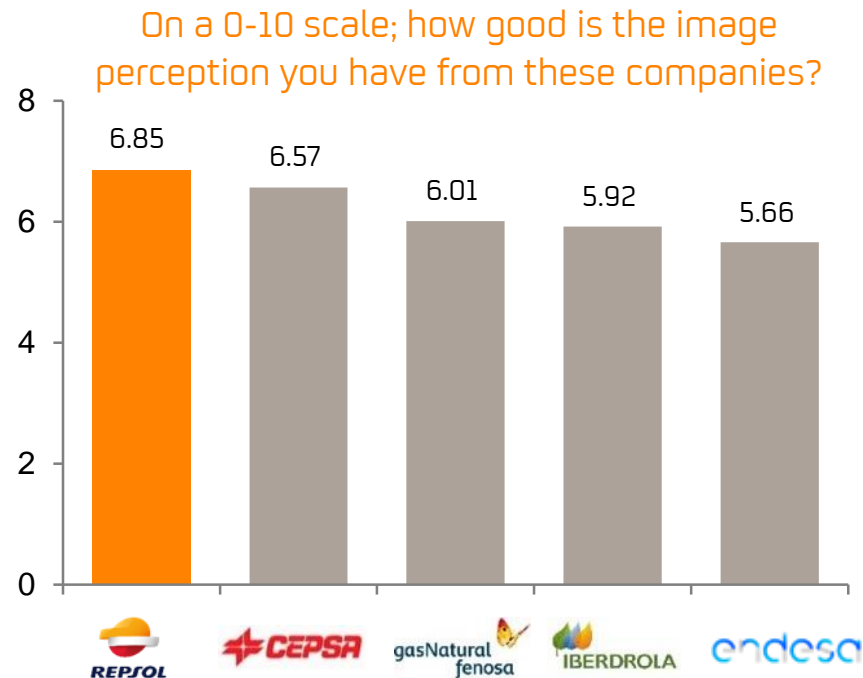
600k Waylet users in 9 months after launch

Constant interactions with clients offer opportunities for cross-selling with our current broad offering and new bundling of products

Repsol's ambition in Gas and Power

We will play in G&P retail market leveraging Repsol's strong brand that is better positioned than incumbent utilities and our position as a major player in wholesale gas markets

Superior brand image



Relevant gas player

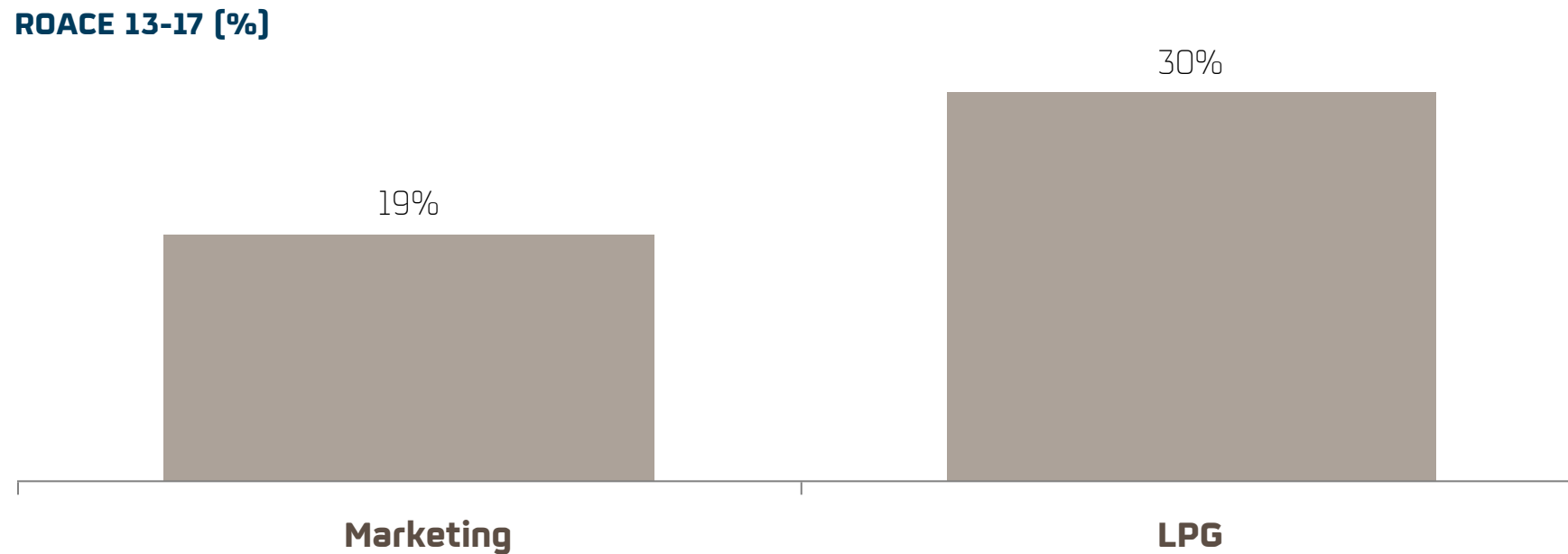


Access to competitive gas

- Significant gas supply as a major gas consumer provides a leverage to use it for competitive gas / dual offerings to customers
- Repsol internal consumption (35 TWh) is equivalent to a 10% share of the total Spanish natural gas market

/ Repsol's ambition in Gas and Power

Finally, we have a strong commercial culture with a solid track record of profitability



Our healthy commercial businesses provide us with a strong balance sheet that is a key differential factor, specially when compared to small players

Repsol's ambition in Gas and Power

- Become a leading actor in the **energy transition** and foster sustainability and efficiency
 - Being actively present in **retail** business of power & natural gas and **low carbon energy generation**
- Create a **new business line** with relevant growth potential
 - Aiming to achieve **over 5% market share** in number of clients in G&P retail in Spain by 2025 [15% as a long-term aspiration]
- Leverage our strong customer base (10+ million) and distribution channel network with a **clear customer-oriented focus**
- Differentiate ourselves by being **technologically driven** [i.e. digital channels, distributed energy, energy storage, smart devices...]
- Converge with Repsol's mobility clients **offering a multi-energy solution** to cover broader customer needs

Repsol's ambition in Gas and Power

In our strategic update, we stated our ambition to develop a new operated position in low carbon businesses...

Repsol is swapping a €5-6B exposure to a medium carbon businesses through GNF...

- Gas
- Natural
- Fenosa
- Non-operated
- No synergies exploited
- 85% regulated business in 2017 EBITDA with a mix of high/low carbon generation



... for an operated and synergistic position in low carbon businesses



- Operated business with full synergies
- Leveraging previous experience in low carbon businesses, markets and know-how
- Focused business mix: wholesale gas, retail G&P and low carbon generation

Ambition

Be players in the future energy transition, fostering sustainability and energy efficiency

Creating profitable low carbon businesses

Enhancing capabilities to thrive in energy transition

Reducing emissions in our operations and products

/ Repsol's ambition in Gas and Power

... with a clear and focused roadmap to achieve our ambition with € 2.5 Bn in 2018- 2020

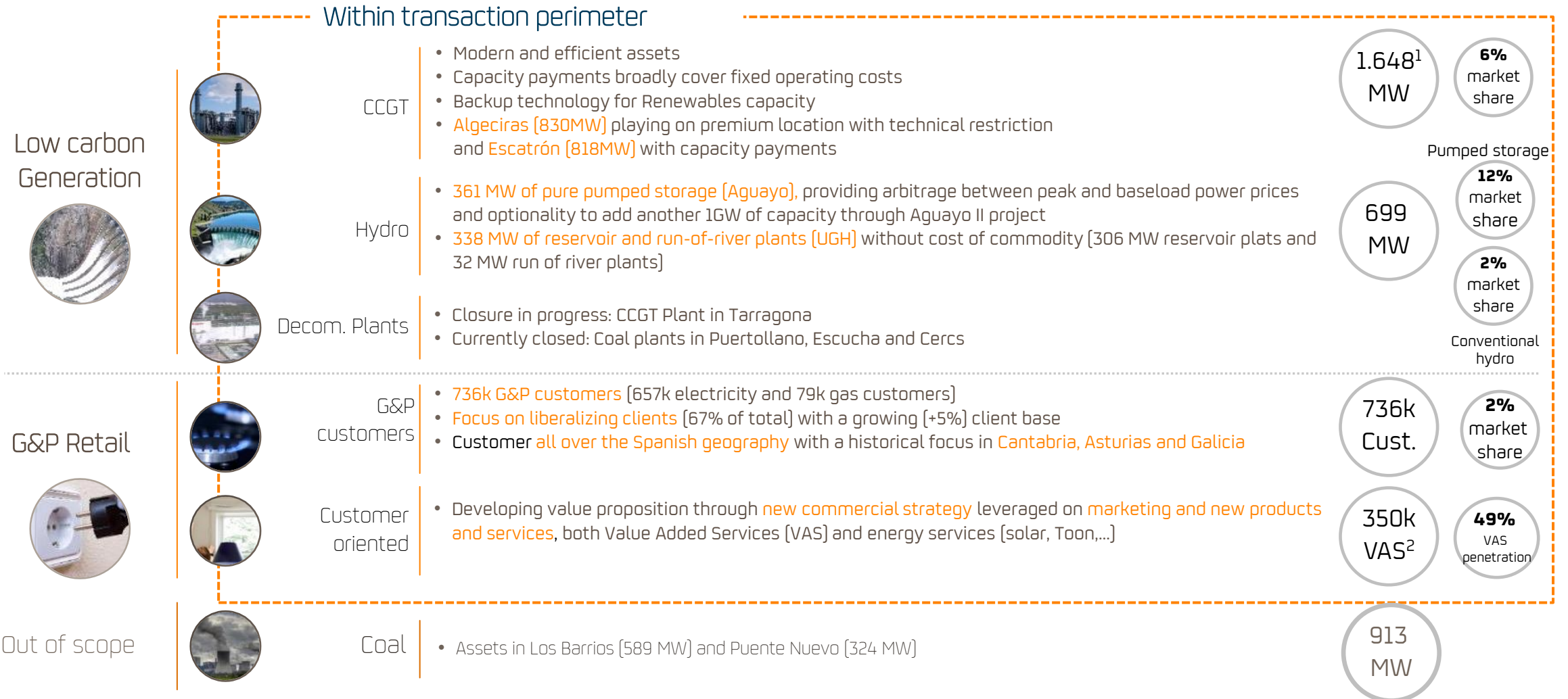
	Low carbon generation	Wholesale Gas	Retail G&P
Top capability	<i>Technical capabilities and experience in managing large scale projects</i>	<i>Leverage our industrial self consumption as the largest gas consumer in Spain</i>	<i>Strong brand and more than 10M client base with direct contact</i>
Roadmap	<ul style="list-style-type: none"> • Develop a strong position in Spain achieving a low carbon integrated business • Technological vocation oriented to solar, wind, CCGT and other low carbon technologies • Diversify in emerging countries that yield higher returns 	<ul style="list-style-type: none"> • Create a successful wholesale gas business, ensuring a competitive gas supply • Developing new business through gas flexibility • Deliver a competitive gas offer for our future retail clients 	<ul style="list-style-type: none"> • To become a relevant Spanish low carbon multi-energy retailer • Progressively sophisticate our offer including advanced energy services and solutions
Targets by 2025	~ 4.5 GW Capacity	>15% Market share ¹	>5% Market share ² 2.5M Clients ³

Investments in low carbon businesses with IRR above 10%

1. Spain market share including our refineries' consumption; 2. Spain market share in number of clients; 3. Not adjusted for dual clients

Repsol's ambition in Gas and Power

As a key step, we acquired selected assets from Viesgo



/ Acquisition strategic fit

Generation assets are aligned with Repsol ambition in energy transition and bring first class operational capabilities...



Low-carbon

Low CO₂ emissions portfolio (0.7 GW of hydro and 1.6 GW of CCGTs) with a share of assets aligned with Repsol's Strategic Plan



Positioned for energy transition

Controllable storage hydro and CCGTs provide flexibility to capture value in a scenario with increased hourly price volatility derived from high RES penetration



Multi-technology

Diversified portfolio with complementary natural hedges against low-rain years or high-gas price periods and able to support RES development



High-quality location

Optimal geographical positioning, with hydro concentrated in the North with stable rain and Bahia de Algeciras CCGT able to capture technical restrictions



Retail hedging

Broad experience in hedging operations with physical back-up to the G&P retail business and commodity price arbitrage



In-house experience

Strong operational focus with O&M costs aligned with best practices and accumulated experience in managing technical plant investments



/ Acquisition strategic fit

We acquired hydro and CCGT assets with a combined installed capacity of ~2.4 GW¹

Hydro

- Reduced marginal costs
- Conventional hydro benefits from potential the increase in pool prices
- Strong pumped storage positioning
- Leader in Spain in terms of use
- Franchises valid till ~2060

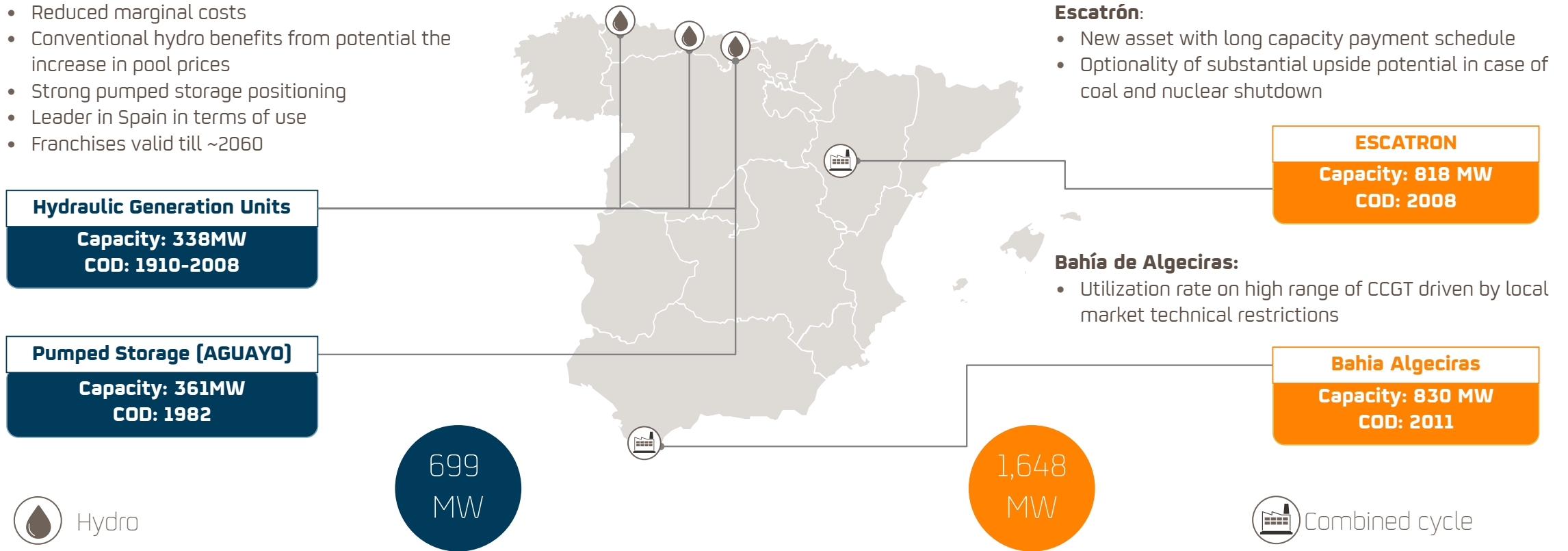
CCGT

Escatrón:

- New asset with long capacity payment schedule
- Optionality of substantial upside potential in case of coal and nuclear shutdown

Bahía de Algeciras:

- Utilization rate on high range of CCGT driven by local market technical restrictions

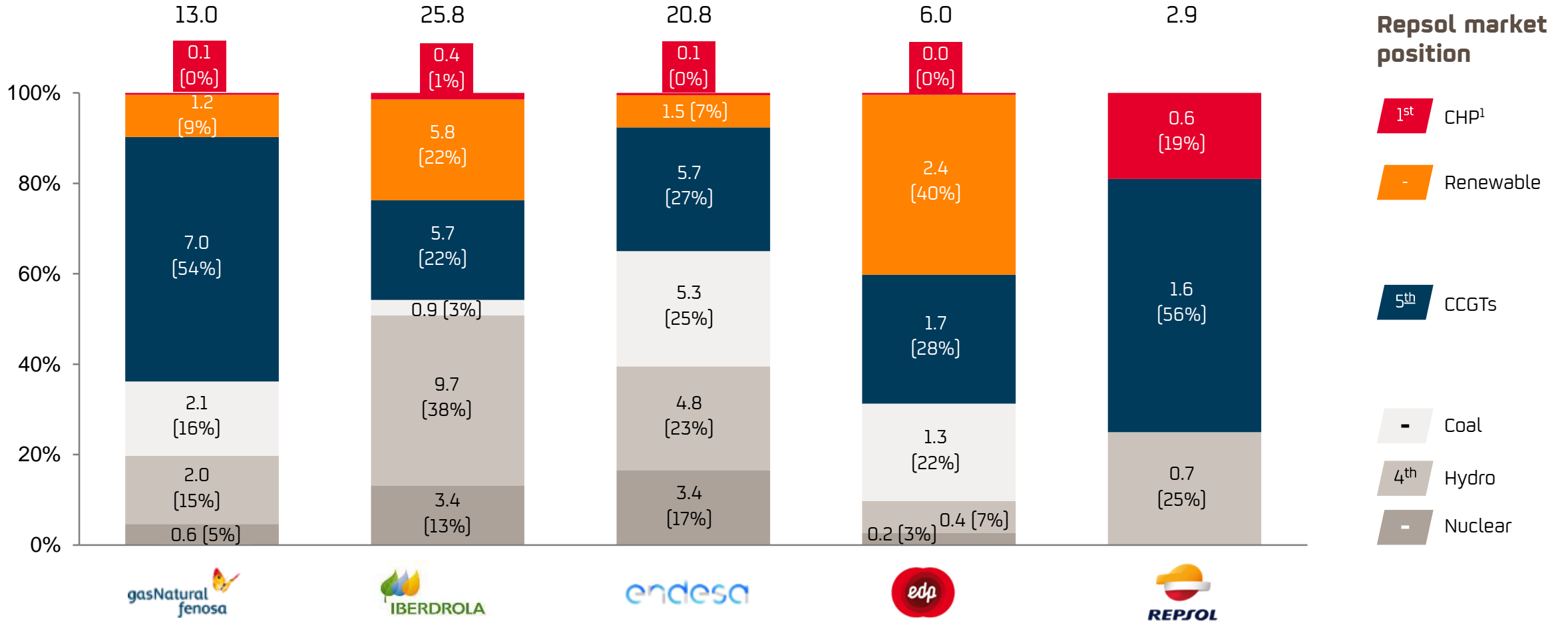


1. Gross capacity
 Note: COD: Commercial Operation Date
 Source: Minetur; Viesgo

Acquisition strategic fit

After acquisition, Repsol will rank 4th or 5th in installed capacity of newly added low carbon technologies

Installed Capacity [GW, %]



1. Combined Heat and Power or cogeneration plants

Source: Annual Reports; UNESA

Acquisition strategic fit

Viesgo G&P retail assets support Repsol target positioning in the business



Critical mass

Right size to help us develop a solid position (~736k customers), without incumbents legacy



Growth orientation

Proven growth track-record (+5% customer growth in 2017 and Q12018) with significant additional potential and strong plan for future market growth



Customer centric

Best brand-advocacy-index among G&P incumbents and best scores in transparency and value-for-money with a strong focus in the most attractive segments (Residential and SMEs)



Digital

Highly advanced digital player (i.e. real time consumption monitoring, smart-devices, Fotofactura, etc.)



VAS focused

High VAS penetration (49%) with wide experience in cross-selling and product bundles



Sophisticated capabilities

Growing sophisticated solutions portfolio (e.g. Viesgo Solar, Toon, eMobility solutions)



Value for money orientation

Strong positioning towards customer energy saving and efficiency (e.g. Laboratorio del Ahorro, Compromiso de Ahorro, HVAC and lighting for B2B)



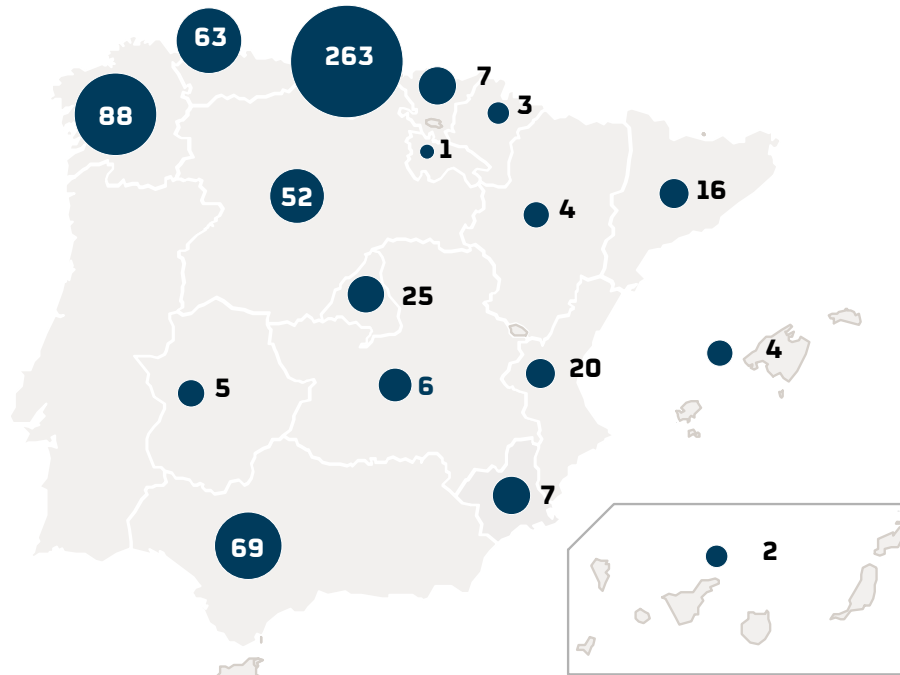
Scalable

State of the art IT systems (e.g. SAP ISU, Salesforce) prepared to further scale the business

/ Acquisition strategic fit

Transaction brings clients across Spain with a mix that is more focused on liberalized market than average...

Activity concentrated in north of Spain

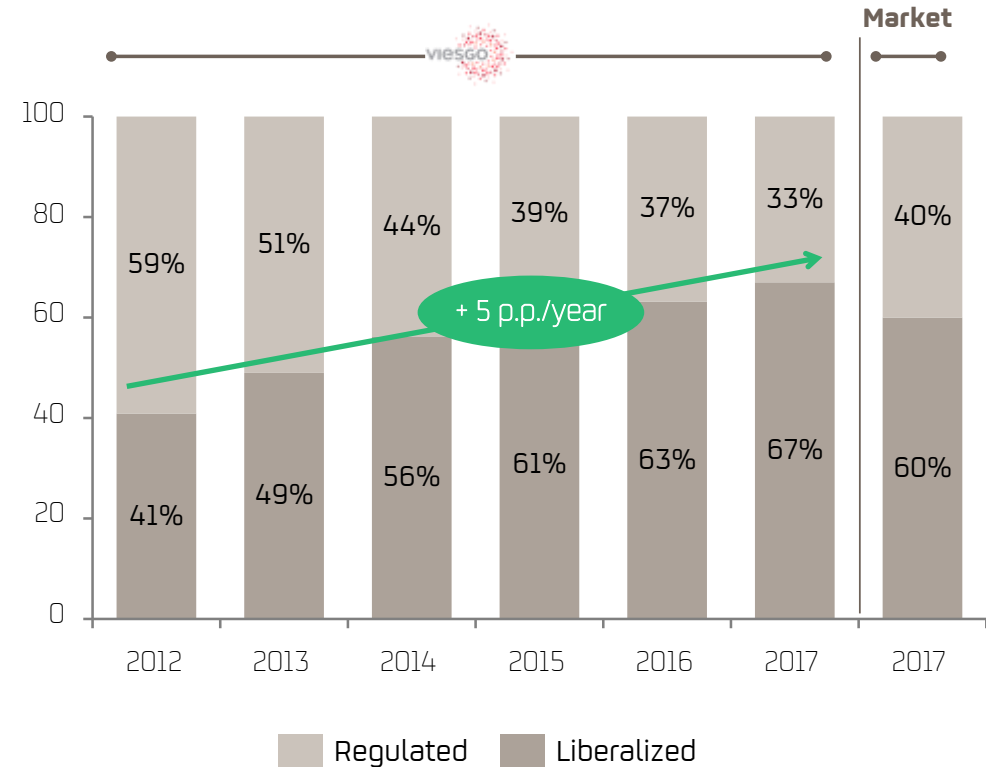


● Viesgo power supply number of contracts [thousands]

Source: CNMC [National Commission on Markets and Competition]

Share of B2C customers with liberalized contracts exceeding average market share

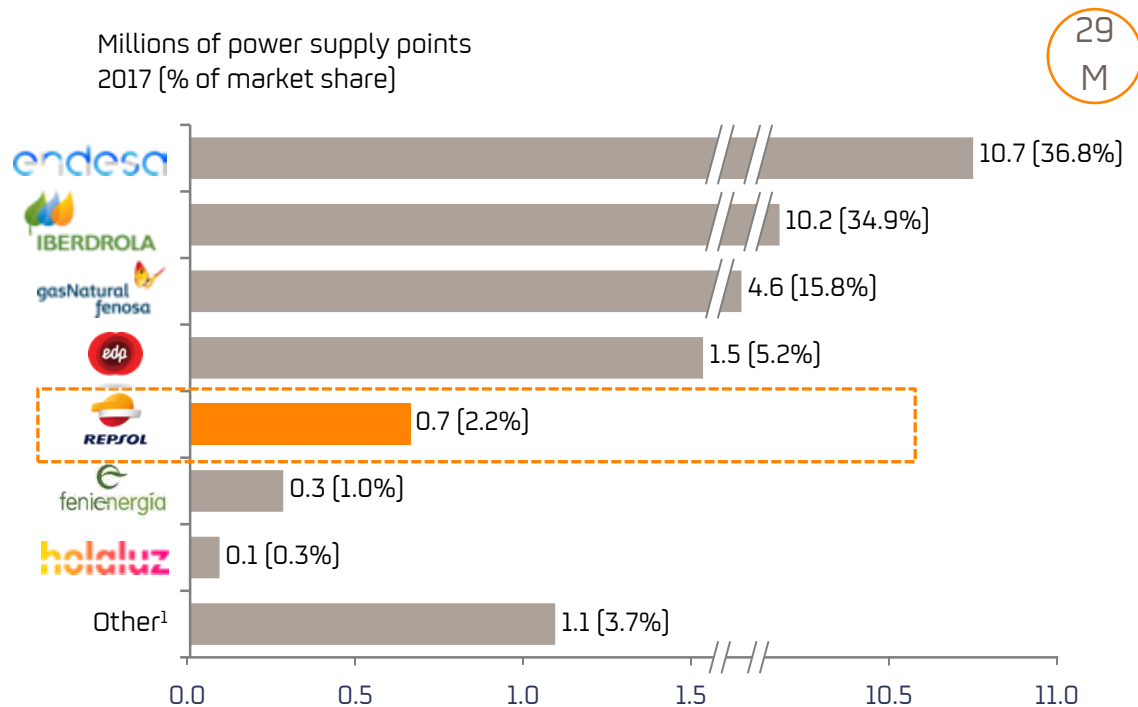
% of Viesgo power supply contracts for residential/commercial customers



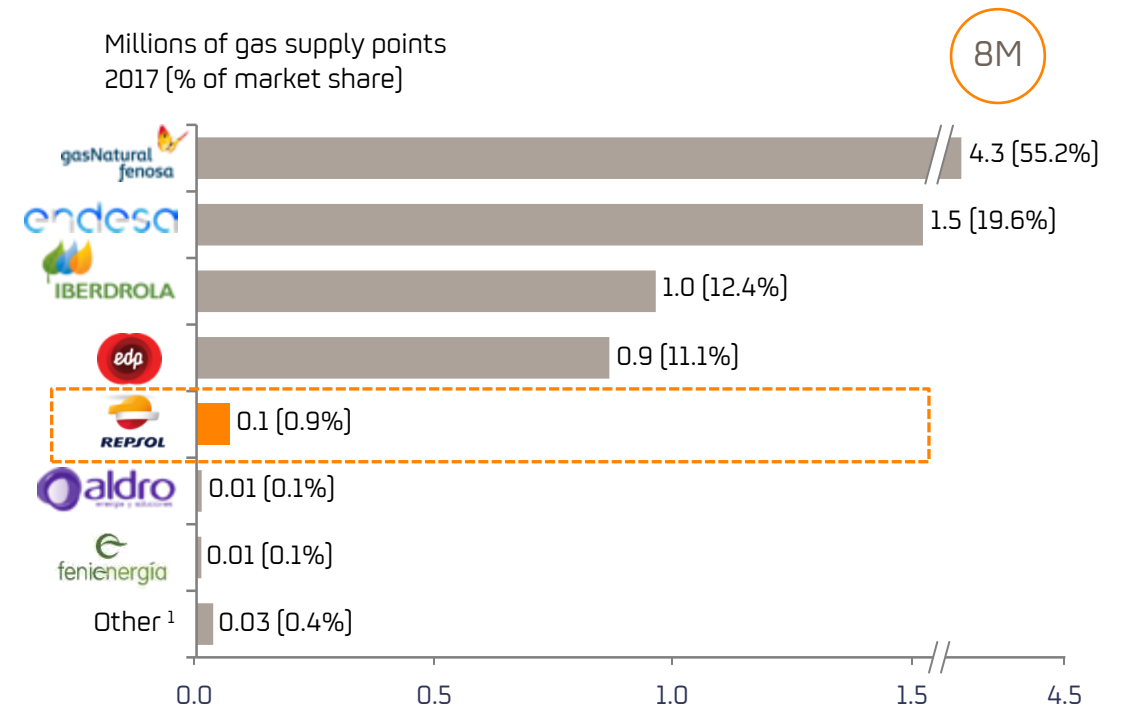
Acquisition strategic fit

...allowing us to become the fifth player in Spanish G&P retail market

In power retail, Repsol becomes the 5th player with 657 k customers...



... as in gas, with 79 k customers



1. Other power: >300 authorized small power retailers; Other gas: >120 authorized small gas retailers
Source: CNMC (National Commission on Markets and Competition)

Acquisition strategic fit

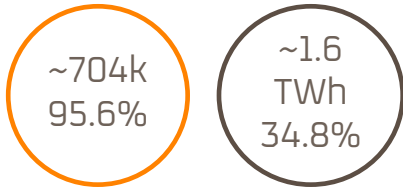
Acquired client base presents a differentiated position for the residential sector/SMEs vs. industrial

KPIs per segment

Strategy per segment



Residential



Customer-centric proposition that presents the highest Brand Advocacy Index (BAI) in the industry



Online initiatives that allow us to stand as a particularly-digitalized player



Extensive offering in Value Added Services and Energy Services vs. the rest of the competition, and focus on dual offerings that allow us to increase loyalty and margins

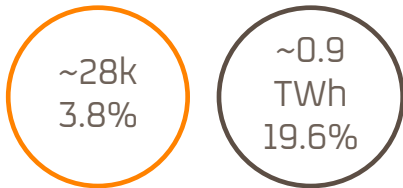


Focus on price transparency and helping clients to save in their energy bills

- Competitive electricity tariffs for <10 kW
- Innovative and transparent approach to clients



SMEs



Customized and in-person/telephone service



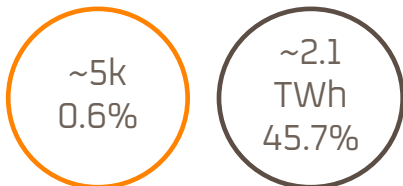
Tailored price positioning





Extensive offering in Energy Services focusing on large-sized customers



Industrial



 # Viesgo power and gas supply points [% of total]

 Volume of Viesgo power and gas demand [% of total]

/ Acquisition strategic fit

Repsol will stand out with customer support tools and initiatives that help clients to understand their billings

Perceived price is one of the main switching drivers of the market, and with even more emphasis than the competition, Viesgo stands as a player with a superior price transparency

"Savings Lab"

We will advise you personally and free-of-charge, so that you can save on your electric bill



¿Quieres consumir de manera más eficiente? Descubre el nuevo Laboratorio del Ahorro: un lugar en el que encontrarás asesoramiento personalizado para ahorrar en la factura de luz de tu hogar o negocio.

Descubre cómo optimizar tu consumo de luz:

- 1 Date de alta en: laboratoriodelahorro.com te llamaremos para asesorarte de forma gratuita y personalizada.
- 2 Encontrarás útiles recomendaciones para ahorrar.
- 3 Sigue nuestro blog y podrás estar al día de nuestras novedades y formas de ahorro.

"Fotofactura"

Send us a photo of your bill, and we will tell you how much you will save with us

Mejoramos tu factura de luz y gas

Sigue 3 sencillos pasos:



El 75% de los clientes que usaron este servicio ya están ahorrando en su factura

Con Viesgo siempre tendrás los mejores precios

Ahorra con Viesgo en tu factura de la luz



¿Qué pasa si recibes una oferta de otra compañía? Todos los clientes de Viesgo pueden beneficiarse de nuestro Compromiso Ahorro. Para saber en la práctica esto ten en cuenta:

- 1 Hace una foto a la oferta recibida y escanéala.
- 2 La analizaremos y nos pondremos en contacto contigo.
- 3 Si las condiciones de la oferta recibida son mejores, igualaremos o mejoraremos tu contrato con Viesgo.
- 4 Si no podemos mejorar la oferta analizaremos cualquier alternativa en tu contrato.

"Savings Commitment"

Save on your electric bill with us. You'll always get the best rates

Acquisition strategic fit

Acquired team has successfully launched sophisticated products and services...

E.g. Toon, smart-thermostat,...



Signed partnership with Eneco to supply the Toon in Spain



Toon is a smart thermostat with energy management capabilities such as real-time consumption monitoring



A pilot was successfully launched and was able to sell 2,000 units



Processes and logistics have been developed to scale it up

... and Viesgo Solar, distributed energy solution



Signed a 5 year exclusivity agreement with Ezzing Solar to use its platform



Ezzing offers an online one-stop-shop platform to develop, track and follow up on personalized offers for solar distributed generation



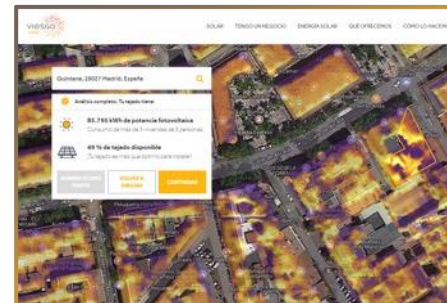
Streamline operations have been also developed:

- Simple budgeting tool
- Agreements with manufacturers
- Network of trusted installers
- Financing alternatives



Viesgo te trae Toon, mucho más que un termostato inteligente

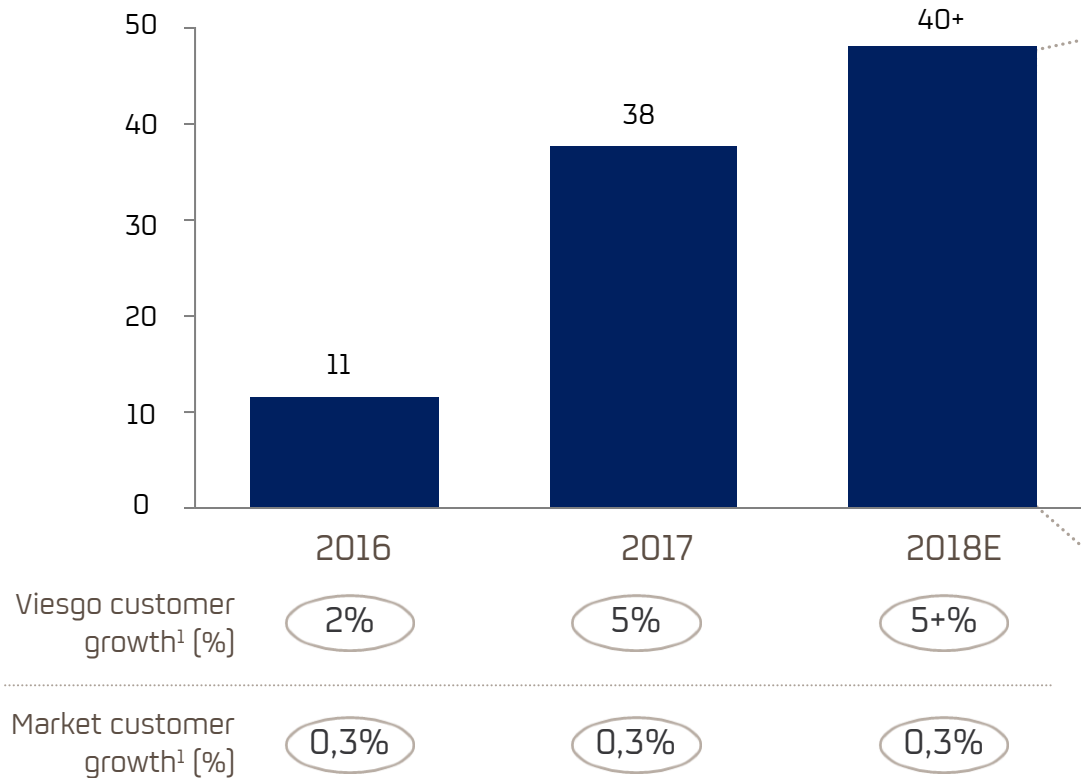
Haz de tu casa un hogar inteligente con Toon y controla tu calefacción desde el móvil.



/ Acquisition strategic fit

..and has demonstrated a strong track-record to deploy new strategies to increase customer acquisitions

Net acquisitions¹ [thousands]



Example of recent successful commercial initiatives



First Viesgo ad campaign on television, at a national level, with Alberto Contador, cycling celebrity (Oct. 16)



"Tu Oficina Online" App to monitor power consumption in real time in € (Nov. 16)



During this period, the "100% online" tariff was one of the most competitive tariffs in the market

1. Includes power & gas. 2018
Source: CNMC, Annual Reports and website

Acquisition strategic fit

Viesgo assets contribute directly to Repsol ambition in G&P



Repsol objectives 2025

Viesgo + Repsol key figures (2018)



Low carbon generation

4.5 GW

Total installed capacity



2.9 GW

1.6 GW

CCGT installed capacity

0.6 GW

CHP installed capacity³

0.7 GW

Hydro installed capacity



G&P retail

>5%

Market share¹



2%

Market share¹



Wholesale gas²

>15%

Market share



12%

Of Spanish natural gas market⁴

1. In number of clients. Annual market growth: 23k new power clients (over a total of 29M) and 82k new gas clients (over a total of 8M); 2. Additionally, deal will increase position in the market thanks to existing wholesale gas business and aggregated volumes from CCGTs and retail activities; 3. Combined Heat & Power. Repsol holds a total power capacity of 600 MW in 13 Combined Heat and Power (CHP) units (also called cogeneration units). Three of these units, with a total power capacity of 155 MW, have a steam turbine operating in condensate mode (similar to a combined cycle) 4. Considering acquired CCGTs consumption of 7.7 TWh on a standard year

From ideas to a tangible business . . .

. . . to take advantage of the energy transition . . .

. . . and build a sustainable & profitable future



REPSOL





Entering in to the Gas & Power Business

Repsol Sustainability Day

Embracing the energy transition, making Repsol the preferred multi-energy supplier



REGGANE PROJECT



1

The Reggane project:

- Country overview
- REPSOL in Algeria
- Project timeline
- Project scope

2

The Challenges

- Logistics, safety & security
- Remote location
- Environmental protection
- Fougarras

3

HSE performance

- Project data
- People
- Results
- HSE

REGGANE PROJECT / REGGANE PROJECT

- Country overview
- REPSOL in Algeria
- Project timeline
- Project scope



REGGANE PROJECT / REGGANE PROJECT

Country Overview



ENVIRONMENT

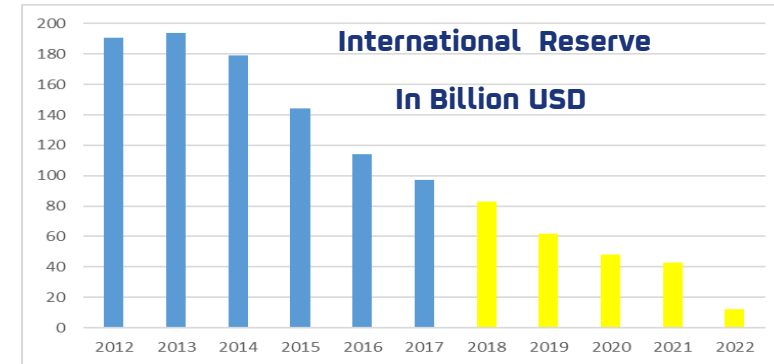
Short term:

- Economical key indicators in yellow nay red.
- Demography (41.5 M hab / +1.7%/y); unemployment: 11.7%*
- Surface: 2.4 MM Km². 1st in Africa
- GDP: 170 B\$ [+1.7% ; 4,104 \$/capita]* expected 3.5% in 2018
- Under pressure to reduce subsidized economy (gas, utilities, 1st necessity product)
- Risk of social unrest

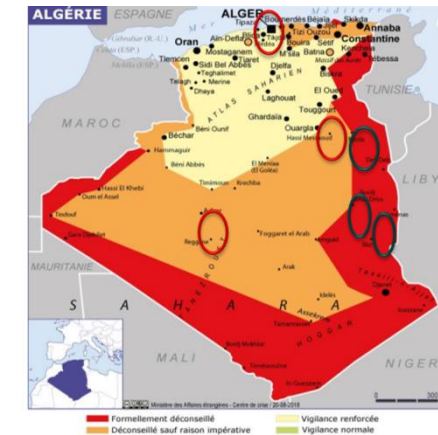
Medium/Long term:

- Political life driven by Bouteflika succession; presidential election March 2019.
- Foreign reserves asset reduction. Importation management
- Inflation control

*Data 2017



- 98% foreign currency from HC export
- Since 2018, use of the billboard with risk of inflation
- Very low external debt ~3.5%

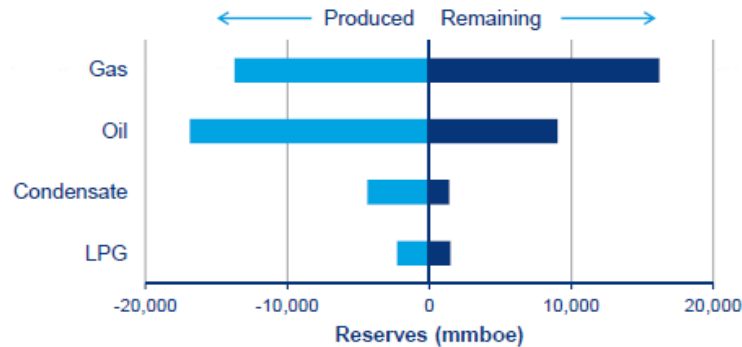


REGGANE PROJECT / REGGANE PROJECT

Country Overview

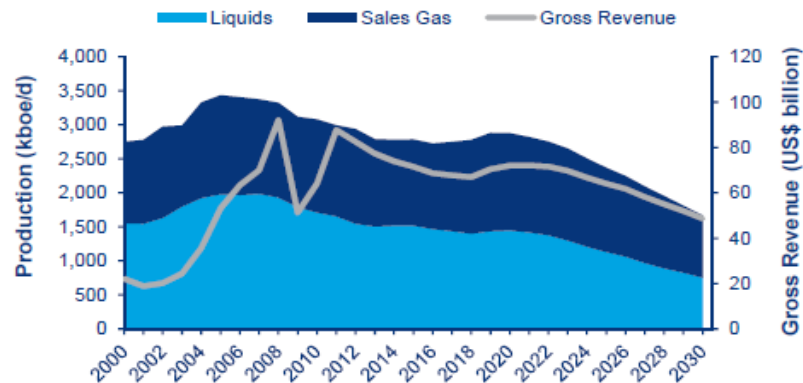


Country reserves



- ✓ Dutch disease country
- ✓ Uncertain social climate
- ✓ Security risk-Associated cost
- ✓ Tight & changing contractual-fiscal terms
- ✓ Lengthy & cumbersome bidding processes
- ✓ Inefficient & costly supply chain-Logistics
- ✓ Easy of Doing Bussines (WB) 166/190
- ✓ Trading across borders (WB) 181/190

Production

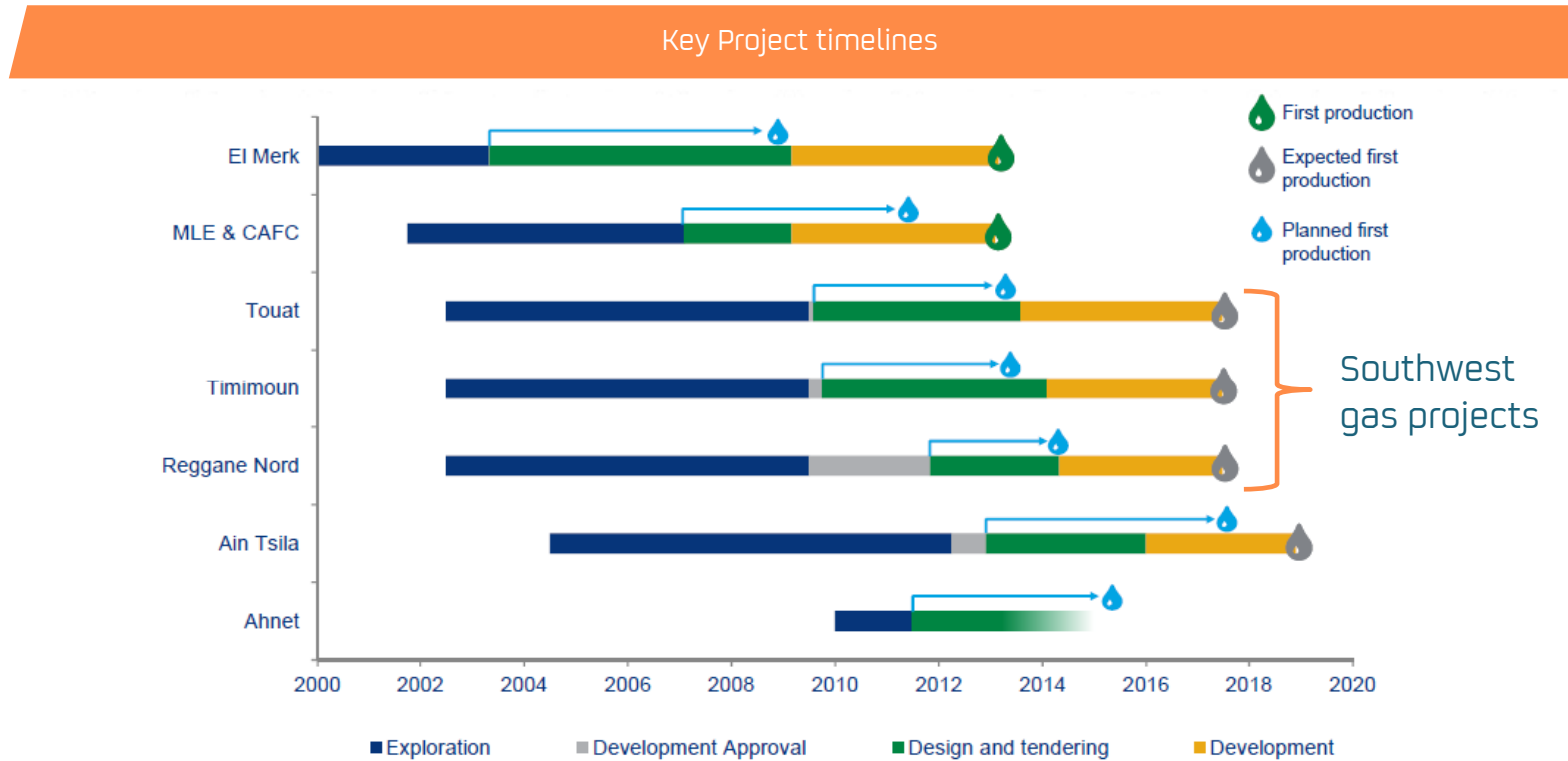


Source: Wood Mackenzie

- ✓ Declining production
- ✓ Increasing domestic demand
- ✓ Dubious local regulations
- ✓ Sonatrach dual role as partner & regulator
- ✓ Shortage of qualified manpower
- ✓ Arbitration as decision-making tool

REGGANE PROJECT / REGGANE PROJECT

Other Projects



Source: Wood Mackenzie

Southwest gas projects: 15-16 years from Exploration to First Gas

REGGANE PROJECT / REGGANE PROJECT

REPSOL in Algeria



- ✓ Repsol is present in the country since 1973
- ✓ Balanced portfolio -exploration, development, production- based on an extensive knowledge of the basins and assets

Production:

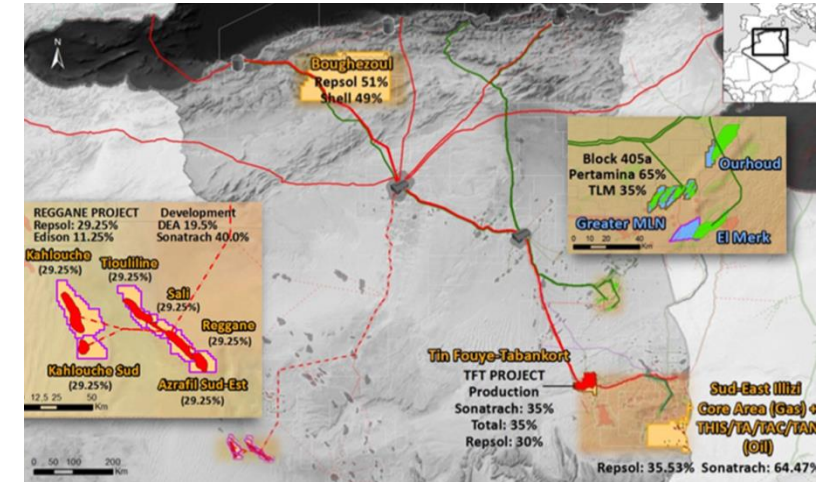
- Oil & gas production from TFT and Block 405a in the Illizi and Berkine basins

Development:

- Reggane project with first gas in December 17

Exploration & appraisal:

- Material oil & gas resources discovered by Repsol in South-East Illizi block (SEI).
- Boughezoul Block, also operated by Repsol, located in the promising -yet underexplored- Algerian Atlas basin



Balance portfolio with positive FCF since day one, and current production of ~8 Kboed

Low technical risk portfolio with long-term stable O&G production

Significant growth potential from exploration & appraisal assets, including resources near existing infrastructure

Secure monetization route in one of the most stable and developed MENA countries

REGGANE PROJECT / REGGANE PROJECT

Project timeline

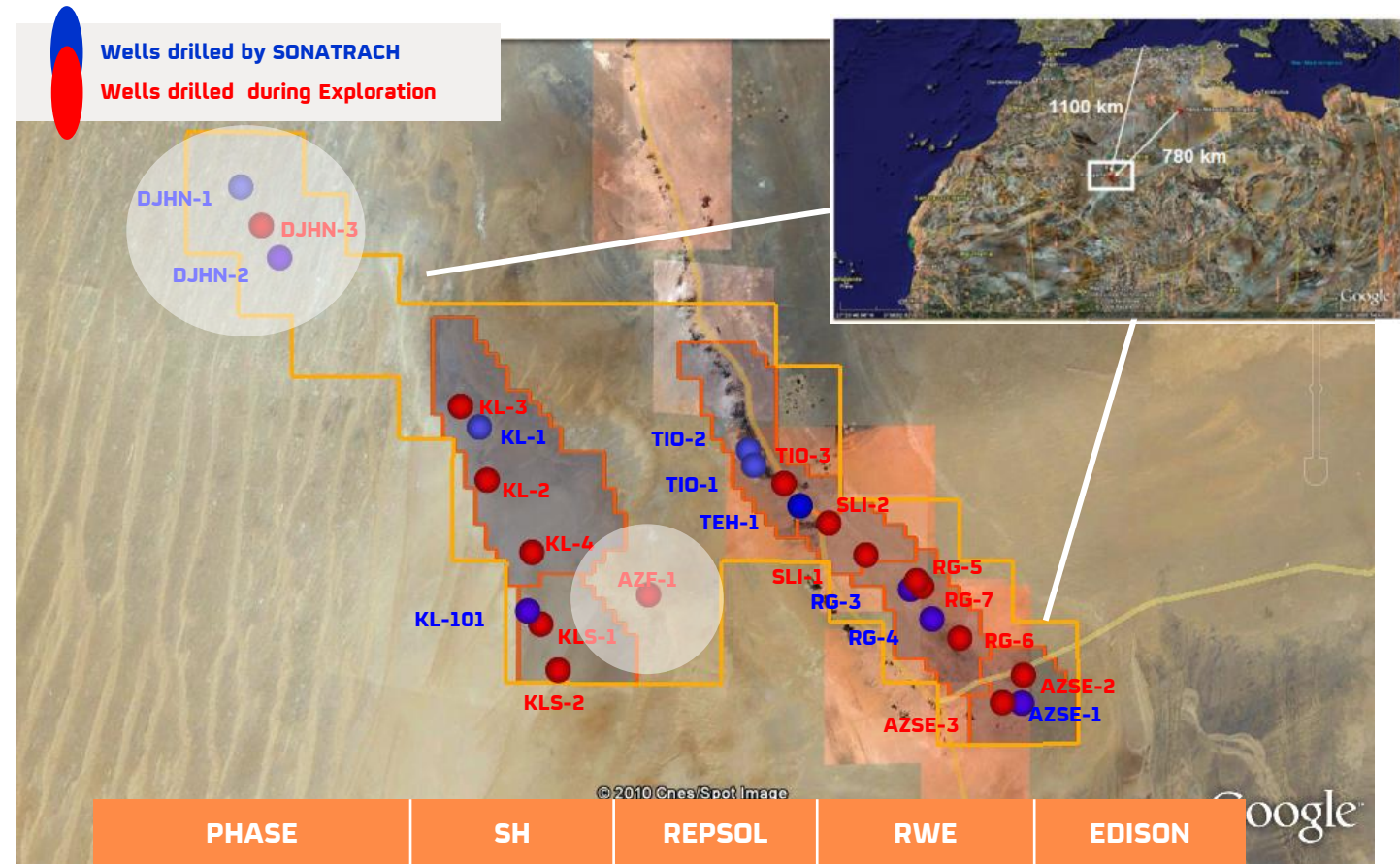
EXPLORATION

Period 1	12-Jan-03 – 11-Jan-06
Period 2	12-Jan-06 – 11-Jan-08
Period 2 ext	12-Jan-08 – 11-Jan-10



EXPLOITATION

FDP approval	30 Nov 2011
Exploitation Period.	30 years



PHASE	SH	REPSOL	RWE	EDISON
Exploration	-	45%	30%	25%
Development & Production	40%	29.25%	19.50%	11.25%



REGGANE PROJECT / REGGANE PROJECT

Project Scope



✓ **Surface Facilities**

- 8 x 10⁶ m³/d gas Processing Plant (CPF)
- 75 km export pipeline CPF-GR5
- 280 km gas gathering network (flowlines, manifolds & trunklines)
- Airstrip & Roads (162 km at First Gas)
- Compression 8 years after First Gas

✓ **Living quarters and Buildings**

- Living Camp for 250 people
- Military Camp for 108 people
- Production & Administrative buildings
- Warehouses & Yards

✓ **Subsurface & Drilling**

- 6 fields-3 reservoirs
- 69 development wells (9 from Exploration)
- 1.7 tcf GSPA reserves (2P)
- First Gas in Dec 2017
- 1,500 km² high resolution 3D seismic

✓ **CAPEX (US\$ million RTs 2014)**

- Total, \$3 billion (First Gas \$2 billion)

✓ **Number Repsol secondees assigned to JV**

- Peak >100 people Repsol expats @ Project
- Production phase, >50 Repsol expats



REGGANE PROJECT / THE CHALLENGES

- Logistics, safety & security
- Remote location
- Environmental protection
- Fougarras



REGGANE PROJECT / THE CHALLENGES

Project Challenges



Logistics, Safety & Security

PLANT

Lack of local skilled personnel.

Temporary Camp for up to 3000p

DRILLING

Moving camp for 3 Rigs, each 250p

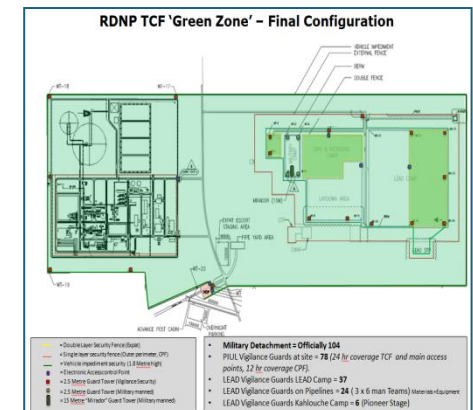
AIR TRANSPORT

Temporary airstrip

Strict aviation audit

LAND TRANSPORT

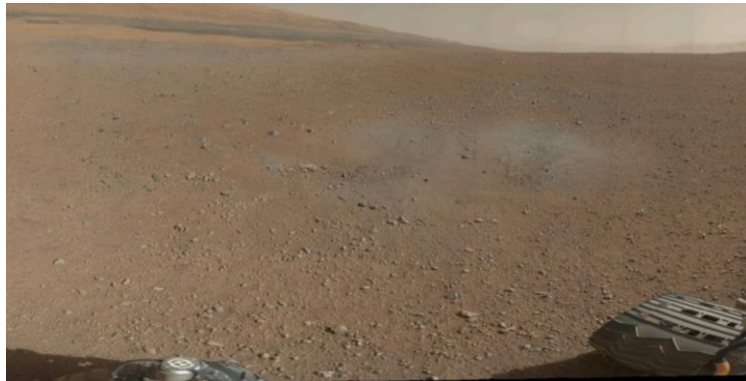
IVMS. Continuous training



REGGANE PROJECT / THE CHALLENGES



GALE CRATER (MARTE). MARS SCIENCE LABORATORY (CURIOSITY)



CAMPOS AZRAFIL SE, SALI Y REGGANE (ARGELIA)



REGGANE PROJECT / THE CHALLENGES



REGGANE PROJECT / THE CHALLENGES



ENVIRONMENT ACTIVITIES


- Create Awareness with PMT & Workers
- Waste Management
- Avoid any contaminated sites.
- Avoid any impact on wáter local resources.
- USE OF REPSOL STANDARDS



ENVIRONMENT MONTH CAMPAIGN




Objective	Proposed Activity list for Environment Month
Creating Awareness	Participation in "Water Day" in collaboration with the Adrar Wilaya Environment dept.
	Creating Awareness of the strong need to think sustainability. Conducting campaigns and participating in Green campaign exercise in all schools in the Wilaya. GRN have been involved in the reparation of local water system (The Foggara) which is the region's heritage local water distribution network .
Week 1	Environmental campaign Awareness Poster placement and sessions with managements
Week 2	Carbon Emission reduction campaign with entire work force and various sub teams across CPF and TCF
Week 3	Carbon Emission Session campaign at Kahlouche camp and Pipeline areas
Week 4	Plant a tree campaign in collaboration with the Adrar Environment department





REMEDIATION OF FOUGGARA TINOURT



What?: Representatives of L'Association de la Protection des Foggaras asked for GRN assistance to repair a line of foggara on the village of Tinourt (Project's Social Aid).






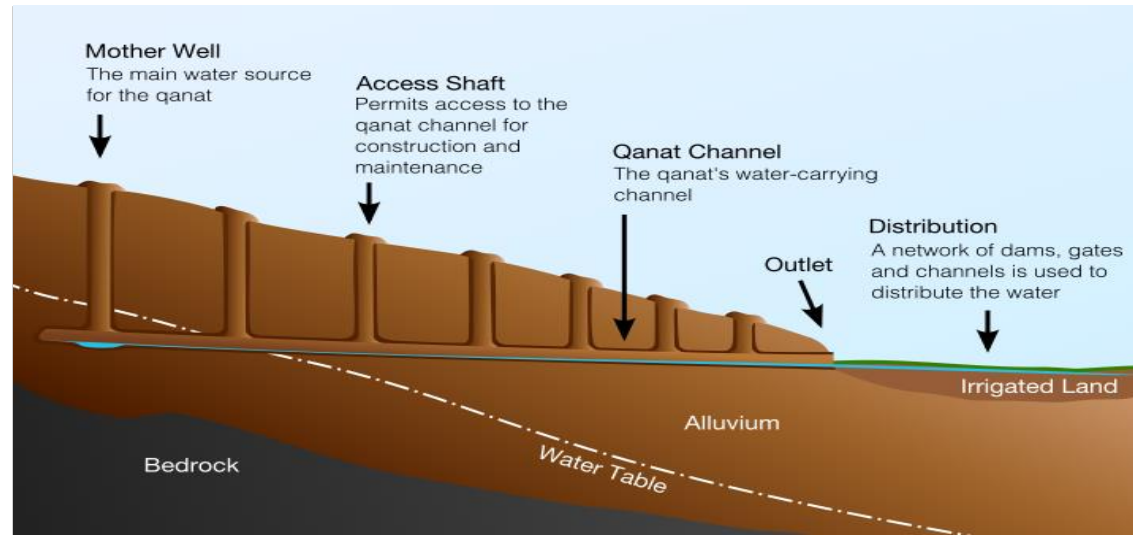
Image: crumbled foggara and water leaks

THE SOLUTION: 7 PVC pipes and concrete pods were provided to remediate the foggara.

REGGANE PROJECT / THE CHALLENGES

Fougaras



REGGANE PROJECT / HSE performance

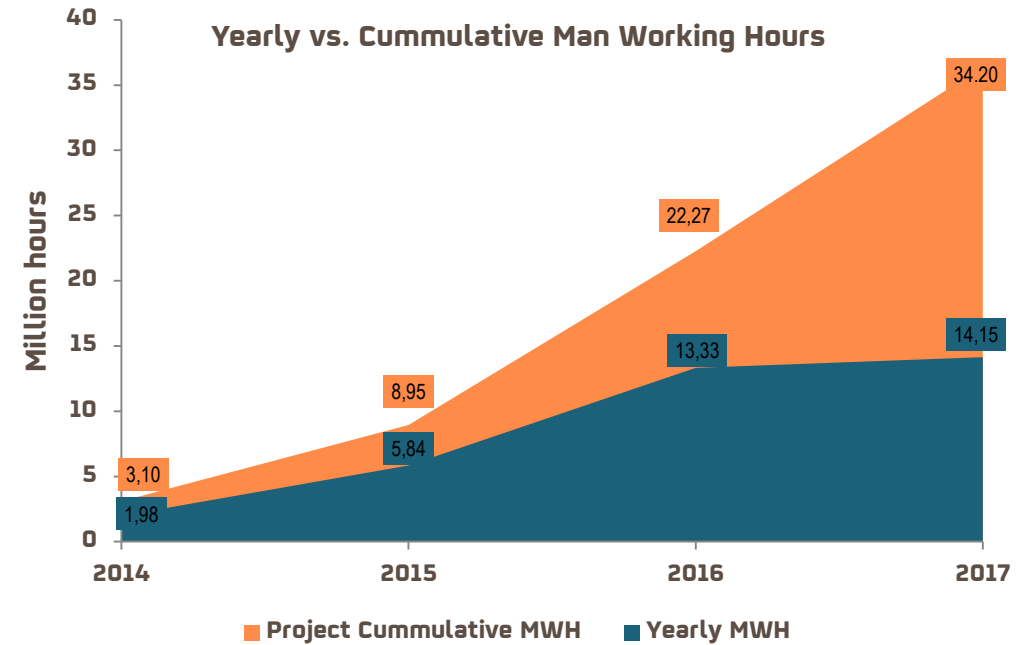


REGGANE PROJECT / HSE performance



PROJECT MANHOURS [OVERALL PROJECT]

EXECUTION PHASE (May 2014 - Date)	Project To Date
Groupement Reggane staff	1.105.326
Project team	833.536
Project Team Contractors	271.790
Contractors	33.087.640
- 3D Seismic Data Processing	25.552
- EPCCS-1 - PETROFAC	21.737.019
- EPC-2 - GCB	2.091.488
- Water Wells + Geopositioning ENAGEO	46.800
- KCA Deutag - Drilling Contractors	6.012.286
- EPC-3 - JV Petrojet - Stagma	3.174.495
TOTAL	34.192.966

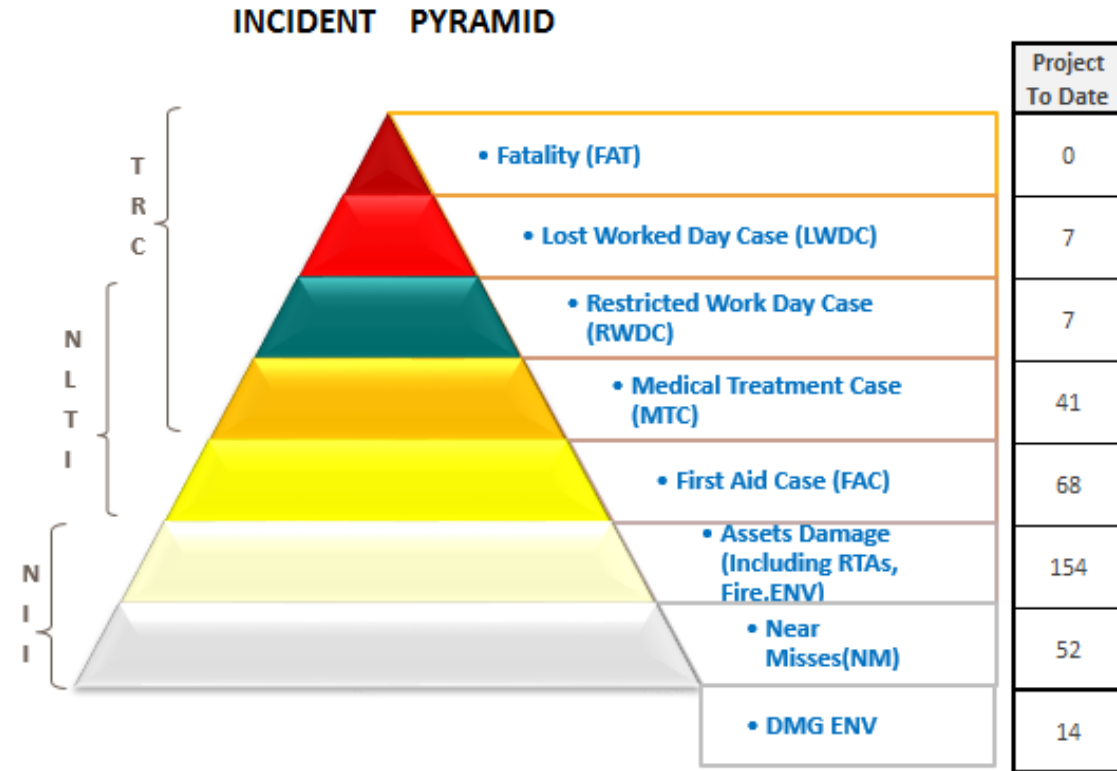


REGGANE PROJECT / HSE performance



Highlights:

- Milestone of First Gas Export achieved on 10/12/2017 without any Safety or Environmental major incident
- Milestone of a period of 15 millions man working hours without LTI achieved.
- Drilling operations completed >1300 days without LTI (No LTI's for the whole first drilling campaign)

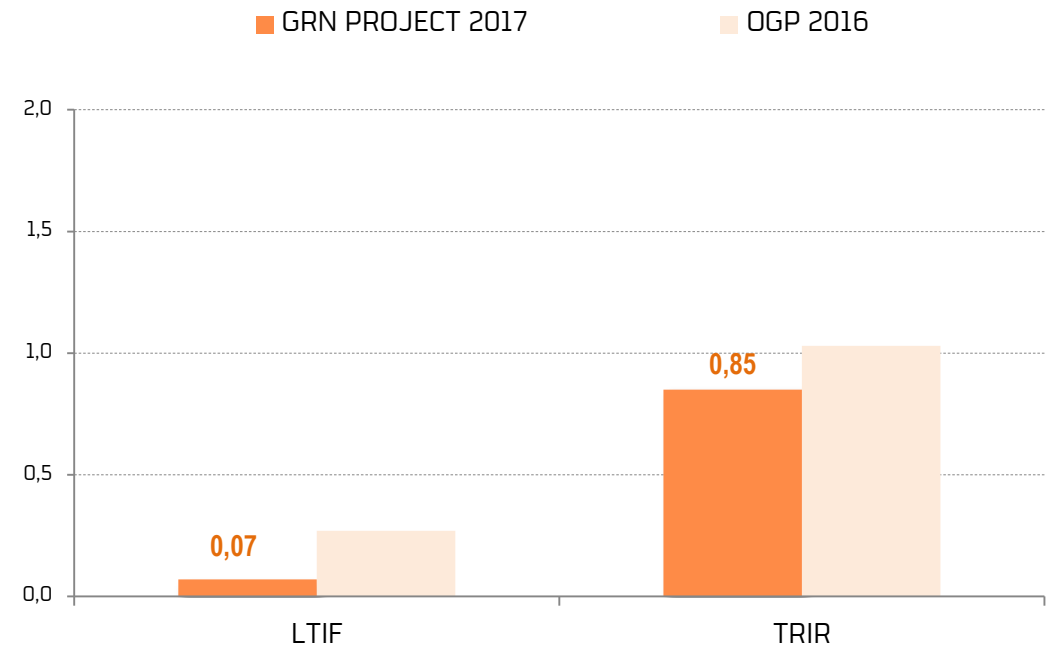


TRC: Total Recordable Case NLTI: Non LTI Case NII: None Injury Incident
 RTA: Road Traffic Accident

REGGANE PROJECT / HSE performance



	LTI	LTIF	TRI	TRIR	MWH
EPC1	4	0,18	34	1,56	21 737 019
EPC2	1	0,48	3	1,43	2 091 488
EPC3	2	0,63	9	2,84	3 174 495
DRILLING	0	0	9	1,50	6 012 286
Project to Date	7	0,19	55	1,50	34 192 966

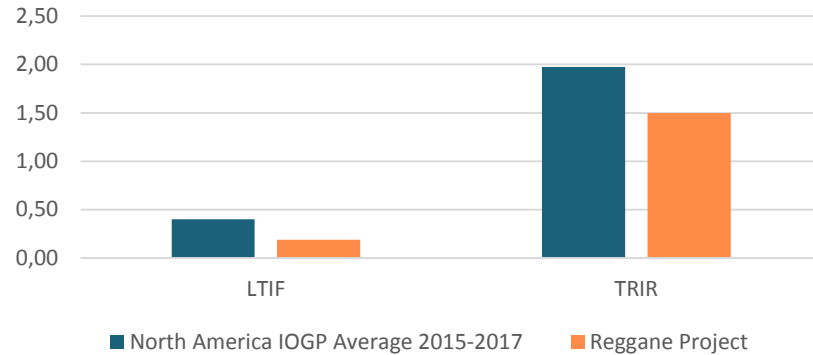


REGGANE PROJECT / HSE performance

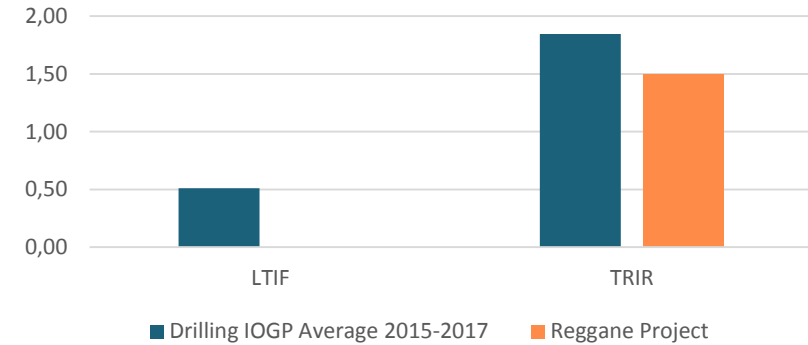


REPSOL

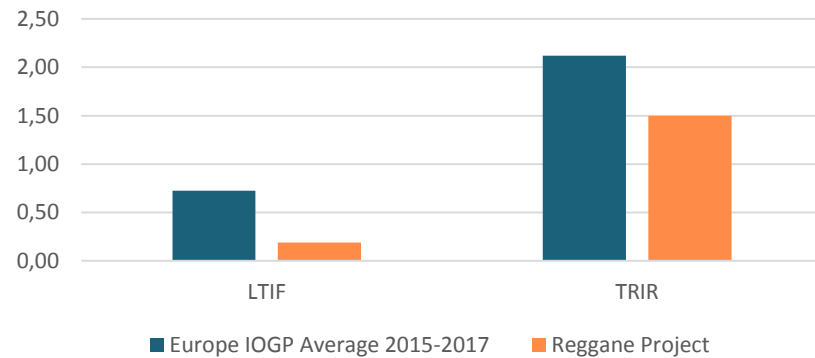
North America IOGP Avg. 2015-2017 vs. Reggane



Drilling IOGP Average 2015-2017 vs. Reggane



Europe IOGP Average 2015-2017 vs. Reggane



REGGANE PROJECT / HSE performance



REGGANE PROJECT / HSE performance



REGGANE PROJECT / HSE performance



REGGANE PROJECT



Safety, Environment and Climate Strategy to 2025



November 5th, 2018

Key Action Lines 2018-2025

Environment and Safety as basis of value creation, excellence, and responsibility

Key Action Lines

1

Achieving leadership in **process safety**

2

Quantification of environmental impacts and dependencies to support our business decisions

3

Enhancing Safety and Environment management of **Non-Operated** activities and Business relationships

4

Progressing towards excellence in the **learning process**

5

Decommissioning processes with Safety and Environment criteria

6

Keeping **social license** through outstanding environmental performance

7

Moving towards excellence in sustainable **water** management

8

Reduce Company's carbon and energy intensity

9

Boosting **culture, transformational leadership** and Safety and Environment awareness

10

Integrating **digitalization, innovation and new technologies** in Safety and Environment management

11

Evolving towards a high level management model of Safety and Environment and **developing technical knowledge**

Our position on Climate Change

How will we prepare our company for a low emissions future?

In Repsol we believe that two global goals have to be pursued:

- ✓ *To fight against climate change and*
- ✓ *To provide access to affordable energy in order to support economic growth and development*

- **We set up and deploy ambitious energy efficiency programs to reduce energy consumption and GHG emissions as one of the key elements of our strategy.**

These programs pursue long term targets which have been made public in order to facilitate their progress by the stakeholders.

- **We consider natural gas as the most cost effective solution to promote a structured transition to a low emissions future, specifically in the power generations field.** In this sense, our upstream portfolio evolves towards greater percentage of gas versus oil (about 63% in production and 74% in reserves).

- We are convinced that **innovation and technological development** are essential for ensuring reliable and sustainable energy supply in the long term.

- **Carbon Capture, Utilization and Storage** is a key element to hold the increase in the global average temperature well below 2°C above pre-industrial levels. **Repsol supports the deployment of these technologies**, working to allow projects to be technically and economically feasible, sustainable and socially acceptable.

- We have the ambition to develop a new operated position in **low carbon business** where energy efficiency, gas, biofuels, CCUS and **renewables** will be needed.

A differentiated Company targets and commitments



Targets and ambitions

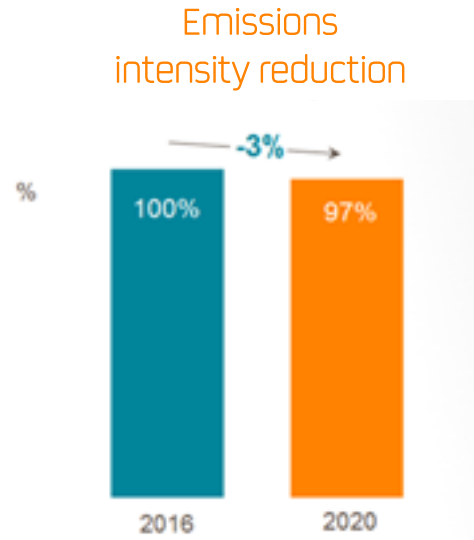
Working towards a low emissions future

Long term approach

Paris Agreement ambition to reduce carbon intensity 40% by 2040

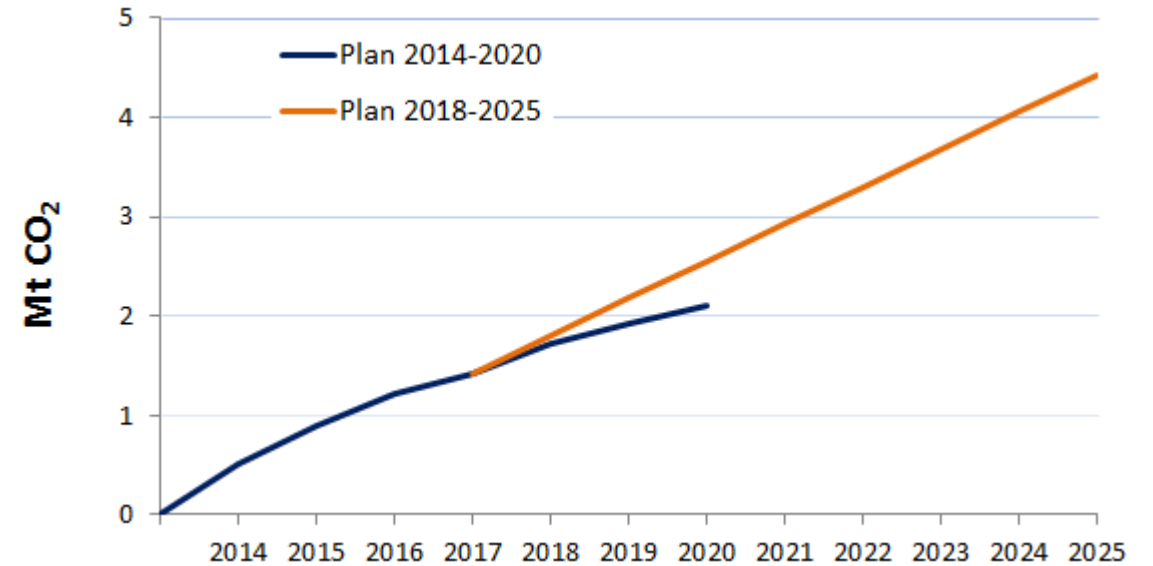
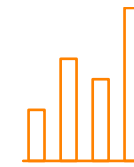


Emissions reduction -3% t CO₂/GJ



New targets by 2025:

- Methane
- Routine Flaring
- GHG emissions



Additionally in the period 2006-2013 we have reduced 3.1 Mt CO₂

**Environment and Safety
as the basis of value
creation, excellence and
responsibility**



Index



Background, Methodology
& Process



Key projects: a quick look
Culture & leadership
Anticipatory safety
Circularity
Water stewardship
Environmental quantification and
monetization



Background

- Previous Safety and Environment planning covered from 2103 to 2017
- New Repsol Strategic Plan
- The whole process has been led by the Safety & Environment Comittee, involving people from all Repsol´s Bussiness lines

Process

**Nov
2017**

**Work
plan
definition**

**Feb
2018**

**Diagnosis
SWOT
matrix**

**Mar
2018**

**Vision
Action Lines
Objectives
2025**

**April
2018**

**Validation
by top
management**

**Jun
2018**

**Key
projects to
2025**

**Sep
2018**

Approval

**Feb
2019**

Metrics

**Annual
follow-up**

STRATEGIC VISION INTERVIEWS

- Top Management Interviews

ANALYSIS OF INTERNAL SOURCES

- Internal References
- Interviews with Unions
- Questionnaire to employees

ANALYSIS OF EXTERNAL SOURCES

- Best practices
- Think tanks
- Trends
- External Interviews

2 Working Groups [Safety and Environment] made up of Repsol's experts in different topics [Operations, Projects, S&E Management, etc]

Index



Background, Methodology
& Process



Key projects: a quick look

- Culture & leadership
- Anticipatory safety
- Circularity
- Water stewardship
- Environmental quantification and monetization



Safety Culture & Leadership

- Process of cultural transformation
- Real and visible leadership is the cornerstone to boost Safety Culture
- Integrated into all decision-making

**Key Project:
Safety
Leadership
Transformation
Program**

Anticipatory Safety to prevent major accidents

- Reinforce existing models of safety barrier management
- Asset integrity as a key aspect [focus on the less visible components: underground and submarine equipment]

**Key Project:
Leading
Indicators
Scorecard**

New opportunities for a Circular Economy

- Move towards quantitative analysis of Circular Economy initiatives
- Promote the identification and implementation of new opportunities
- Implementation of indicators for each Business
- Establishment of Circular Economy targets
- Promote industrial symbiosis

An orange rectangular box containing the text "Key Project: Reciclex" in white, bold, sans-serif font. The box is positioned over a background of overlapping, semi-transparent ribbons that form a circular shape. Each ribbon has the words "CIRCULAR ECONOMY" and a green arrow pointing to the right, repeated along its length.

Water stewardship

- **Quantify**
- **Identify alternative sources**
- **Reduce consumption**
- **Improve the significance of current performance indicators**
- **Incorporate the real value of water in the decision process**

**Key Project:
Repsol Water
Book**

Quantification of environmental impacts and opportunities

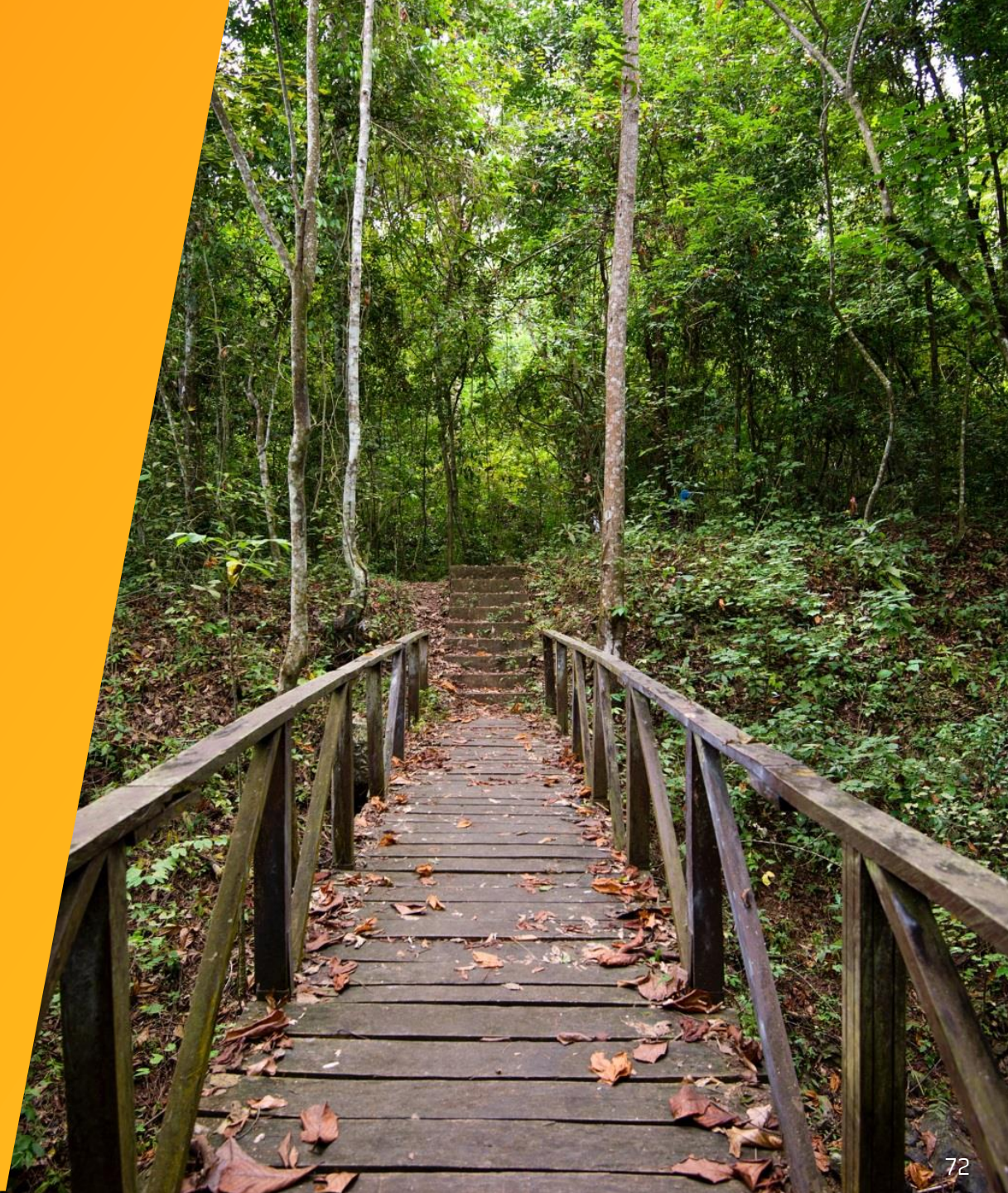
Repsol is working towards the definition and implementation of an integrated economic model aimed to:

- Manage our environmental impacts and dependencies by considering their actual value in the economic analysis of projects
- Analyze the value added by the Environmental Management and its impact in the business
- Integrate environmental criteria into decision-making regarding new projects, acquisitions, and operational excellence in assets

**Key Project:
Repsol
Environmental
Data Analysis
System
(READS)**



**Leadership in the
energy transition. New
Energy and climate
targets and ambitions**



Index



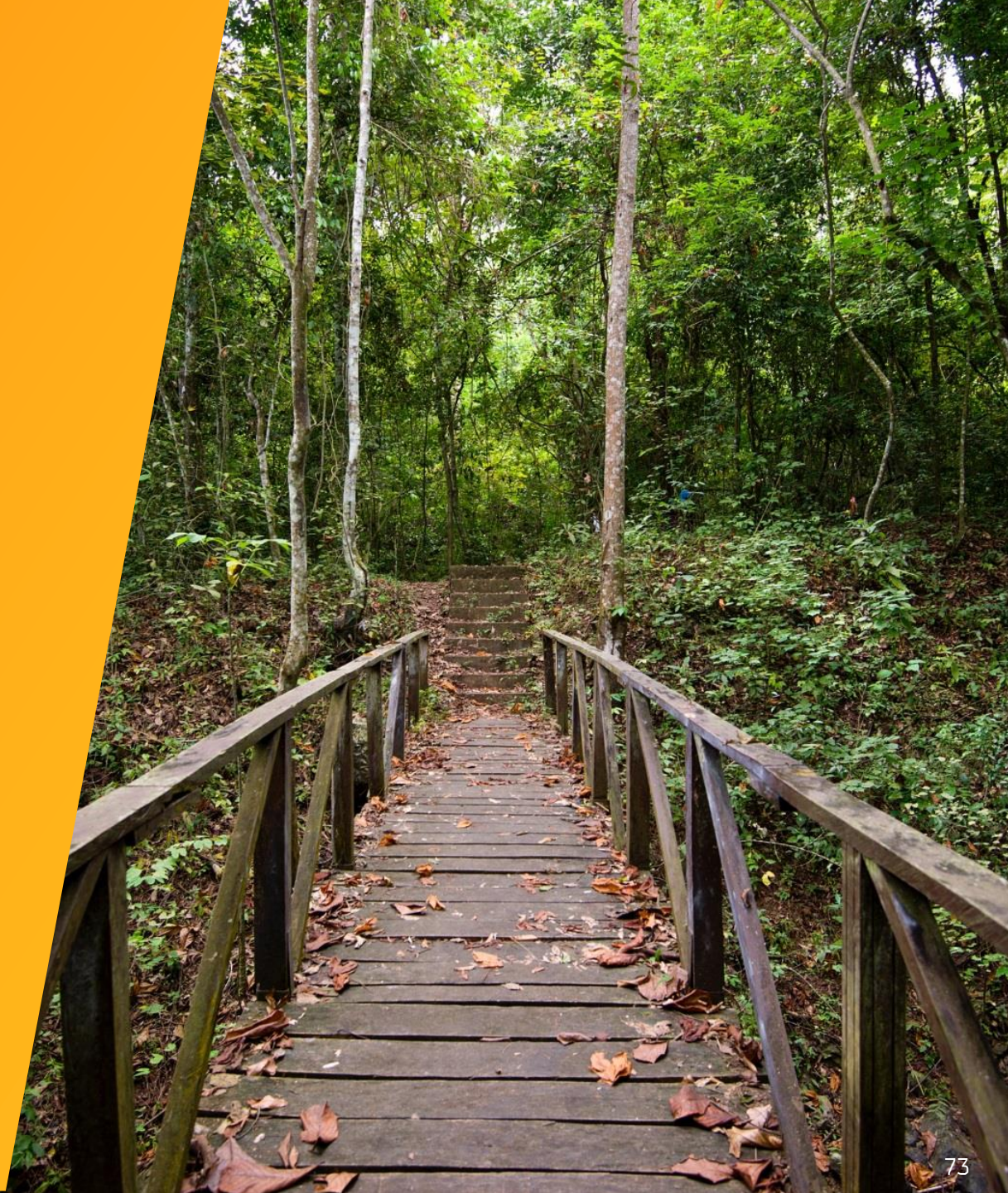
Repsol Long-Term approach



Targets to improve our Short-Term levers



Repsol experience issuing a Green Bond



Repsol Long-Term approach

Working towards a low emissions future

In Repsol we believe that two global goals have to be pursued:

- To fight against **climate change** and
- To **provide access to** affordable **energy** in order to support economic growth and development

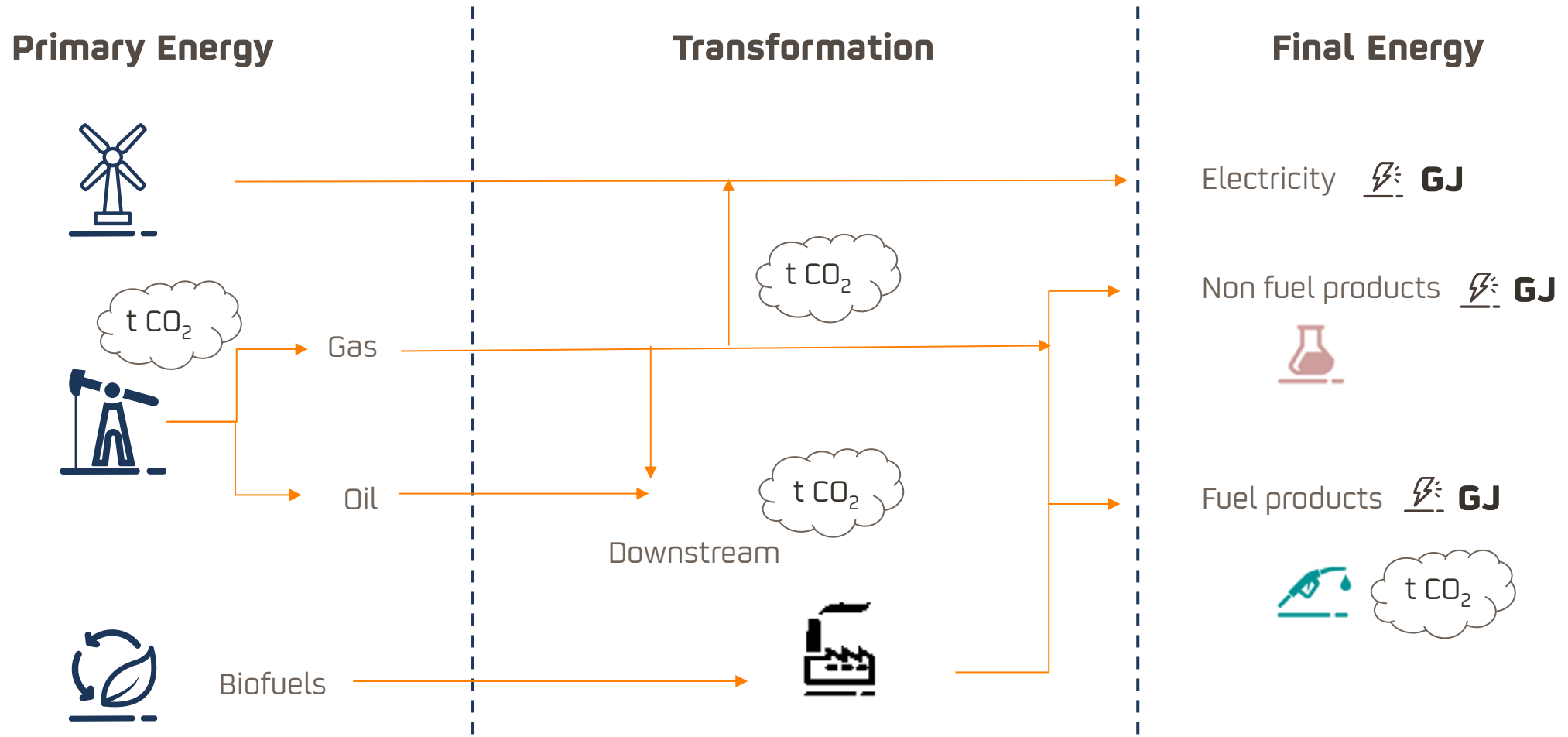
Defining a global carbon intensity indicator

t CO₂/GJ

Supply energy [GJ] with the lowest possible emissions [CO₂]

Repsol Long-Term approach

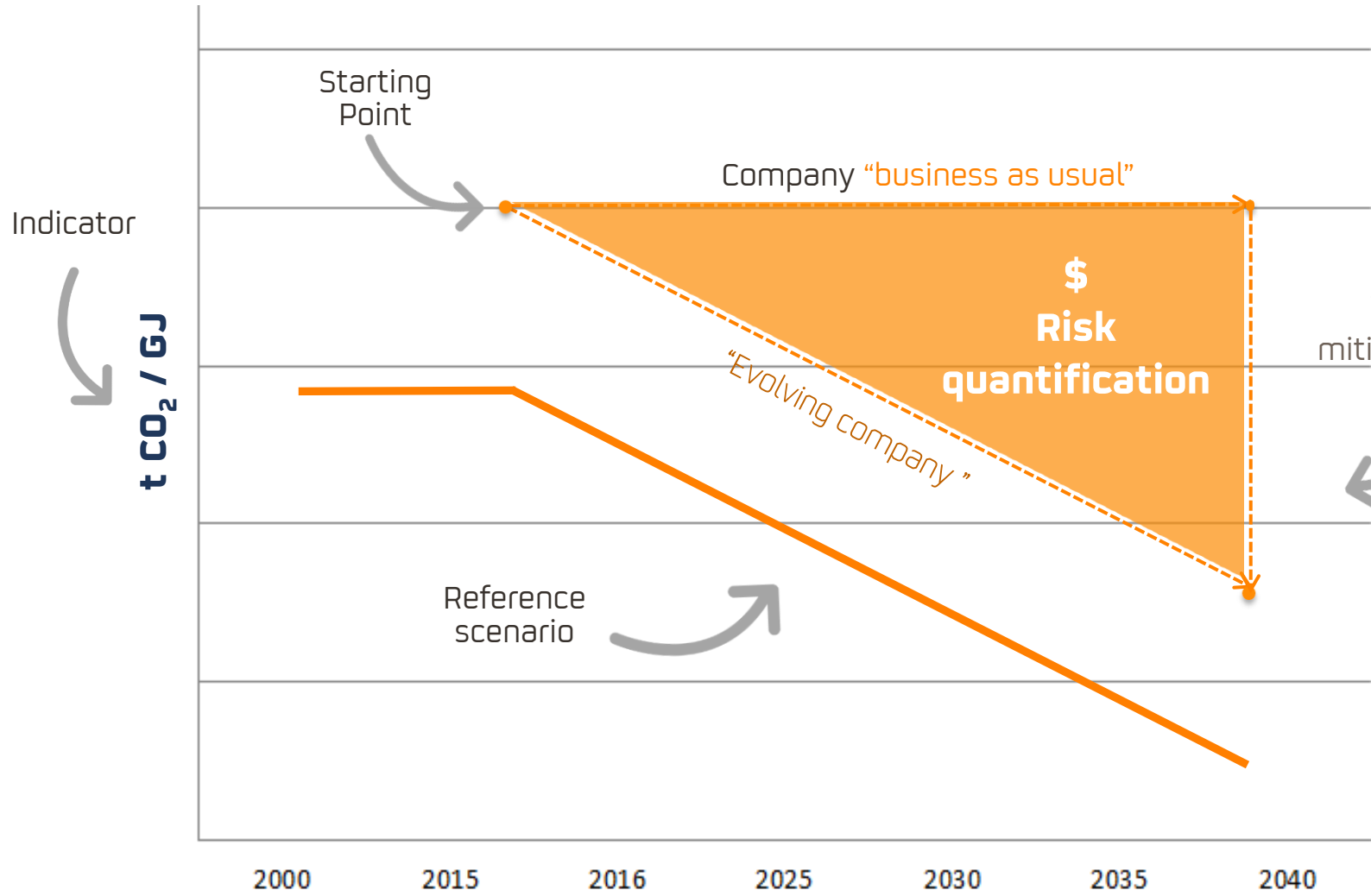
How to manage the global indicator?



t CO₂ / GJ

Repsol Long-Term approach

Defining Scenarios and Levers to mitigate the transition risks



Levers
in order to
mitigate the risks

Taxonomy
Sustainable
Finance

- Ratio Oil to Gas
- Energy Efficiency
- Methane emissions
- Flaring
- NFU, Chemistry
- Biofuels
- Renewables
- CCUS
- Green / Blue H₂
- Natural Sinks
- Etc.



Carbon Pricing

Repsol Long-Term approach

Targets and ambition



Our ambition

Repsol has a clear ambition (-40% by 2040) to reduce our carbon intensity and fight against climate change

Repsol uses the ratio $t\ CO_2/GJ$ to measure its $2^\circ C$ path progression

Repsol has a clear positioning and values aligned with climate change:

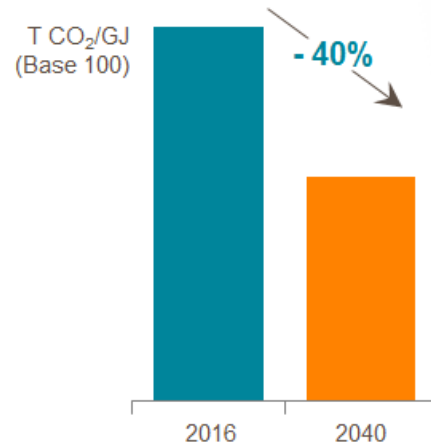
- Supply society with access to affordable energy
- Be part of the solution in the fight against climate change

Objective: Supply the energy needed with a reduced impact to environment.

Ratio used: carbon intensity ($t\ CO_2/GJ$)

Note: 40% tCO_2/GJ reduction needed to achieve the 2 degrees objective from Paris Agreement
Source: Repsol, IEA

Paris Agreement ambition to reduce carbon intensity 40% by 2040



Repsol aligned with the 40% reduction through key levers

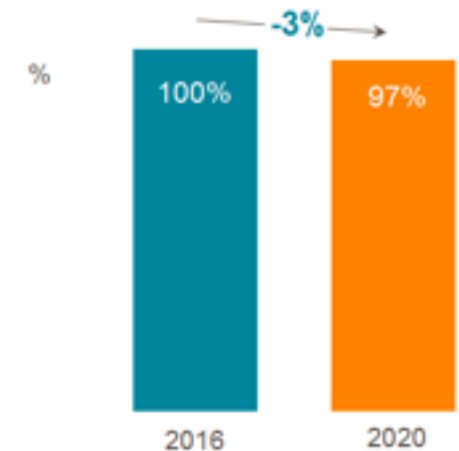
Key levers for CO_2 emissions reduction:

- Natural gas shift
- Energy efficiency
- Methane emissions
- Minimizing flaring
- Carbon capture, utilization and storage
- Non fuel uses (chemicals)
- Increase biofuels
- Increase use of renewables
- Natural sinks
- Hydrogen & others

Our commitment

Emissions reduction
-3% $t\ CO_2/GJ$

Emissions intensity reduction



/ Index



Repsol Long-Term approach



Targets to improve our Short-Term levers



Repsol experience issuing a Green Bond



Targets to improve our Short-Term Levers

Reducing methane emissions to support the role of natural gas



25%/25 REPSOL commits to reduce by 25% its methane emissions by 2025

Scope all O&G operated assets [170 ktCH₄ in 2017]

COLLABORATION WITH PARTNERS SHARING
BEST PRACTICES AND TECHNOLOGY
DEVELOPMENT



Methane Guidance Principles Roundtable

Accurate detection and quantification methodologies implementation

- Expanding application scope of LDAR techniques
- Testing emerging technologies
- Developing digital projects

Emission reduction opportunities identification & application

- Continuous updating of Opportunities Catalogue
- Sharing external and internal best practices
- Applying mitigation technologies

Transition to a lower emission portfolio

- Focused on gas as a transition fuel
- Considering GHG emissions as a key factor in the decision making process



Targets to improve our Short-Term Levers

Working at a pace to minimize the routine flaring by 2030

50% reduction of the routine flaring by 2025

Scope: all O&G operated assets

Baseline: 2017

REPSOL ZERO ROUTINE FLARING ENDORSEMENT

1

Minimize routine flaring in E&P operations by 2030

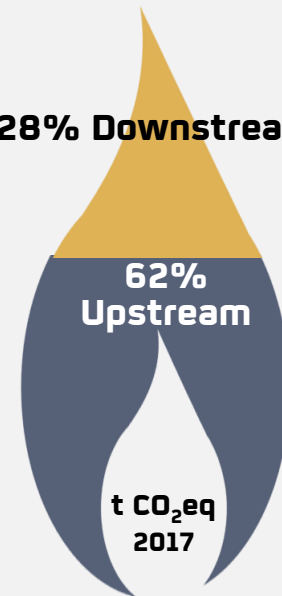


WORLD BANK GROUP

2

Ensure that new fields include, from design phase, solutions to avoid routine flaring and venting

28% Downstream



ON SITE MINIMIZATION

- More accurate measurement
- Identification of routine / non-routine flaring
- Improve facility design and operational procedures

GAS REUTILIZATION

- Fuel combustion
- Power generation
- Re-injection



COMMERCIAL SOLUTIONS

- Include in the gas sales after treatment, if any.



WHAT IS ROUTINE FLARING

Flaring during normal oil production operations in the absence of sufficient facilities or amenable geology to re-inject the produced gas, utilize it on-site, or dispatch it to a market.

Targets to improve our Short-Term Levers

Going beyond improving efficiency in our facilities: New reduction Plan 2018-2025

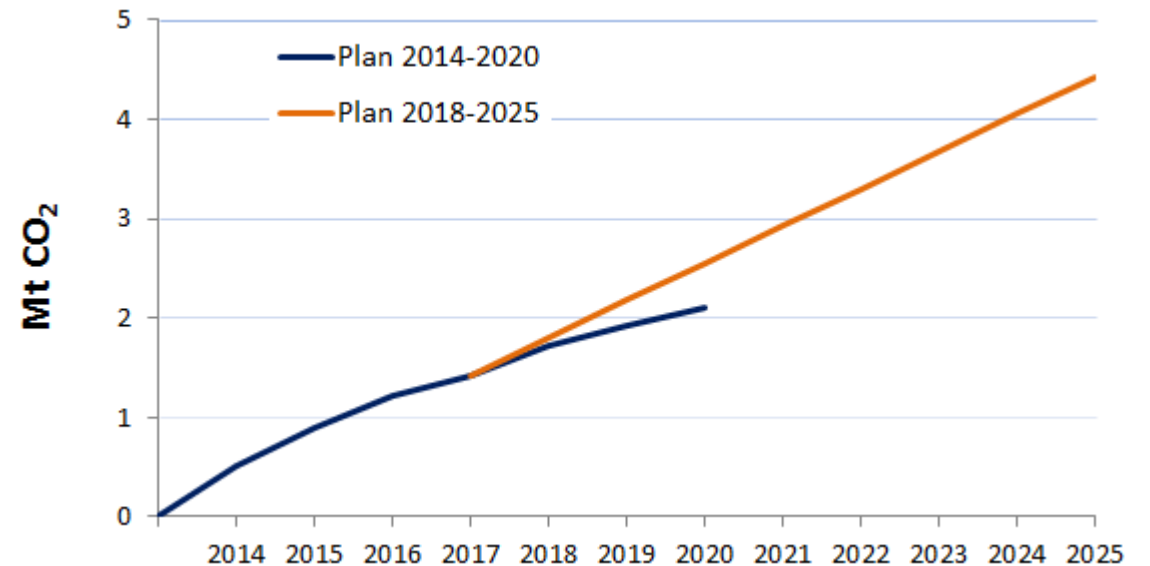
Efficiency improvement

1. Electrification
2. Units simplification
3. Networks simplification
4. Opportunities for energy use
5. Fugitive emissions reduction
6. Flaring & Venting opportunities
7. Environment integration (energy import/export)
8. Adaptation and optimization of fuel gas, steam and H₂ balances
9. Digitalization

New processes and technologies

10. Renewable generation
11. New processes
12. CO₂ Capture and use
13. Green hydrogen

Expressing **our ambition**:
Our goal goes **beyond improving efficiency** in our facilities!



3 Mt CO₂eq by 2025

Index



Repsol Long-Term approach



**Targets to improve our
Short-Term levers**

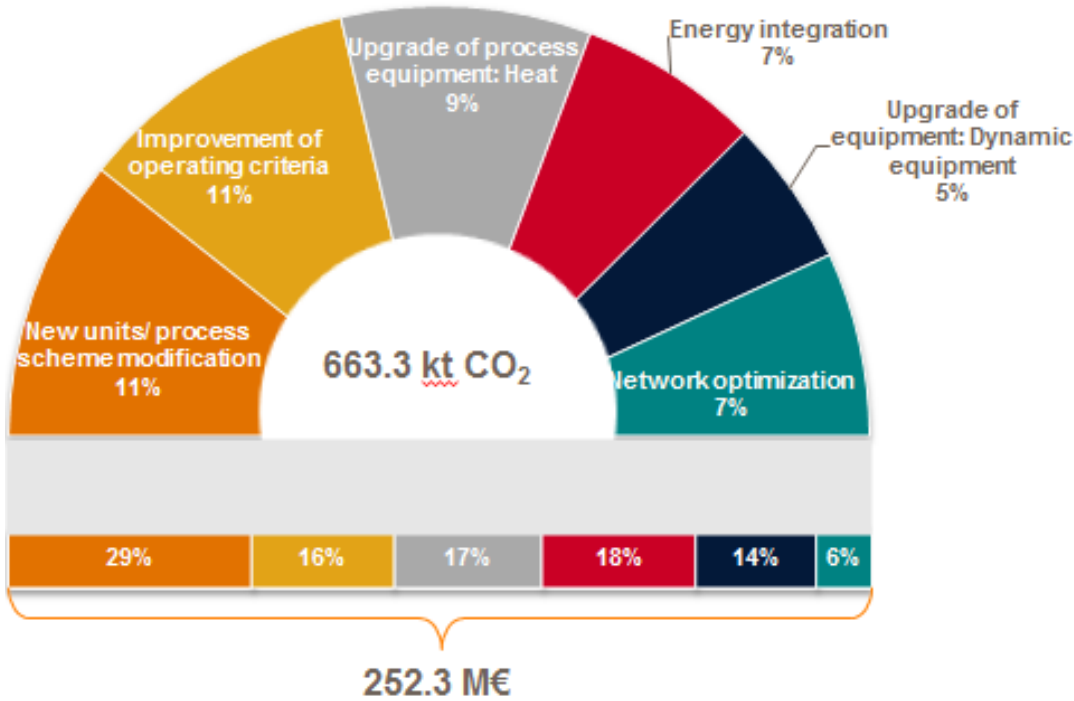


**Repsol experience issuing
a Green Bond**



Repsol experience issuing a green bond

Repsol green bond: A year later...



\$

51%

of the funds were allocated by the year 2017

CO₂

55%

of the GHG emissions were avoided by the year 2017

And more than 130 actions!



2017+ new energy efficiency and low emissions projects to allocate the rest of the funds

June 2018: **First Third Party verification** process*

* All projects have been verified under ISO 14064-1 standard.

Repsol experience issuing a green bond

... and some remarks for the future

- **Repsol was pioneer in the issuance of a green bond by a leading O&G company, reinforcing our commitment with sustainability.**
- It deserved many positive recognitions in the financial markets. Opening, at the same time, **a necessary debate about the important role of oil and gas sector** in the energy transition and in the sustainable financing markets.
- Our commitments to sustainability include new low carbon businesses, as well as ambitious energy efficiency programs and support of CCUS technologies. **In our view it is very important to move towards a broader green taxonomy** that includes all these initiatives that have a clear positive impact in the environment, regardless of the sector. Allowing all energy sources to play a positive role in the future scenario and to have access to green financing.
- We have a great opportunity ahead of us. It is necessary that **innovation, technology, regulation and also financing converge in a single path: securing a sustainable future.**
- Repsol's intention is to continue **being active at green financing markets in the future** to support the implementation of our Sustainability Plan:
 - Funding projects for the development of low carbon business and new technologies that clearly contribute to a low emissions scenario.
 - Always following the ICMA's Green Bond Principles, in the same way that we did in our existing Green Bond.

Safety, Environment and Climate Strategy to 2025



November 5th, 2018



Repsol's 5th Sustainability Day

London, 5 November 2018