



# Capital Markets Day

Strategic Plan 2018-20

Francesco Starace  
CEO & General Manager



# Capital Markets Day

## Agenda



Opening remarks	Francesco Starace
2018-20 Strategic Plan Key Pillars	Francesco Starace
2018-20 Strategic Plan Financials	Alberto De Paoli
Global Infrastructure & Networks	Livio Gallo
Global Renewable energies	Antonello Cammisecra
Global e-Solutions	Francesco Venturini
Global Thermal Generation	Enrico Viale
Global Trading	Claudio Machetti
Closing remarks	Francesco Starace

# Capital Markets Day

Enel today: evolution since 2014<sup>1</sup>



#1 private **network** operator globally  
65 mn end users and 44 mn digital meters

+4.5 mn end users  
+8.4 mn smart  
meters<sup>3</sup>



~20 mn free **retail** customers  
#1 in Italy, Iberia and top.3 in Latam

+5 mn free customers  
+20% electricity sold  
in free market



#1 **renewable** operator  
~40GW managed capacity<sup>2</sup>

+6 GW  
+80%  
additional capacity

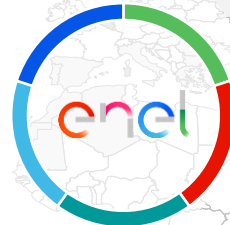


~47 GW **thermal** capacity  
Highly flexible and efficient assets

10 GW  
capacity closure



e-Solutions  
+5.7 GW demand response



□ Countries of presence<sup>4</sup>

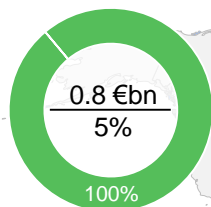
1. 2014-2017 delivery. As of 2017E
2. Consolidated capacity equal to 37 GW (including 25 GW of large hydro)
3. Including replacement of smart meters 2.0 in Italy equal to 1.4 mn. Enel global market share equal to 24% (BNEF 3Q17 Energy Smart technologies market Outlook)
4. Presence with operating assets

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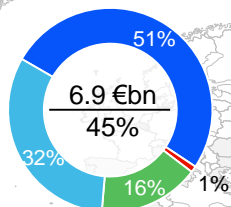
Enel today: global and diversified operator<sup>1</sup>



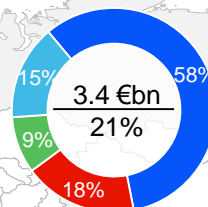
North & Central America



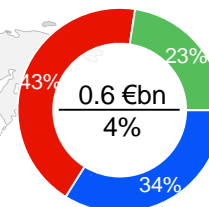
Italy



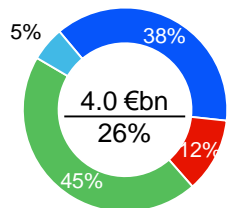
Iberia



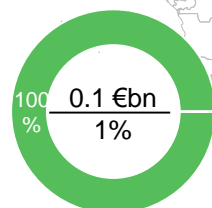
Europe & North Africa



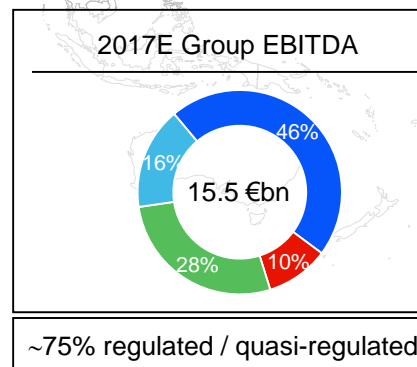
South America



Subsaharian Africa & Asia



2017E Group EBITDA

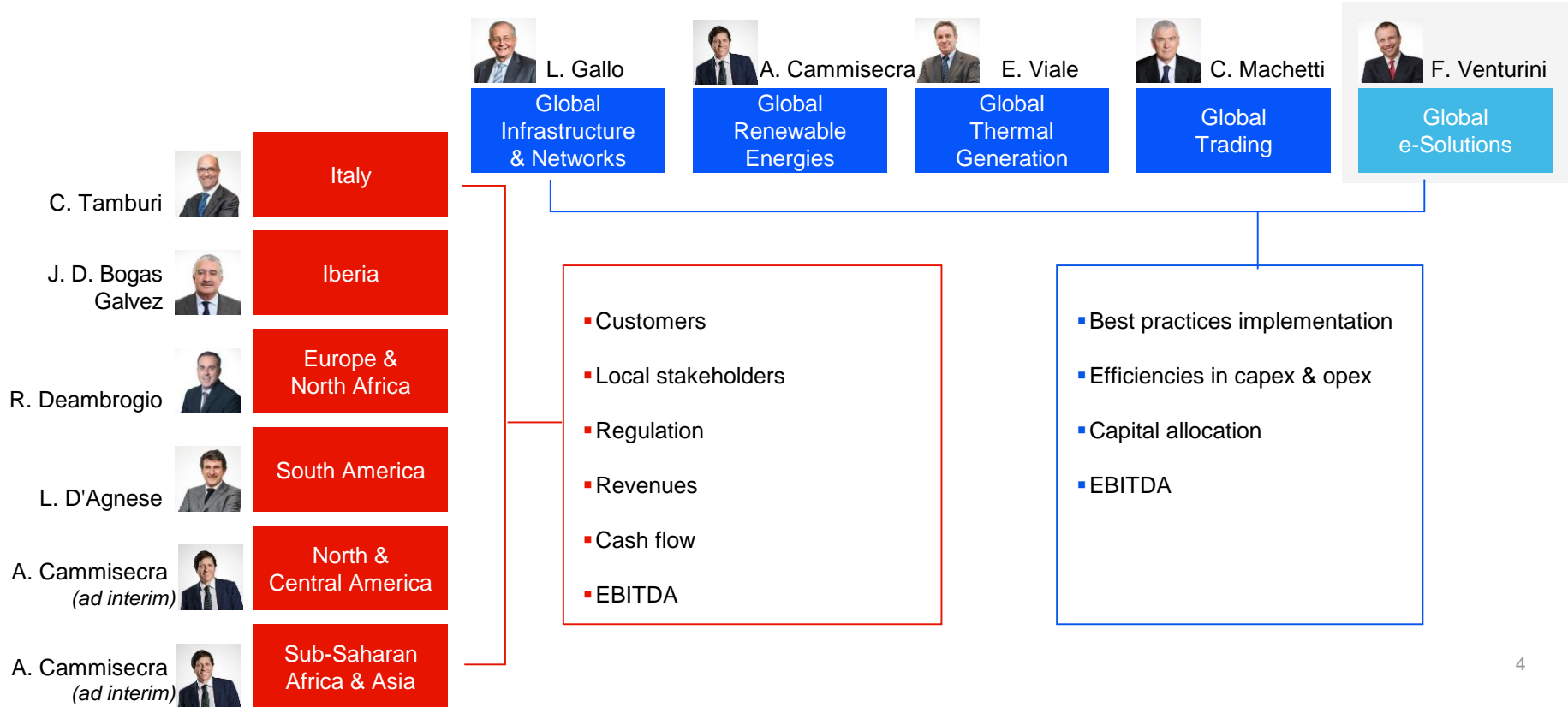


■ Networks ■ Renewables  
■ Thermal generation ■ Retail

1. As of 2017E. Breakdown excludes -0.3 €bn from holding and services Presence with operating assets

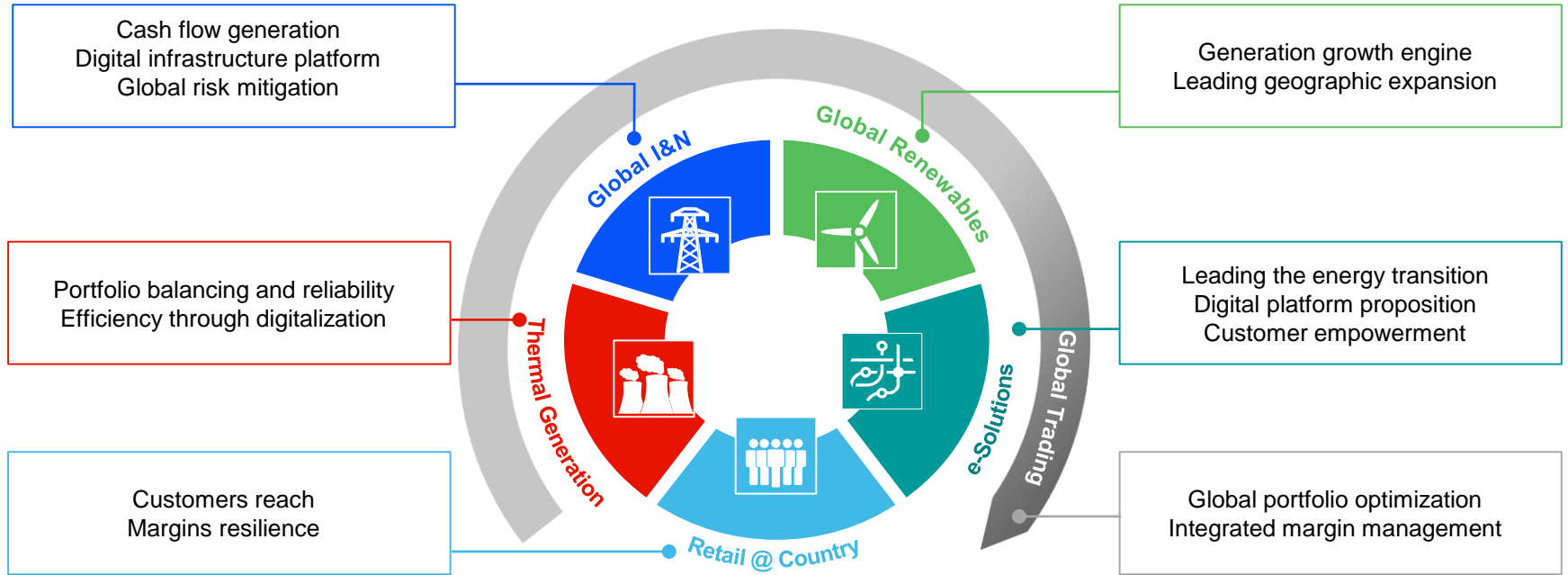
# Investor presentation

Updated organizational structure



# Capital Markets Day

Integrated model fit for digitalized, low carbon world



Fully integrated business model drives value and synergies



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Delivery on strategic plan

# Capital Markets Day

Delivery on strategic plan: financial targets



	2015 actual	2016 actual	2017 target	CAGR
Ordinary EBITDA (€bn)	15.0 ✓	15.2 ↑ target 15.0	15.5	~2%
Net ordinary income (€bn)	2.9 ✓	3.2 ✓	3.6	~11%
DPS (€/sh)	0.16 ✓	0.18 ✓	0.23 <sup>1</sup>	~15%
Pay-out	50% ✓	55% ✓	65%	~14%
FFO/Net debt	25% ↑ target 21%	26% ↑ target 25%	27%	~2%

Financial targets met across the board

1. Minimum DPS equal to 0.21 €/sh



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Delivery on strategic plan: strategic pillars



2015-17 Delivery

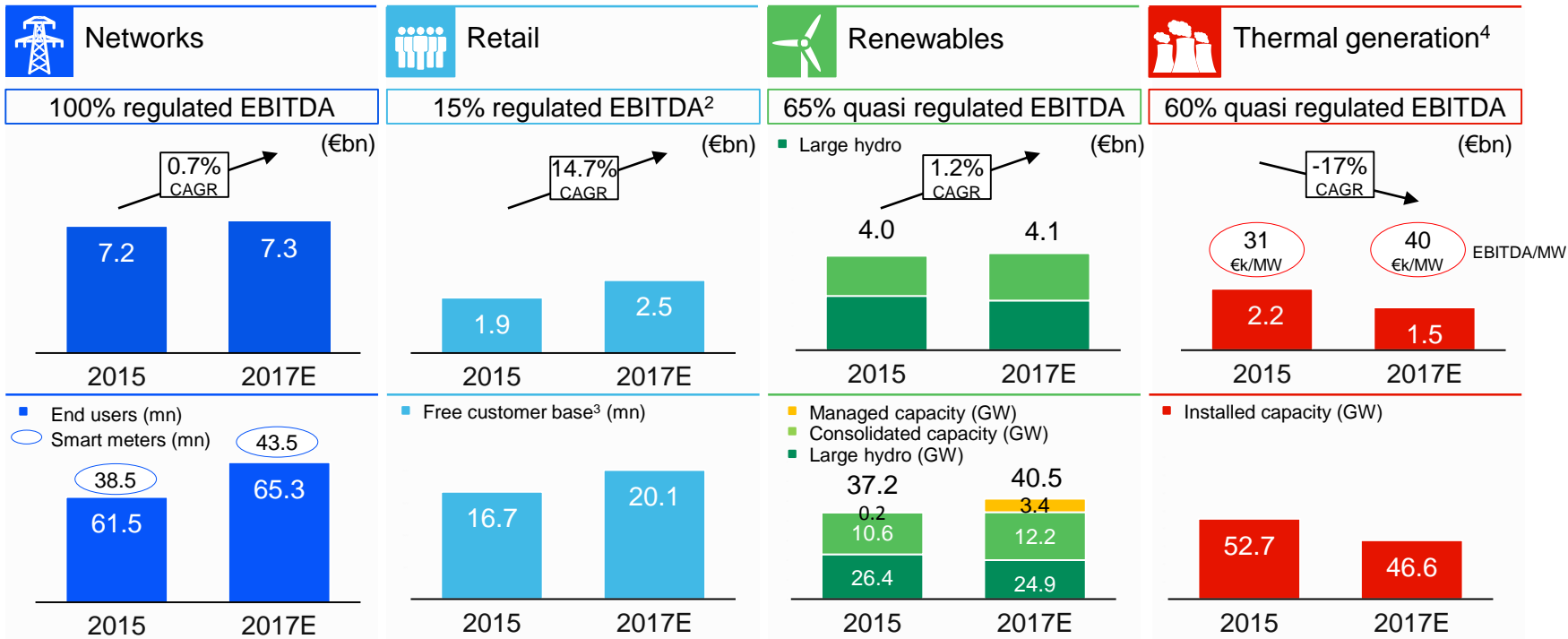
1	Operational efficiency	1 €bn opex savings in 2017 in real terms Maintenance capex down by over 10%	✓
2	Industrial growth	16 €bn growth capex in the past three years 800 €mn 2017 growth EBITDA <sup>1</sup> fully secured	✓
3	Group simplification	From 69 to 53 companies in South America EPS accretion: from 64% to 73% of economic interest <sup>2</sup>	✓
4	Active portfolio management	6.3 €bn asset rotation finalized 5.8 €bn for acquisitions, minority buyouts and growth	✓
5	Shareholder remuneration	Payout raised from 50% to 65% DPS floor at 0.21 €/share for 2017	✓

Sound progress on all strategic pillars

1. Including connection contribution  
2. Calculated as Group Net income on Net income pre-minorities

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Delivery: business drivers<sup>1</sup>



1. EBITDA figures are rounded

2. Global retail including e-Solutions equal to 0.1 €bn in 2017

3. Includes only power and gas free customers

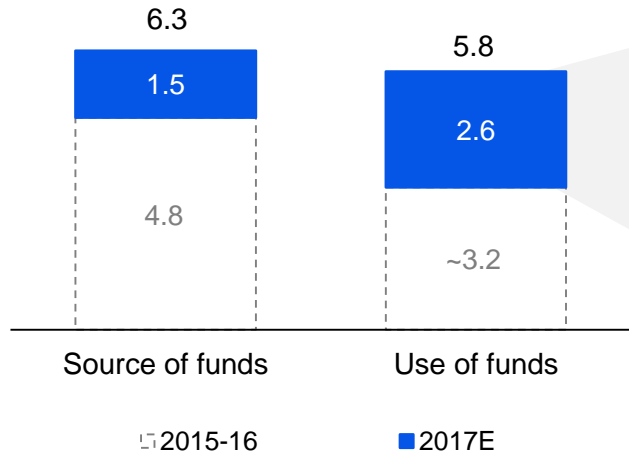
4. Including Global Trading and nuclear in Iberia. 2015 EBITDA includes Slovenske Elektrarne sold in 2016

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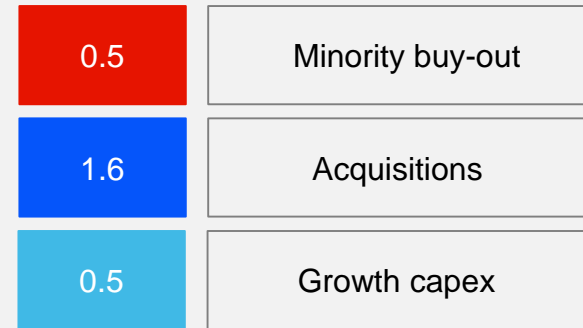
Delivery on active portfolio management



2015-17 active portfolio management (€bn)<sup>1</sup>



2017 Use of funds (€bn)<sup>1</sup>



80% of 2015-2019 plan completed

# Capital Markets Day

Delivery: Mexico BSO



## Key figures

1.7 GW capacity  
0.4 MW operating assets  
1.3 GW under construction

2.2 €bn asset value

0.2 €bn capital gain  
expected in 2017

1.6 €bn debt reduction



## Description and main drivers

Sale of majority stake to financial investors<sup>1</sup>

Equity IRR 11%

Long term contracts  
Stable cash flow generation

Option to reconsolidate through new  
projects contribution

**First successful application of BSO strategy outside the US**

1. Caisse de dépôt et placement du Québec, and CKD Infraestructura Mexico

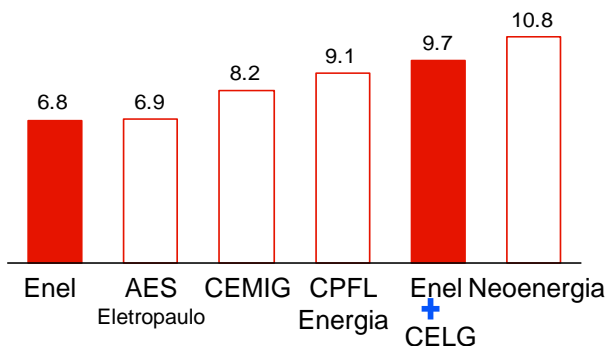
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Delivery: positioning in a digitalized, low carbon world



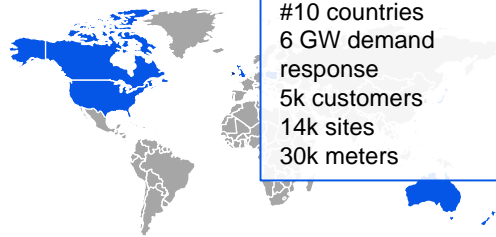
## CELG-D

Distribution companies in Brazil (# customers, mn)



Second Brazilian network operator<sup>1</sup>

## EnerNOC



Leader in demand response worldwide

## Demand Energy

- Behind-the-meter storage market
- 3 MW/9 MWh of installed capacity in USA and South America
- Pipeline in excess of 30 MW/100 MWh

## eMotorWerks

- V1G e V2G platforms<sup>2</sup>
- US customer base > 22 k
- Charging stations in US and South America
- Synergies with Demand Energy and Enernoc

**Bolt-on acquisitions in networks and demand response to strengthen positioning**

1. In terms of number of customers  
2. Vehicle to Grid

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## Delivery: a sustainable strategy



### Enel commitments to the global SDGs



400,000 people by 2020



3 million people by 2020, mainly in Africa, Asia and Latin America



1.5 million people by 2020



< 350 gCO<sub>2</sub> /kWh<sub>eq</sub> by 2020  
(-25% vs base year 2007)


### Delivery

2017E

2015-17E<sup>1</sup>



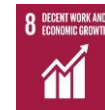
~200,000

~500,000 



~400,000

1.7 million



~300,000

1.5 million 



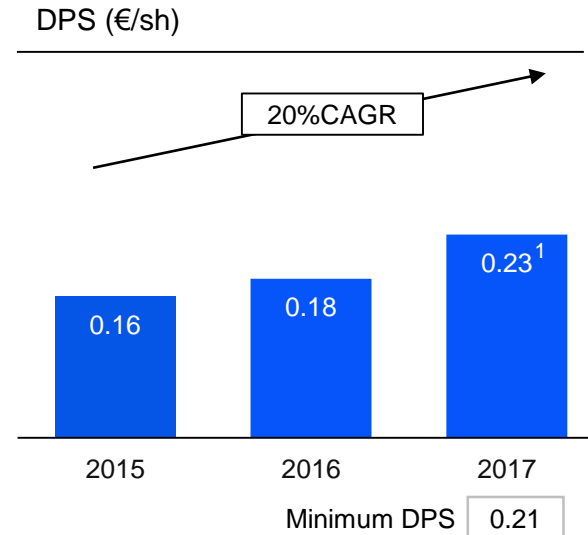
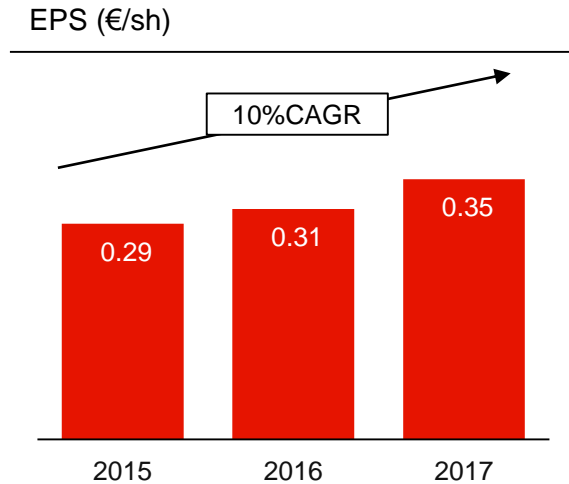
399 gCO<sub>2</sub> /Kwh<sub>eq</sub><sup>2</sup>

n.a.

1. Cumulated figure
2. -14% vs base year 2007. Including BSO

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Delivery: shareholders' remuneration



Strategy has delivered strong earnings and dividend growth

1. DPS based on payout



# Capital Markets Day

2018-20 strategic plan

Key pillars



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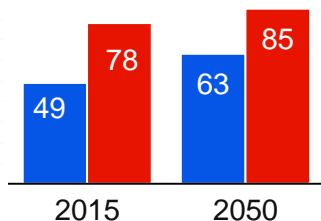
## Sector trends



### Urbanization trend

By 2050, 6.3 bn people will live in cities  
66% on total population  
Cities will have to be smart and resilient

Urbanization rate<sup>1</sup> (%)

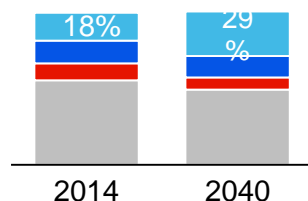


■ Developing countries ■ Developed countries

### Electrification

By 2040, electricity will increase from 18% to 29% of total energy demand driven by the electrification of transports and heat production

% on final energy demand<sup>3</sup>

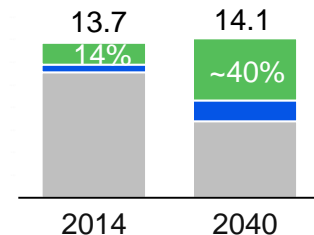


■ Power ■ Gas ■ Coal ■ Other<sup>4</sup>

### Decarbonization

By 2040, ~40% of generation will come from renewables  
Achievement of Paris Agreement entails fuel switching

Primary energy mix<sup>2</sup> ('000 Mtoe)

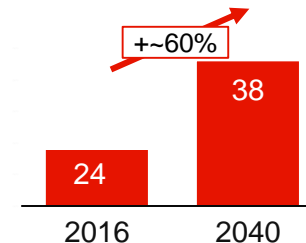


■ Renewables ■ Fossil ■ Nuclear

### Demand increase

By 2040, electricity demand will increase globally by ~60%

Electricity demand<sup>5</sup> ('000 TWh)



1. United Nations, World Population Prospects, The 2014 and 2015 revision.

2. IEA-IRENA Perspectives for the Energy Transition 2017

3. IEA: WEO 2016 and IEA IRENA 2017 - NPS (New Policies Scenario)

4. . Other include Oil, Heat, Biomass & Waste and Hydrogen

5 BNEF NEO 2017, June 2017

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## Sector trends

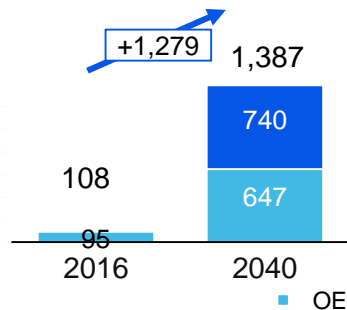


### Small scale PV and demand response

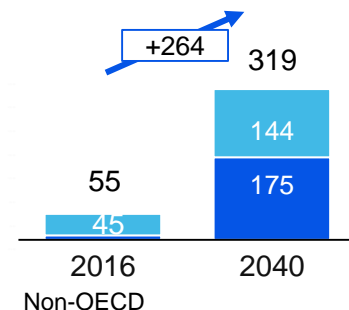
Distributed generation and demand response will drive the increase in number of “prosumers”

Low cost and low-carbon technologies will allow a greater deployment of decentralised electricity access solutions in rural areas in particular

Small scale PV (GW)<sup>1</sup>



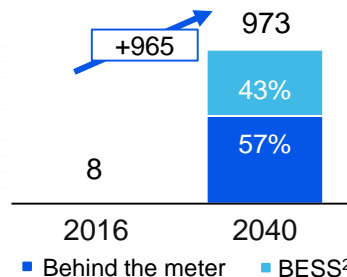
Demand response (GW)<sup>1</sup>



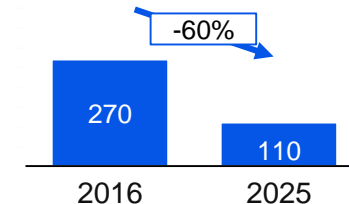
### Storage and electric vehicles<sup>1</sup>

Storage is in the uptake path, will ease renewable integration into the market and push distributed solutions penetration transforming the customer journey

Energy storage (GW)<sup>1</sup>



Electric Vehicles<sup>1</sup>  
Lithium battery cost (\$/KWh)



1. BNEF NEO 2017, June 2017  
2. Battery Energy Storage Systems

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Integrated model fit for digitalized, low carbon world



Sector trends

Enel positioning: 2020 targets

Decarbonization

Generation: 48 GW renewables, 39 GW thermal  
Specific CO<sub>2</sub> emissions < 350 gCO<sub>2</sub>/KWheq



Electrification  
Storage & Demand Response

0.6 GW storage capacity  
10.7 GW demand response  
313 k charging stations

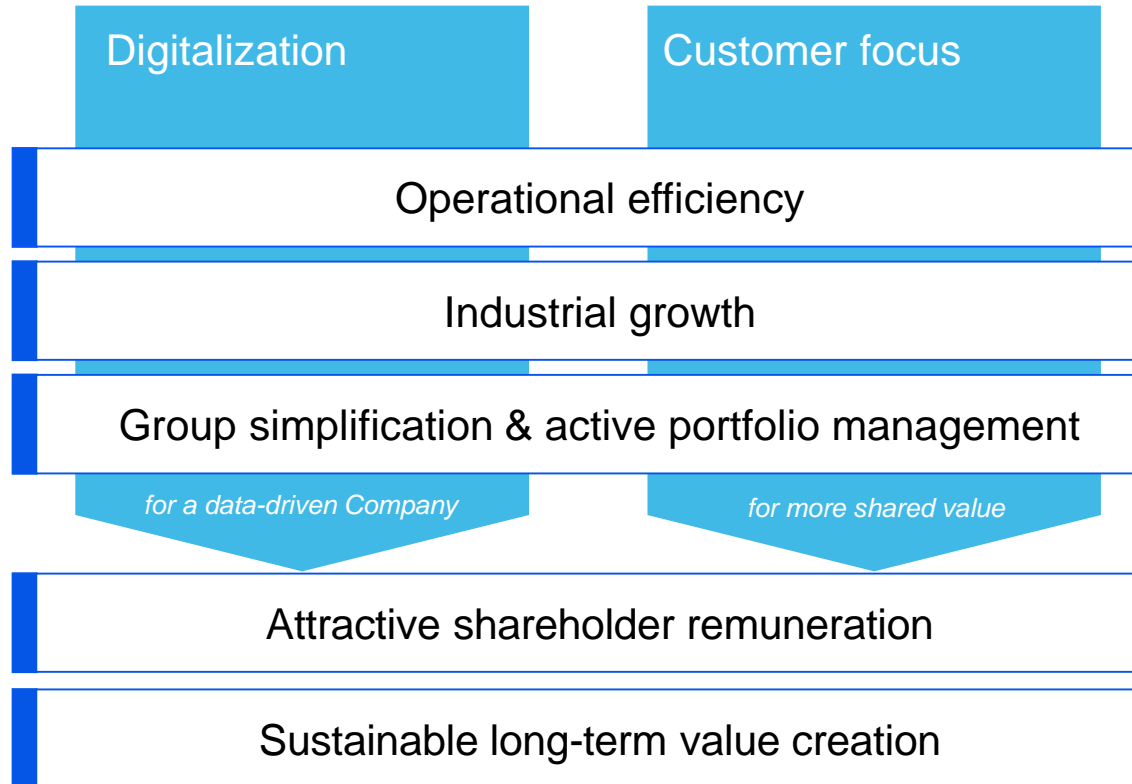
Urbanization

67 mn end-users  
47.9 mn smart meters  
17.4 mn second generation smart meters

Leading positioning in the energy transition

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Strategic pillars

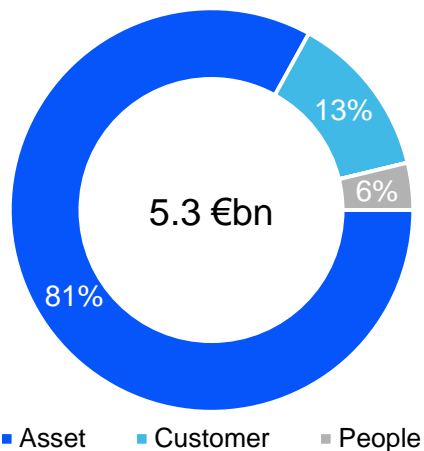


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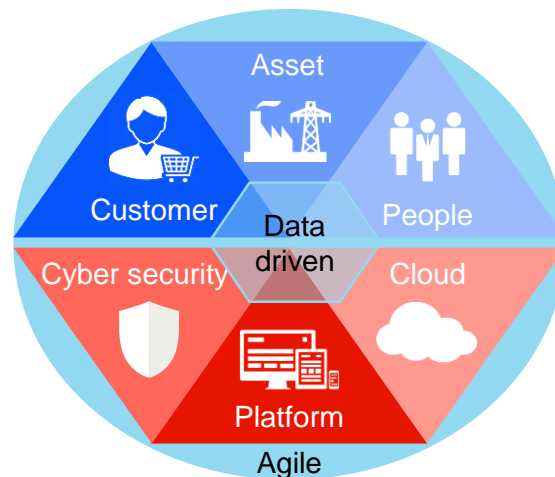
## Digitalization



2018-20 digitalization capex



Key levers for digitalization



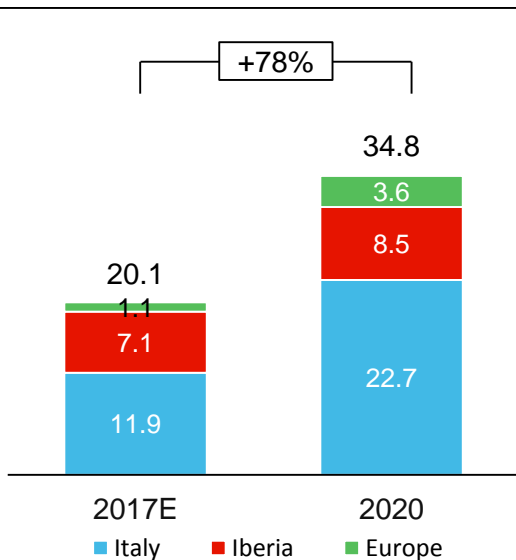
Agile operating model maximizing speed and efficiency through optimal use of data

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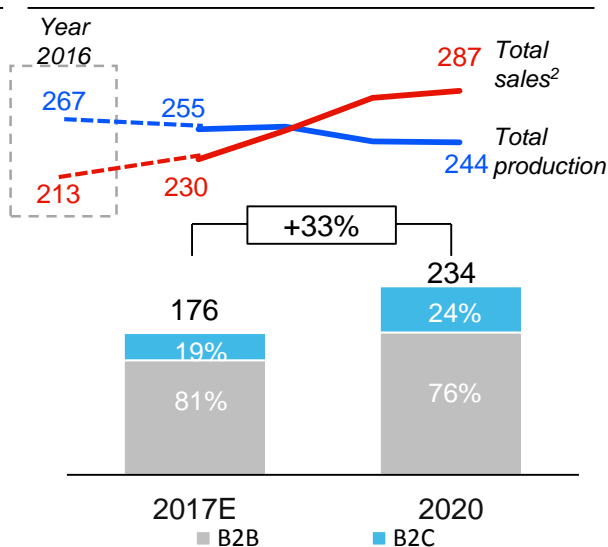
Customer focus: commodity retail



Free customers<sup>1</sup> (mn)



Power sold in free market (TWh)



Free customers growing in all countries

Liberalization in Italy: opportunity to increase volumes and clients

Iberia: gas margin recovery thanks to higher competitiveness of gas contracts

South America: opening of the market now limited to big industrial customers

From long energy to long customers

1. It includes power and gas customers. South America number of customers <1mn  
 2. Including power sold with PPAs

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Customer focus: e-Solutions 2020 targets



**e-Industries**

**Demand Response**  
*(GW generating revenues)*

>10GW

**Storage / BtM**  
*(MW installed/year)*

>200 MW



**e-Mobility**

**Public infrastructure**  
*(Public charging stations installed)*

~9 k  
>100% CAGR

**Private charging**  
*(wall-box installed managed by Enel)*

>300k  
>100% CAGR



**e-Home**

**Maintenance and repair**  
*(Customer base)*

>2mn  
>100% CAGR

**Credit cards**  
*(Total Credit Cards)*

~2 mn  
>100% CAGR



**e-City**

**Smart Lighting**  
*(Light Points)*

3mn  
+7% CAGR

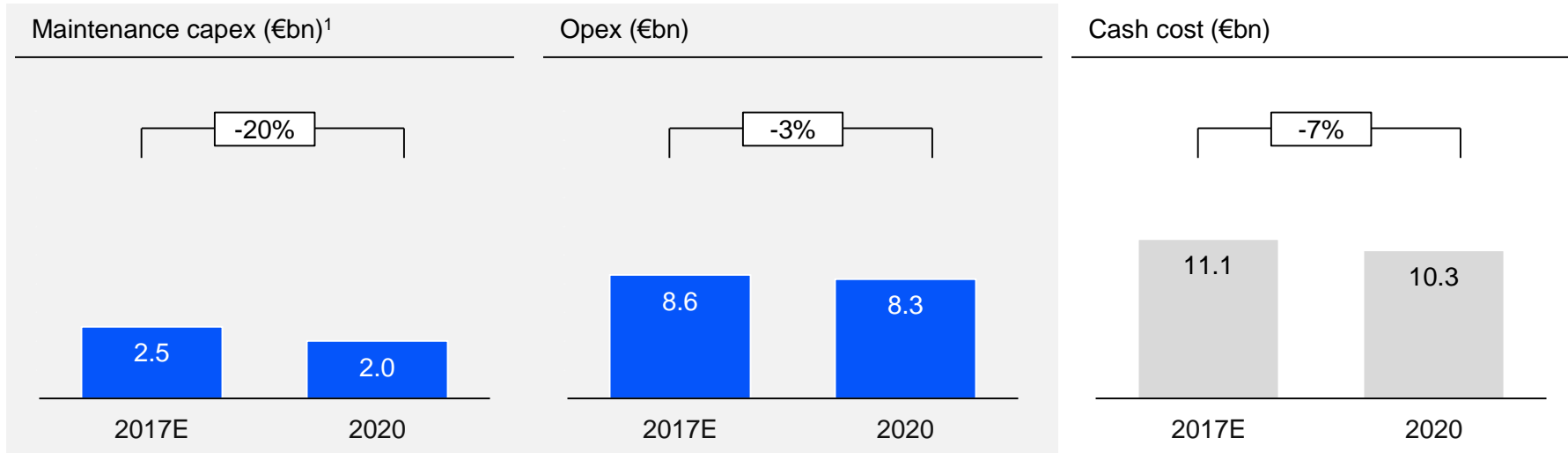
**Fiber deployment**  
*(houses passed)*

7.5 mn<sup>1</sup>  
77% CAGR

Addressing new customer needs with innovative technologies

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## Operational efficiency



**Digitalization enables acceleration on operational efficiency**

1. Net of network connections

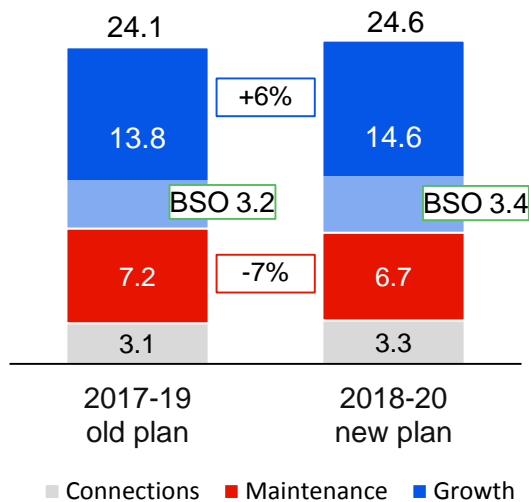


# Capital Markets Day

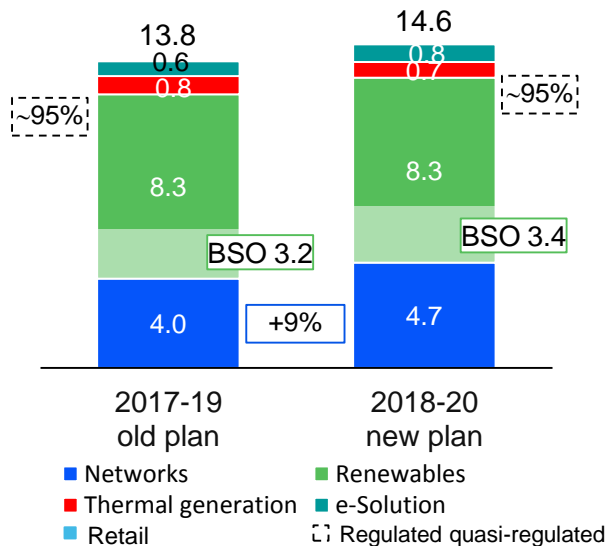
Industrial growth: 2018-20 capex plan



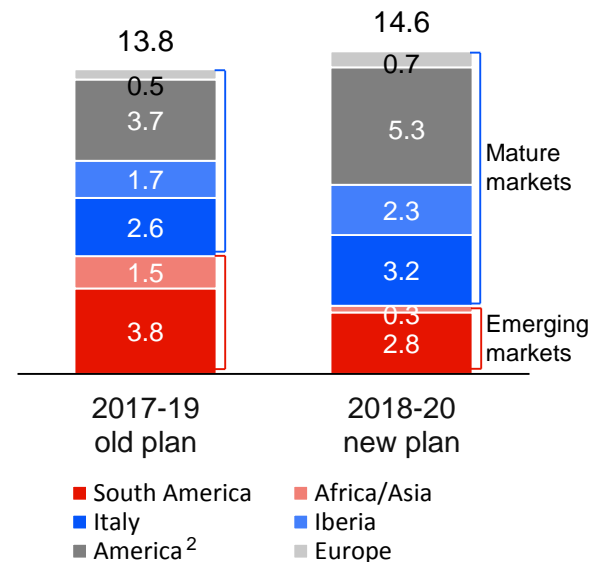
Total gross capex (€bn)



Growth capex by business line<sup>1</sup> (€bn)



Growth capex by geography<sup>1</sup> (€bn)



Rebalancing capex in networks and developed countries

1. Net of connections in networks. Total growth capex includes other  
2. North & Central America

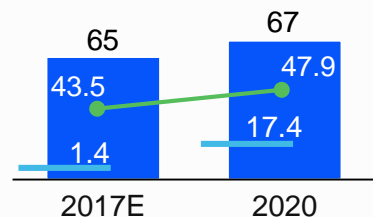
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## Industrial growth: operational targets by business



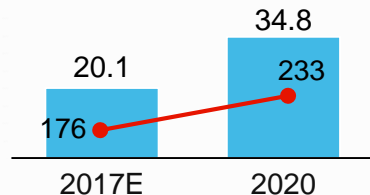
### Networks

- End users (mn)
- Smart meters (mn)
- Smart meters 2.0 (mn)



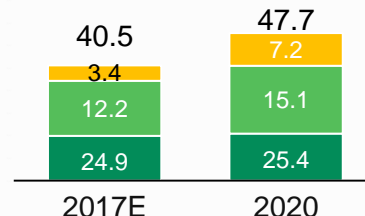
### Retail

- Free customer base<sup>1</sup> (mn)
- Power sold<sup>2</sup> (TWh)



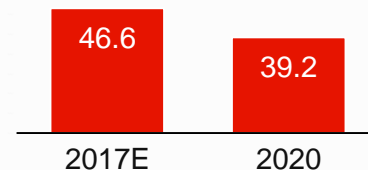
### Renewables

- Managed capacity (GW)
- Other renewables (GW)
- Large hydro (GW)



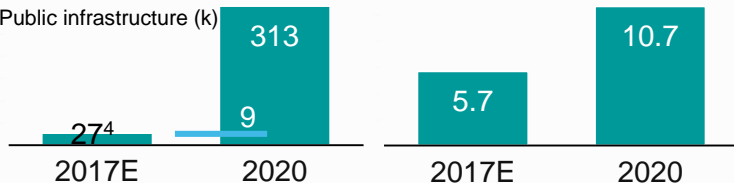
### Thermal generation

- Installed capacity<sup>3</sup>(GW)



### E-solutions

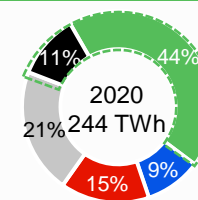
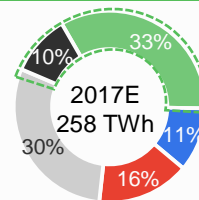
- Charging stations (k)
- Public infrastructure (k)
- Demand response (GW)



### Net production

43% emission free

55% emission free



- Hydro
- Renewables
- Oil & Gas
- CCGT
- Coal
- Nuclear

1. Includes only power and gas free customers

2. In free market

3. Includes nuclear in Iberia

4. Of which ~600 public infrastructure

# Capital Markets Day

Group simplification & active portfolio management



## Simplification

## Minority reduction

Delivery

From 69 to 53 # companies in South America

Sale of minority stakes in Electrogas and Bayan

Romania

Peru

Next steps

To below 30 # companies in South America

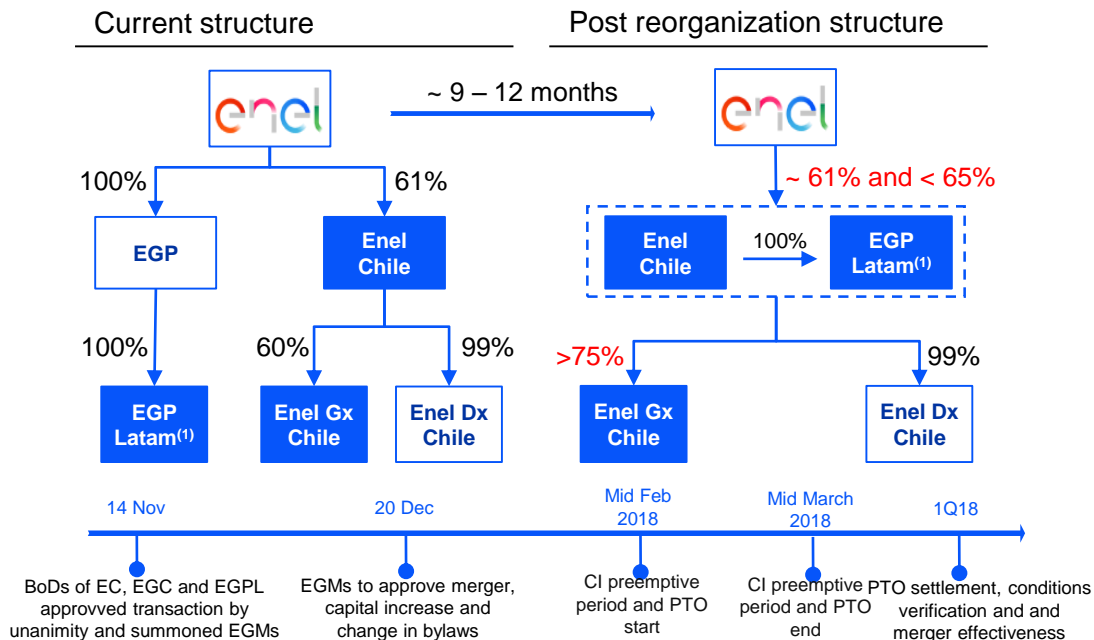
Simplification of subsidiaries in Enel Americas, Enel Romania and Enel Investment Holding

Chile integration of renewable assets and tender offer on Enel Generation Chile

A leaner, more agile and simple structure

# Capital Markets Day

## Group simplification & active portfolio management



### Rationale

Integration of renewable energy platform of assets in Chile

EPS accretion and reducing holding discount

Tender offer on EGC: **354 CLP/sh + ~2.88** newly issued shares of EC (**20.7%** premium over the cash portion)

Merger EC/EGPC: exchange ratio **15.80x** **1.7 \$bn** of equity value for renewable assets

Cash out up to **1.6 \$bn** of the overall transaction in case of 87.5% of acceptance in tender offer<sup>2</sup>

### Chilean reorganization

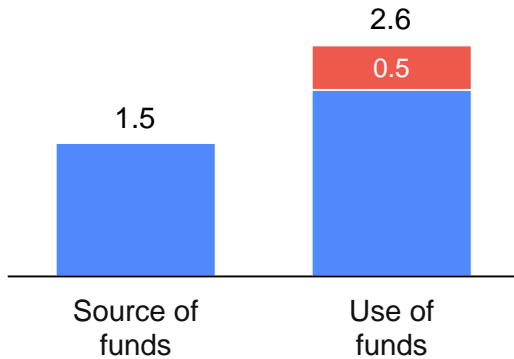
1. Enel Green Power Latin America (holding company of EGP assets in Chile)
2. Including 5% withdrawal rights in EC

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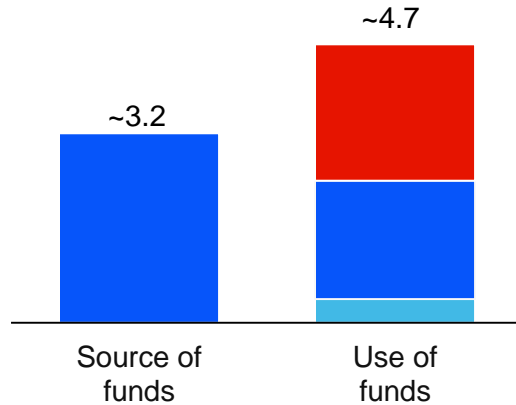
Group simplification & active portfolio management: the new plan



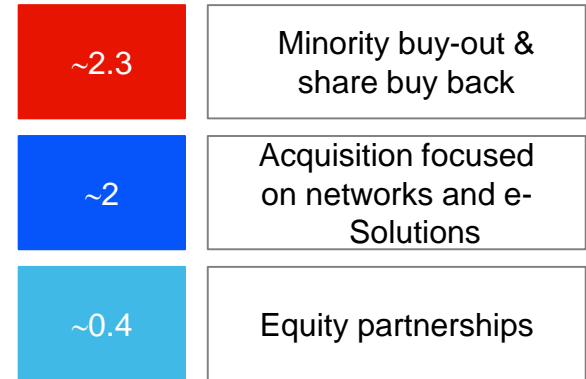
2017 program (€bn)



2018-20 program (€bn)



2018-20 use of funds (€bn)






Higher minority buy-outs leading to 3% earnings accretion

# Capital Markets Day

## Communities and people



### Local communities (mn beneficiaries)

	2017E	2020 <sup>1</sup>
 <p>High-quality, inclusive and fair education</p>	0.5	0.8 <sup>2x</sup> From 0.4
 <p>Access to affordable and clean energy mainly in Africa, Asia and Latin America</p>	1.7	3.0
 <p>Employment and sustainable and inclusive economic growth</p>	1.5	3.0 <sup>2x</sup> From 1.5



### Our people

	2020
<p><b>Talent attraction and retention</b></p> <p>Appraise performance of people we work with<sup>2</sup></p>	100% of people involved 99% of people appraised 95% of people interviewed
<p>Climate corporate survey<sup>2</sup></p>	100% of people involved 86% of people participating
<p><b>Diversity</b></p> <p>Global implementation of the diversity and inclusion policy</p>	Recruiting should ensure equal gender splitting of the candidates (c. 50%)
<p><b>Training</b></p> <p>Enable digital skills diffusion among people we work with</p>	100% of people involved in digital skills training <span style="border: 1px solid green; padding: 2px;">NEW</span>

1. 2015-20 cumulated target  
2. Eligible and reachable people having worked in the Group for at least 3 months

# Capital Markets Day

Innovation



## Key highlights

**+2,300** startups scouted  
**+100** active projects  
**+30** startups scaled

**18 agreements**  
with Venture Capital Funds

**21 innovative**  
**partnerships** globally

**4 Community**  
(Blockchain, Storage, Drons, Augmented reality)  
**Crowdsourcing initiatives**

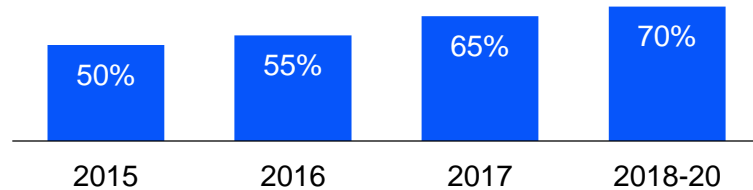
**7 Hubs in the world to catch innovation where it happens**

# Capital Markets Day

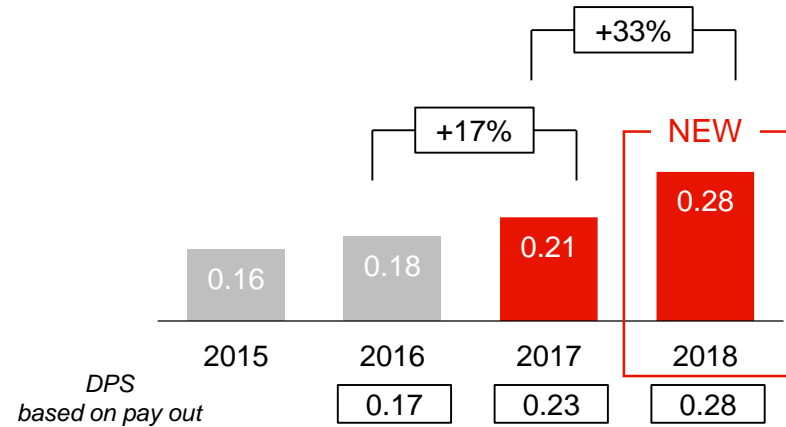
## Shareholder remuneration



### Dividend policy



### Minimum DPS (€/sh)



Confidence on strategy delivery and revised plan allows improved shareholder return





# Capital Markets Day

Strategic Plan 2018-20

Alberto De Paoli - CFO





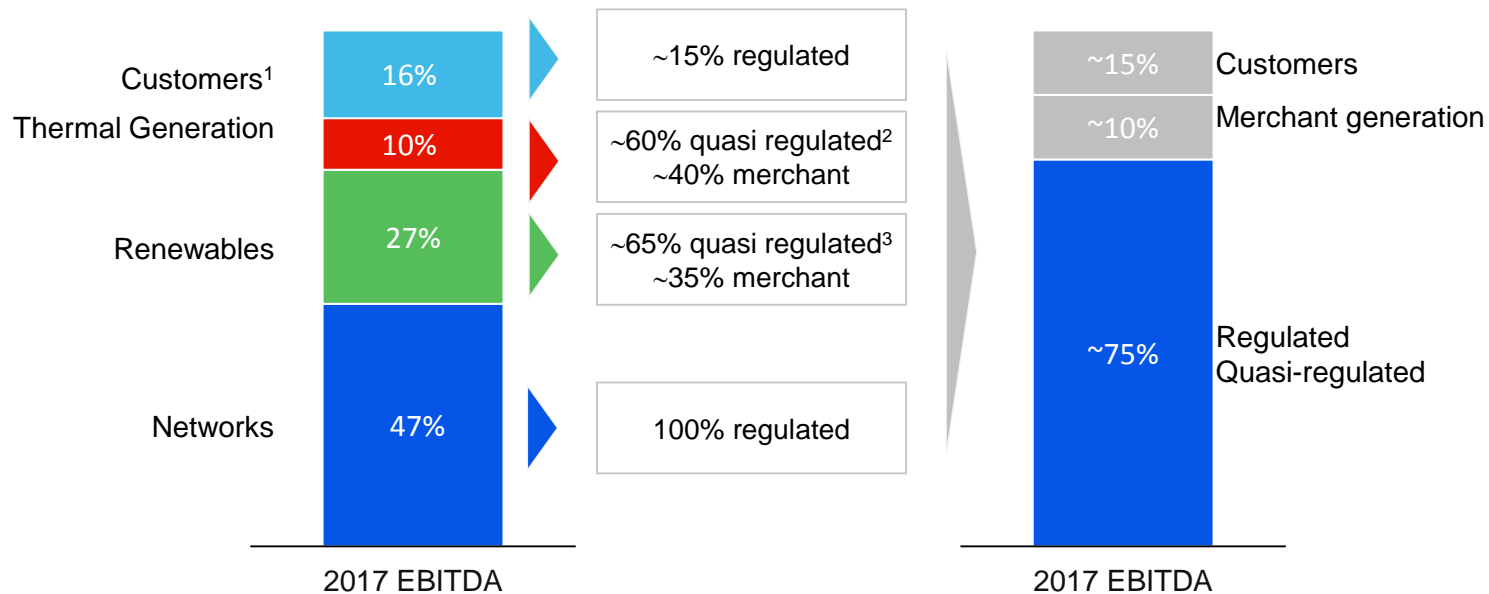
# Capital Markets Day

2018-20 strategic plan

Key financials

# Capital Markets Day

Enel today: diversified and resilient operator



Low volatility in earnings

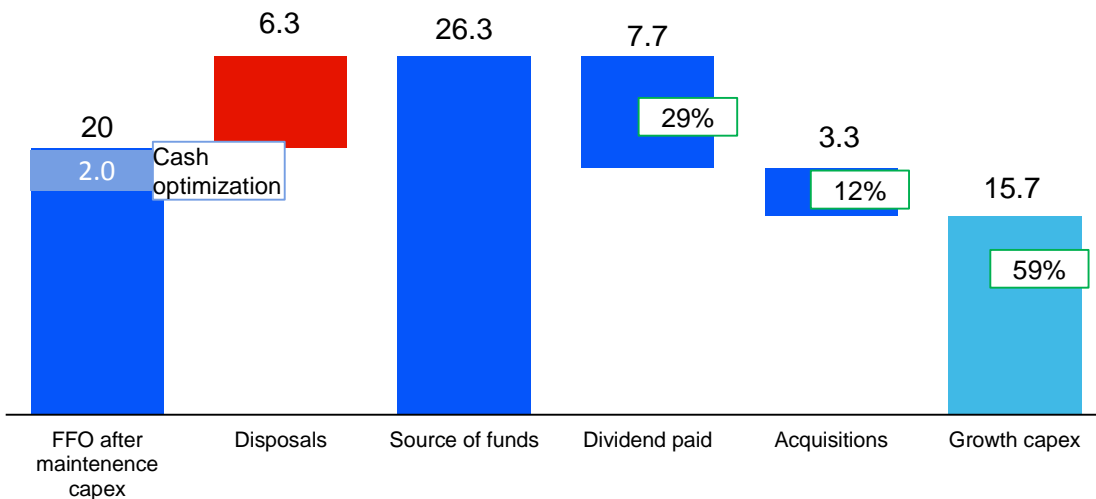
1. Includes Retail and e-Solutions  
2. Regulated, i.e. Iberian Island, essential plants, contracted under long term PPAs  
3. Contracted under long term PPAs and incentivized

# Capital Markets Day

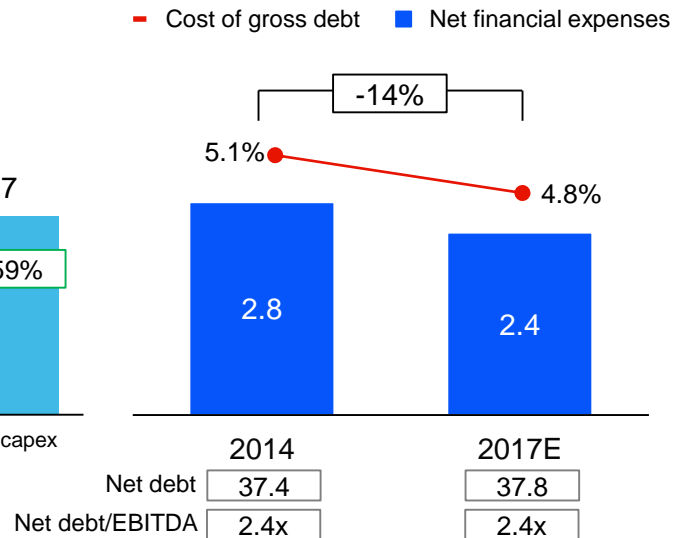
Delivery: financial targets



Funds allocation for growth and shareholders' remuneration 2015-17 (€bn)



Net financial expenses on debt (€bn)



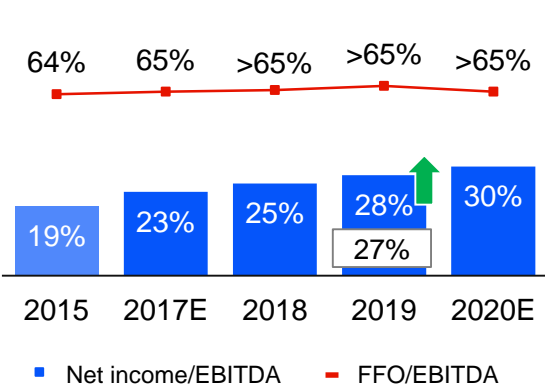
26 €bn of funds to fuel growth and remunerate shareholders

# Capital Markets Day

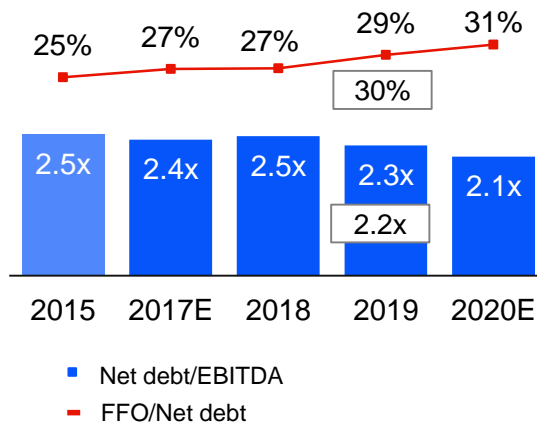
Enel transformation and 2020 targets



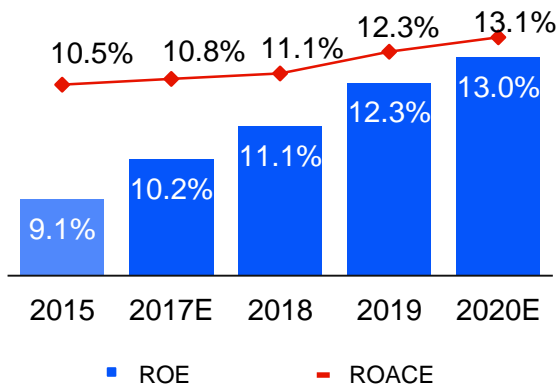
Profitability & cash generation



Leverage



Returns

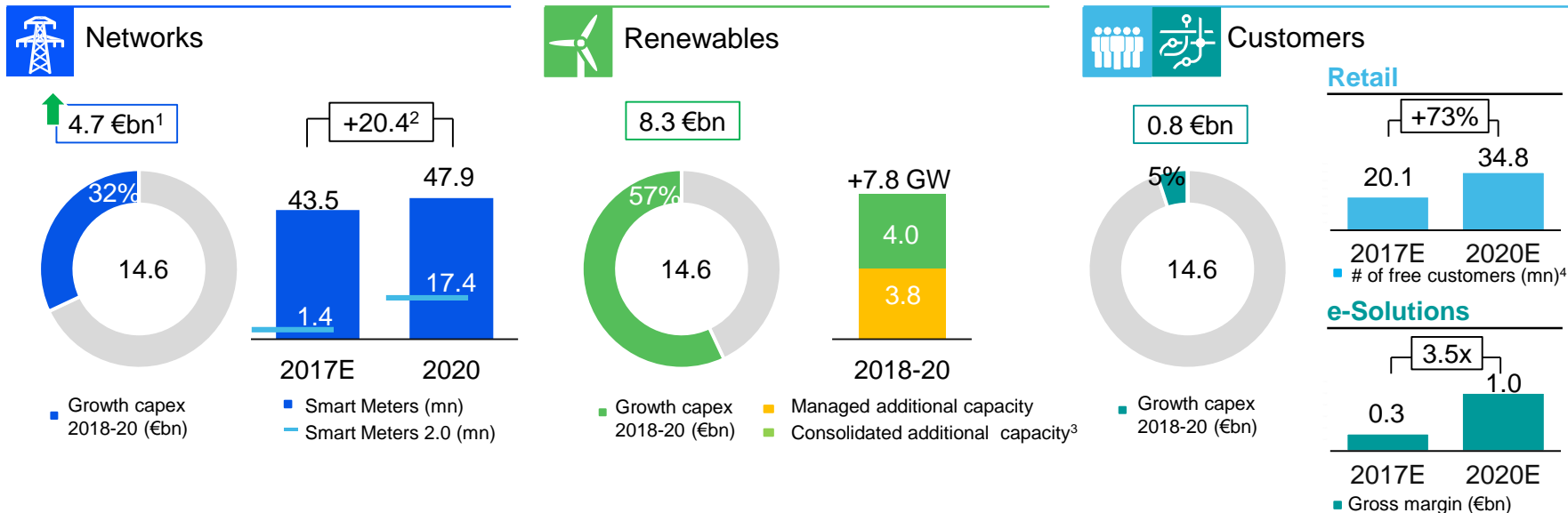


Continuous improvement in cash generation, profitability and returns

- 2019 target  
old plan

# Capital Markets Day

Integrated model fit for digitalized, low carbon world



Investing to strengthen our positioning in the energy transition

1. Excludes connections for 3.3 €bn  
 2. Meters installed plus meters replaced with smart meters 2.0 in Italy  
 3. Including 0.3GW of projects to be consolidated in 2019 not included in the growth capex

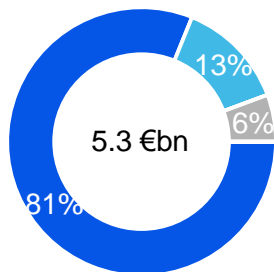
4. Power and gas customers

# Capital Markets Day

## Digitalization



2018-20 cumulative digitalization capex



■ Asset ■ Customers ■ People

	Plan 2017-19	Plan 2018-20
<b>Asset</b> 	3.9 €bn	4.3 €bn
<b>Customer</b> 	0.7 €bn	0.7 €bn
<b>People</b> 	0.1 €bn	0.3 €bn
	4.7 €bn	5.3 €bn

2018-20 cumulative benefits<sup>1</sup>

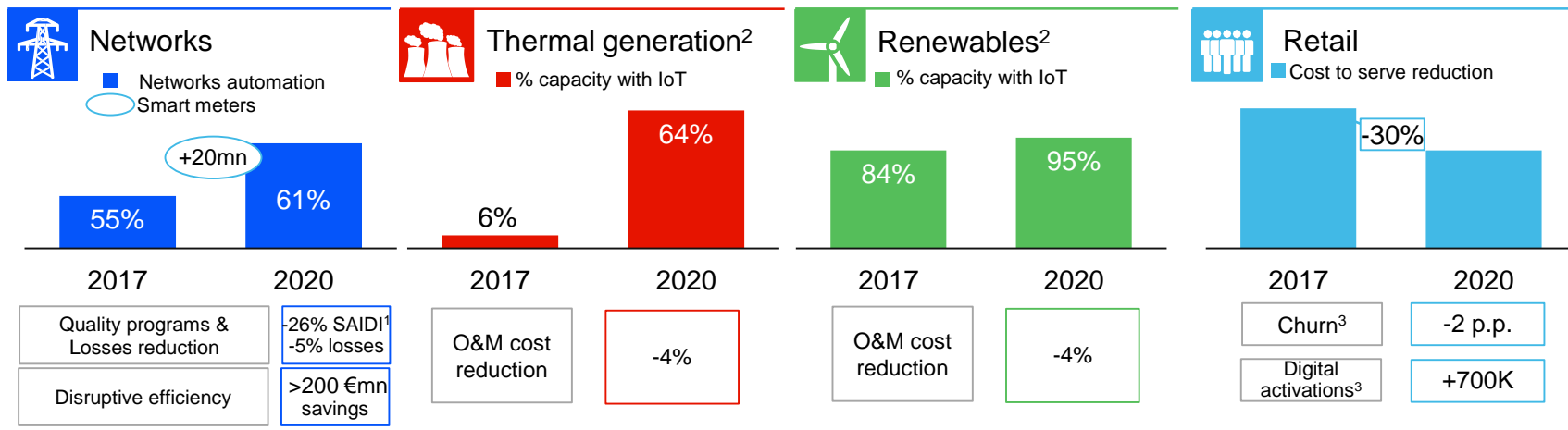
	Gross Margin	Opex	EBITDA
	1.0 €bn	(0.3) €bn	1.3 €bn
	0.2 €bn	(0.2) €bn	0.4 €bn
	0.0 €bn	(0.2) €bn	0.2 €bn
	1.2 €bn	(0.7) €bn	1.9 €bn
	1.1 €bn	(0.5) €bn	1.6 €bn

Focus on assets, customers and people development

1. In real terms.

# Capital Markets Day

## Digitalization



**Maintenance capex:** 300 €mn savings vs old plan

**Cloud migration:** 85% of data center already migrated into cloud, 20% opex reduction at regime

**Driving efficiency and best in class service**

1. Duration of the interruptions  
 2. KPIs are calculated only on power plants included in digital projects.  
 3. It refers to Italy

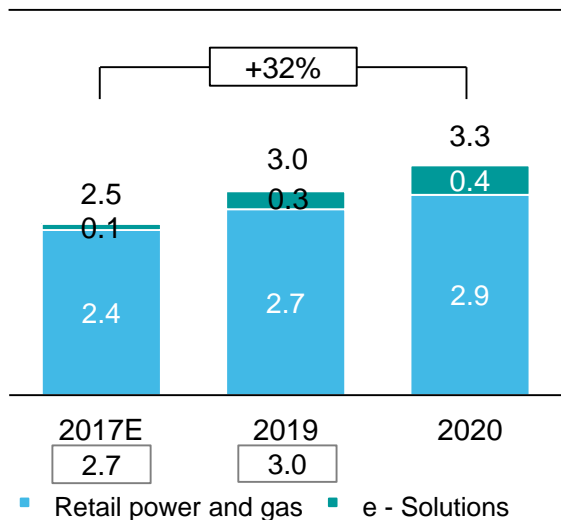


# Capital Markets Day

Customer focus: global retail and e-Solutions



EBITDA (€bn)



Key drivers

- Growth of retail customer base worldwide
- Higher focus on corporate customers in Latam
- Digitalization in customer relationship
- e-Solutions global business line start up

Key figures

- +13.9 mn power customers  
+0.8 mn gas customers
- 33% increase in power volumes  
15% increase in gas volumes
- Cost to serve -30%
- e-Solutions: >50% EBITDA CAGR

Confirming trend and enhancing 2020 targets

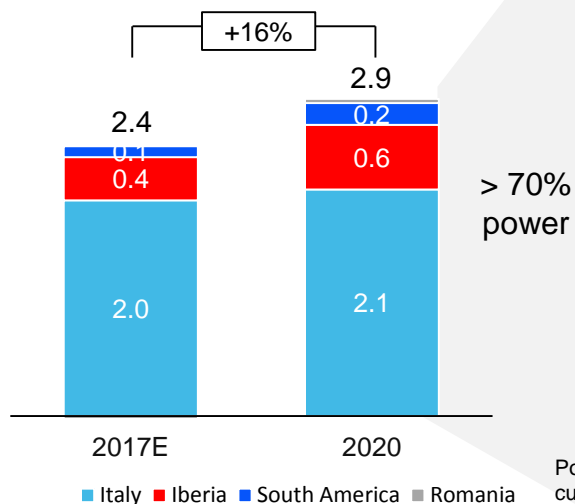
- Old plan

# Capital Markets Day

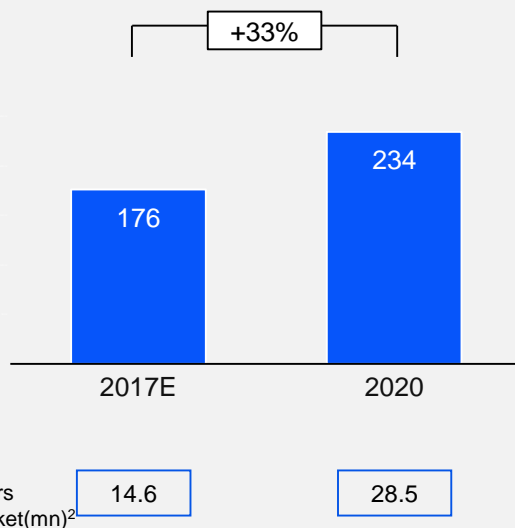
Customer focus: global retail



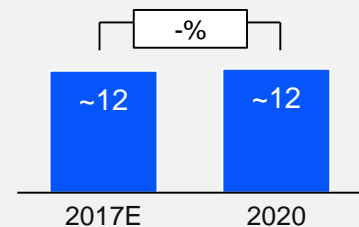
EBITDA retail power and gas (€bn)<sup>1</sup>



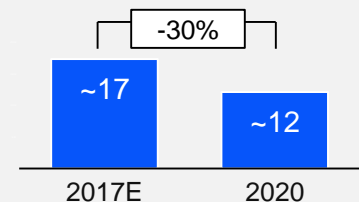
Power sold in free market (TWh)



Power unitary margin in free market (€/MWh)



Cost-to-serve (€/customer)<sup>3</sup>



**Growing volumes and efficiency driving EBITDA increase**

1. Including regulated EBITDA. Romania equal to -0.05 in 2017 and +0.04 in 2020  
 2. Power and gas  
 3. Italy, Iberia and Romania

# Capital Markets Day

Customer focus: Italian retail



Enel supply and demand balance 2017

(TWh)

57



Net production

60

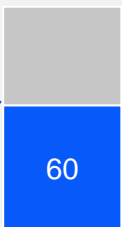
Power sold in free market

Long customers position already achieved in 2017

Enel power sold

(TWh)

26%



2017E

7.8

50%

Enel free market share (vol.)

2019

Free customers (mn)

Enel free market share (# cust.)

■ Regulated market ■ Free market

60

85

2020

18.2

50%

Market liberalization

Enel supply and demand balance 2020

(TWh)

85



Power sold in free market

60



Net production

Further improvement by 2020

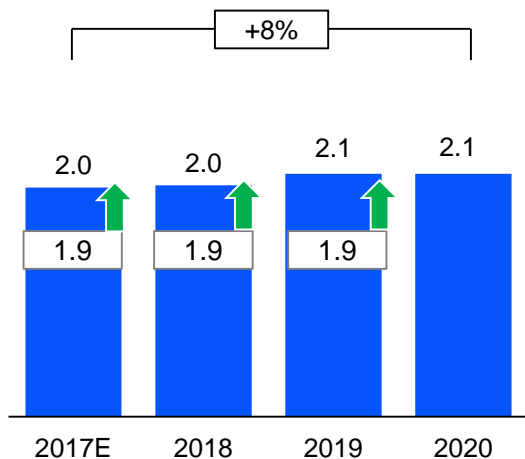
Value migration towards final customers

# Capital Markets Day

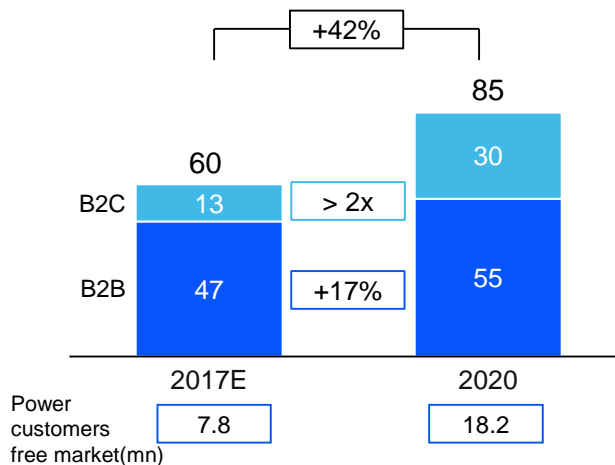
Customer focus: Italian retail



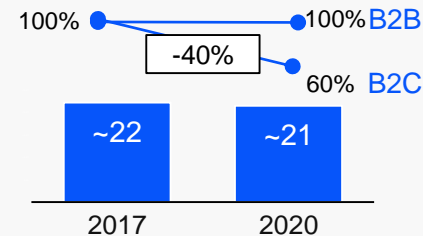
EBITDA (€bn)<sup>1</sup>



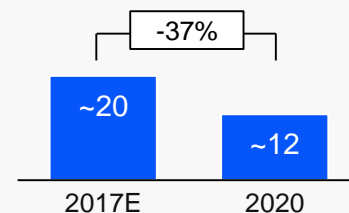
Power sold in free market (TWh)



Power unitary margin in free market (€/MWh)



Cost-to-serve (€/customer)



Evolution in strategy resiliency in margins

1. Including regulated EBITDA

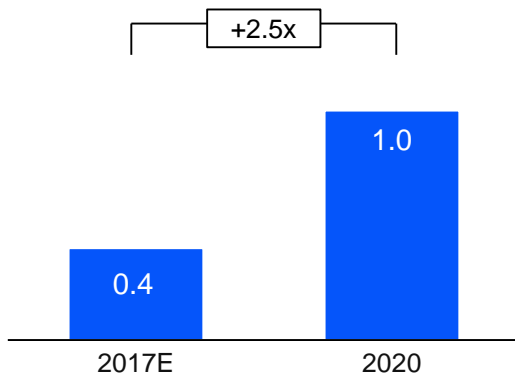
- Old plan

# Capital Markets Day

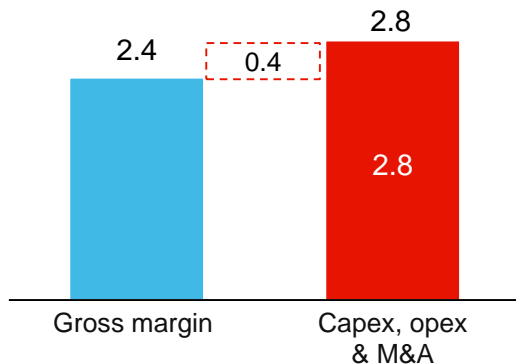
Customer focus: e-Solutions



Gross margin (€bn)



Cumulated 2018-20 (€bn)



Key highlights

0.4 €bn EBITDA in 2020

>10 GW demand response

+300 k private, +7 k public charging stations

4.5 mn customers in e-Home business

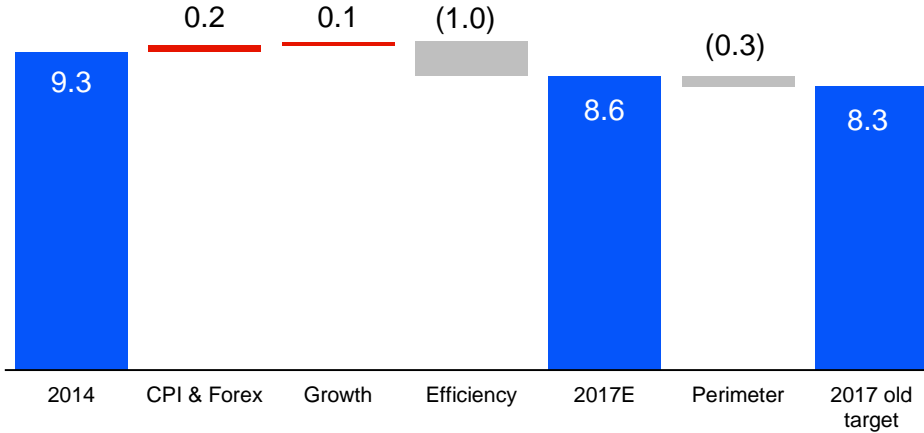
Positioning for the energy transition

# Capital Markets Day

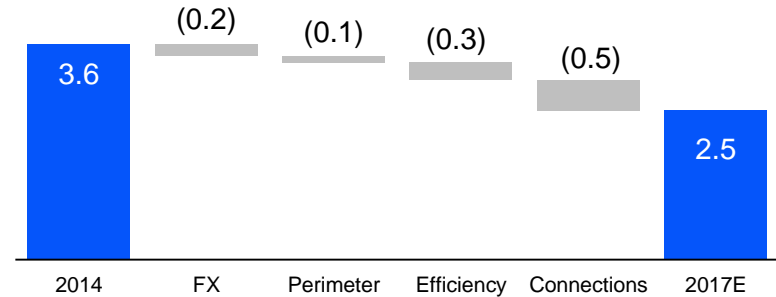
Operational efficiency: delivery 2014-17



Opex (€bn)



Maintenance capex (€bn)



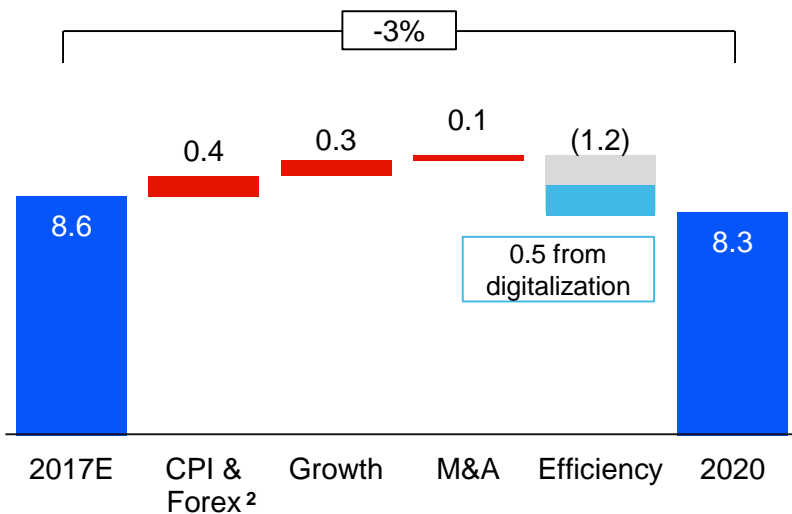
Completed efficiency plan launched in 2014

# Capital Markets Day

Operational efficiency: focus on opex



Opex evolution (€bn)<sup>1</sup>



Opex by business<sup>3</sup>



Networks  
€/end user



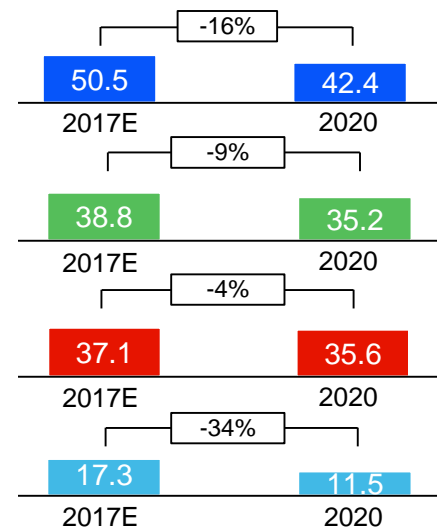
Renewables  
k€/MW



Thermal Generation<sup>4</sup>  
k€/MW



Retail  
Cost to serve  
(€/customer)



**Digitalization will accelerate further opex reduction**

1. Total fixed costs in nominal terms (net of capitalizations). Impact from acquisitions is not included.
2. Of which CPI +0.7 €bn and forex -0.1 €bn.
3. In real terms. Adjusted for delta perimeter

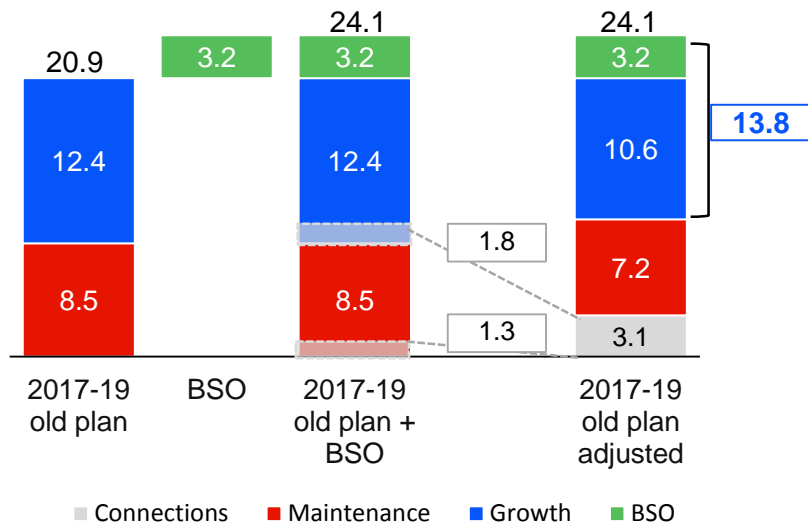
4. Excludes nuclear in Iberia

# Capital Markets Day

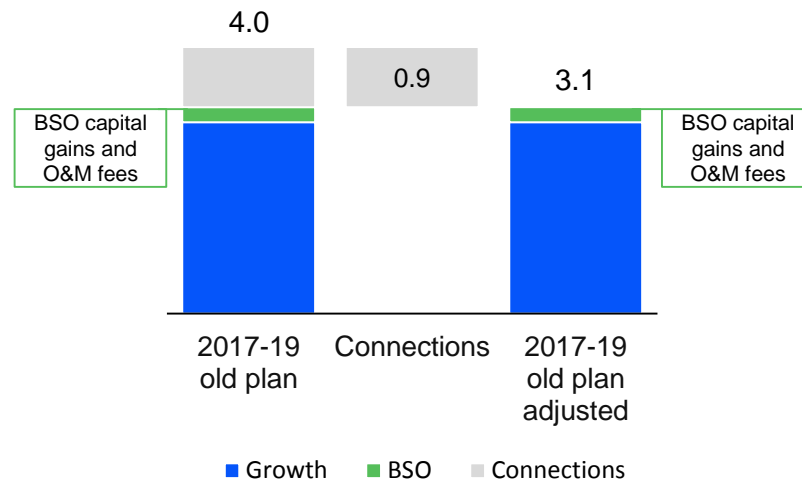
## Industrial growth: capex and growth EBITDA reconciliation



2017-19 total capex (€bn)



2017-19 cumulated growth EBITDA (€bn)



Main differences are for connections and BSO capex

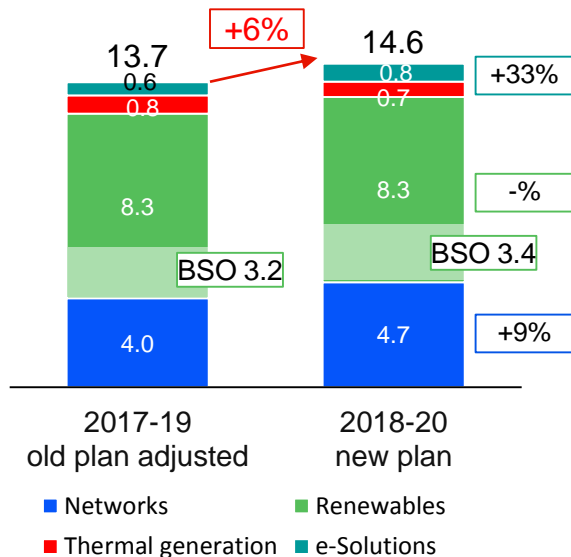


# Capital Markets Day

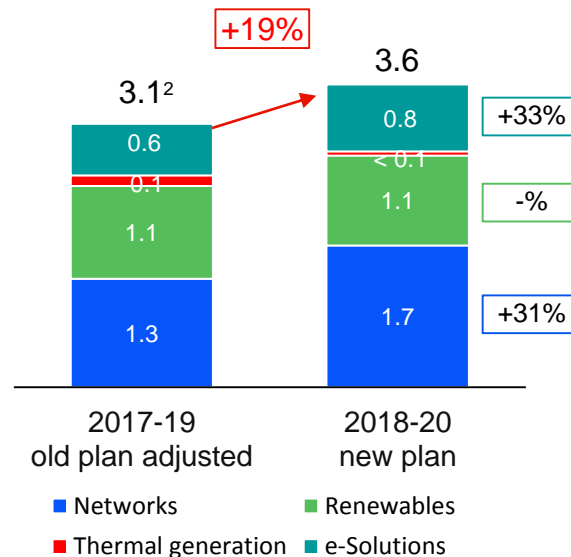
Industrial growth: focus on growth capex and growth EBITDA



Growth capex by business line<sup>1</sup> (€bn)



2018-20 cumulated growth EBITDA<sup>1</sup> (€bn)



**Growth capex increase and re-allocation driving higher returns vs previous plan**

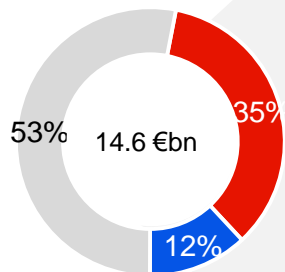
1. Net of connections. Rounded figures  
 2. Old target 2017-19 equal to 4 €bn 2017-19 minus contribution from connections (300 €mn per year).

# Capital Markets Day

Industrial growth: focus on growth EBITDA

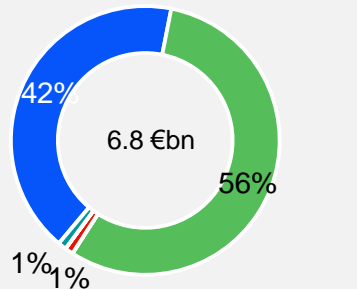


2018-20 growth capex



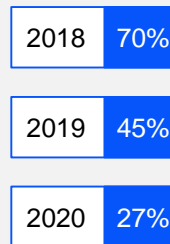
- In execution
- Tenders awarded
- To be addressed

Capex addressed by business

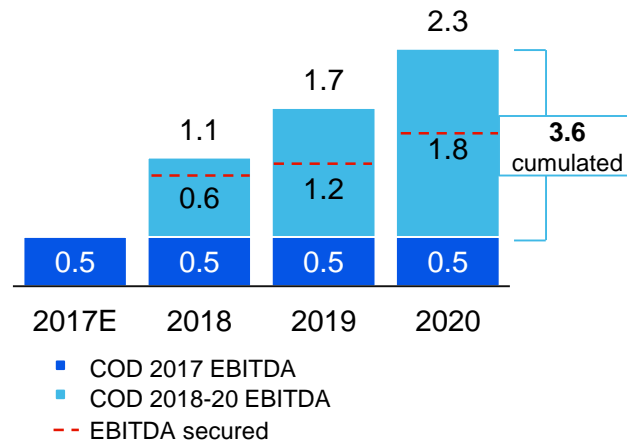


- Networks
- Renewables
- Thermal generation
- e-Solutions

By year<sup>1</sup>



Growth EBITDA by year<sup>2</sup> (€bn)



**Increased contribution from networks and e-solutions**

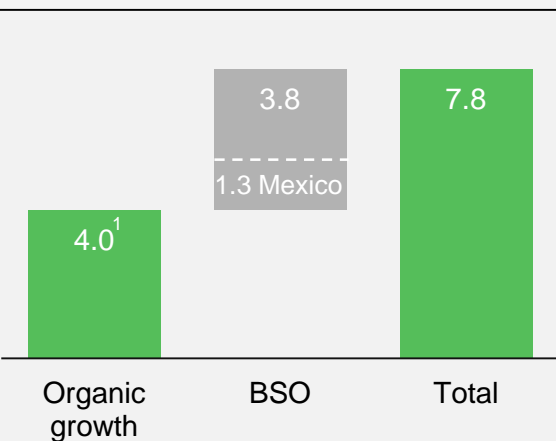
1. Portion of committed capex on total yearly amount  
 2. Net of connections equal to an average of 300 €mn

# Capital Markets Day

Industrial growth: renewables, Build Sell & Operate model (BSO)

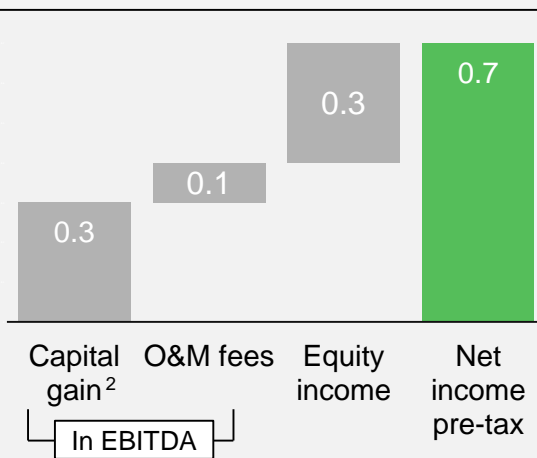


Capacity additions 2018-20 (GW)



8.3 €bn growth capex

BSO model benefits (cumulative 2018-20)



Rationale

Capital gain  
>100 k€/MW from 80 k€/MW in previous plan

EBITDA cumulative impact ~0.4 €bn

Spread over WACC 150 bps for consolidated and 200 bps for BSO

Option to reconsolidate assets

**Strong lever to accelerate value creation**

1. Including 0.3 GW of projects to be consolidated in 2019 not included in the growth capex  
 2. Not including capital gain for 1.3 GW already sold in Mexico in 2017

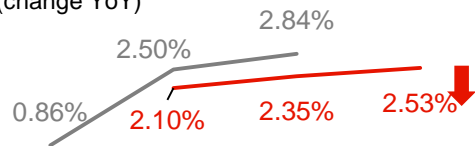
# Capital Markets Day

Macro scenario: revised assumptions for commodities and prices



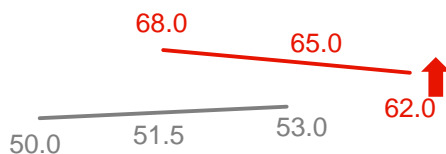
### Electricity demand South America

(change YoY)



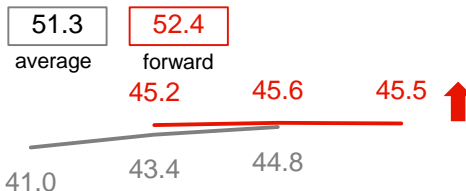
2017E 2018 2019 2020

### Coal price - API2 (USD/ton)



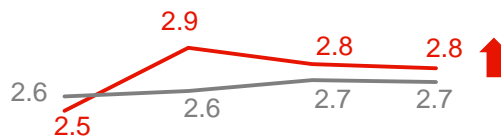
2017E 2018 2019 2020

### Italy power price (€/MWh)



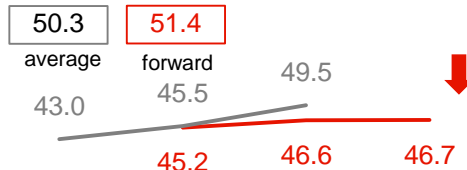
2017E 2018 2019 2020

### CPI all countries (% YoY)<sup>1</sup>



2017E 2018 2019 2020

### Spain power price (€/MWh)



2017E 2018 2019 2020

### FX EUR/USD



2017E 2018 2019 2020

More conservative macro scenario assumptions

1. It includes: Italy, Spain, Russia, Romania, United States, Mexico, Argentina, Brazil, Chile, Colombia, Peru

# Capital Markets Day

What has changed



Macro assumptions (€bn)

Managerial actions (€bn)

Yearly impact on average EBITDA	
-0.1	Demand
-0.1	Price curve and commodities
-0.1	FX
-0.1	Lower hydro availability
-0.1	Inflation
<b>Total on EBITDA: -0.5 €bn</b>	

Yearly impact on average EBITDA	
+0.1	Higher efficiency and margins driven by higher digitalization capex
+0.15	Higher growth capex in networks
+0.1	Higher retail in Italy and Iberia
+0.3	Regulatory reviews in South America
-0.15	e-Solution start-up
<b>Total on EBITDA: +0.5 €bn</b>	

Minorities buyout  
**HIGHER EARNINGS ACCRETION**

**LOWER COST OF DEBT**

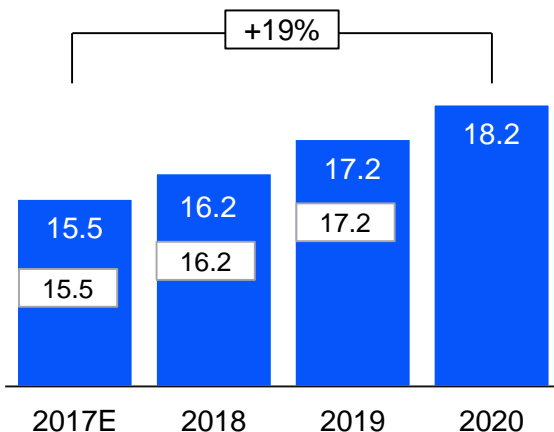
**The plan delivers higher CAGR in EBITDA and net income trajectory**

# Capital Markets Day

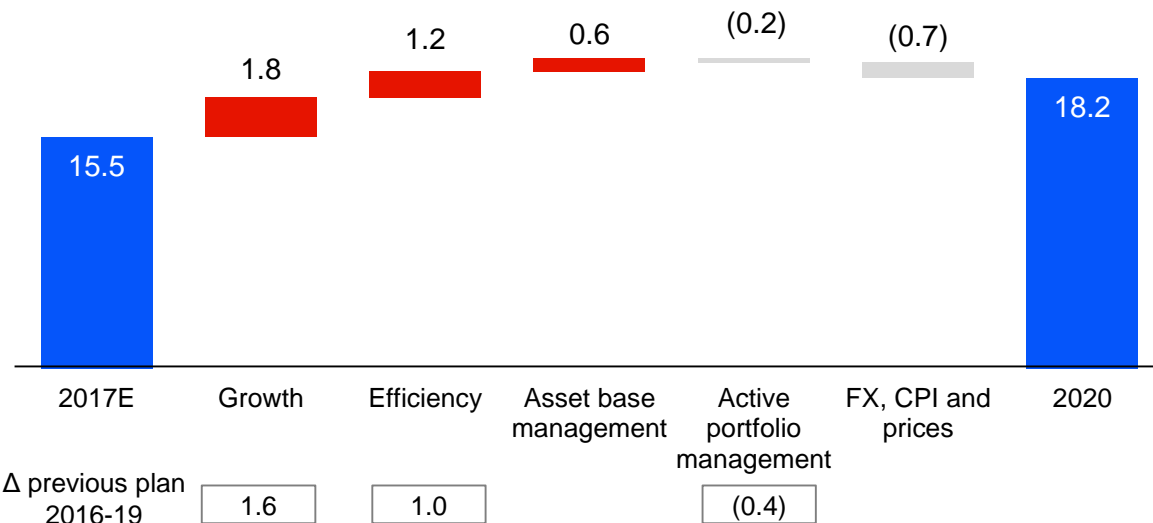
## EBITDA evolution



Ordinary EBITDA (€bn)



2017-20 ordinary EBITDA evolution (€bn)



**Growth and efficiency driving performance**

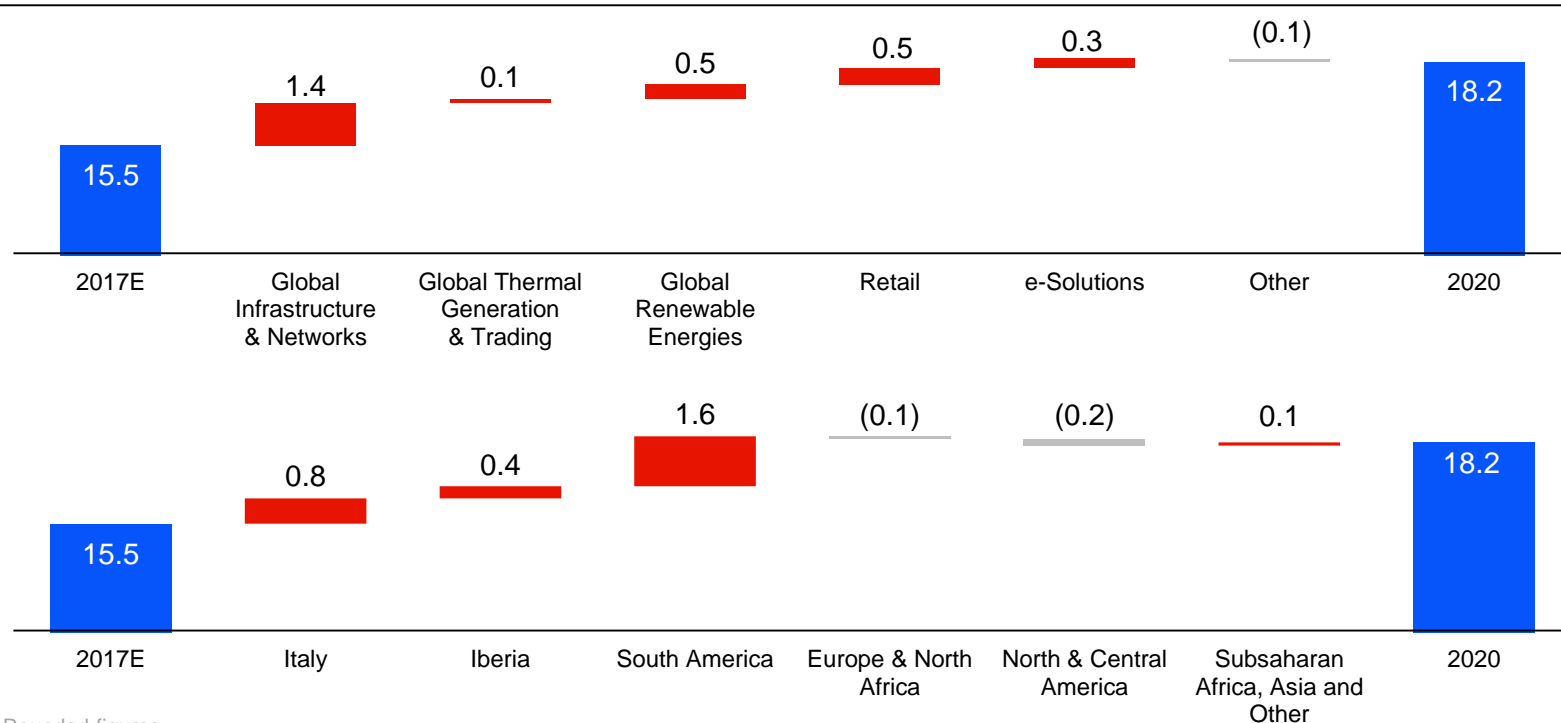
- Old plan

# Capital Markets Day

## EBITDA evolution<sup>1</sup>



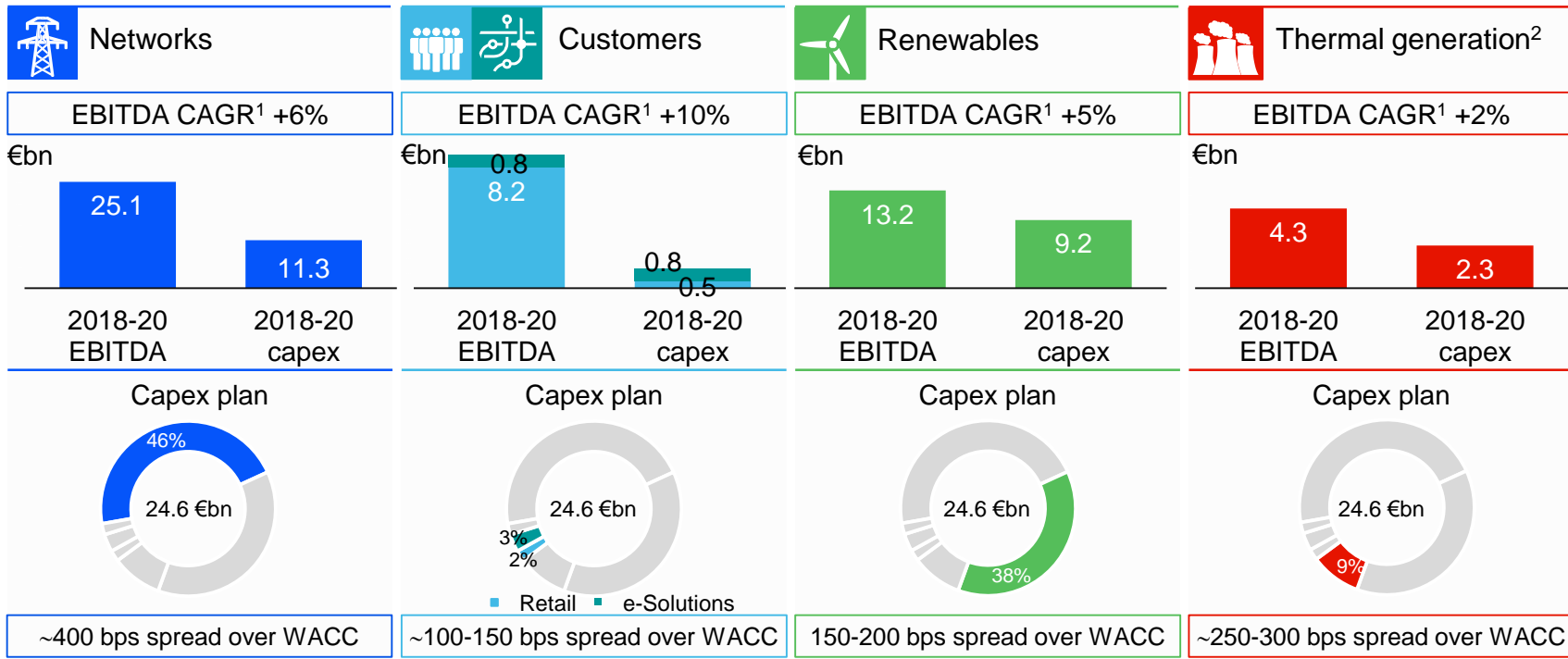
2017-20 EBITDA evolution by business line and country (€bn)



1. Rounded figures

# Capital Markets Day

Summary by business line



1. 2017-20 CAGR  
 2. Including Global Trading and nuclear in Iberia



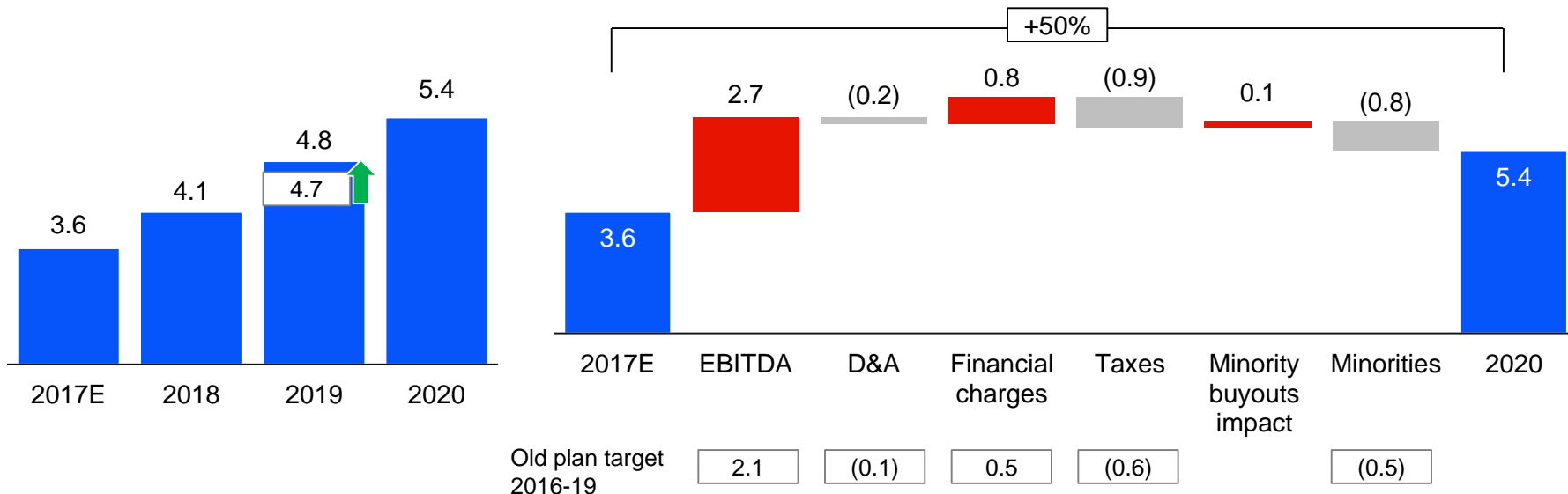
# Capital Markets Day

## Key financials: Group net income evolution



Group net ordinary income (€bn)

2017-20 group net ordinary income evolution (€bn)



Accelerating net income accretion

# Capital Markets Day

## Financial strategy



### 2017 actions completed (€bn)

7	Yankee bonds issuance
1.25	Green bond issuance
0.5	EIB financing for Open Meter
1.5	Liability management
4.3	Repayment of bond maturities

Total savings in interest expenses of ~125 €mn

### Financial strategy for 2018-20 (€bn)

5.7	Bond refinancing including green bonds program
2.7	Hybrid refinancing
9.4	Renegotiation of credit line
0.5	Further EIB financing for Open Meter
	Capital structure optimization in higher growth countries
	Further liability management actions

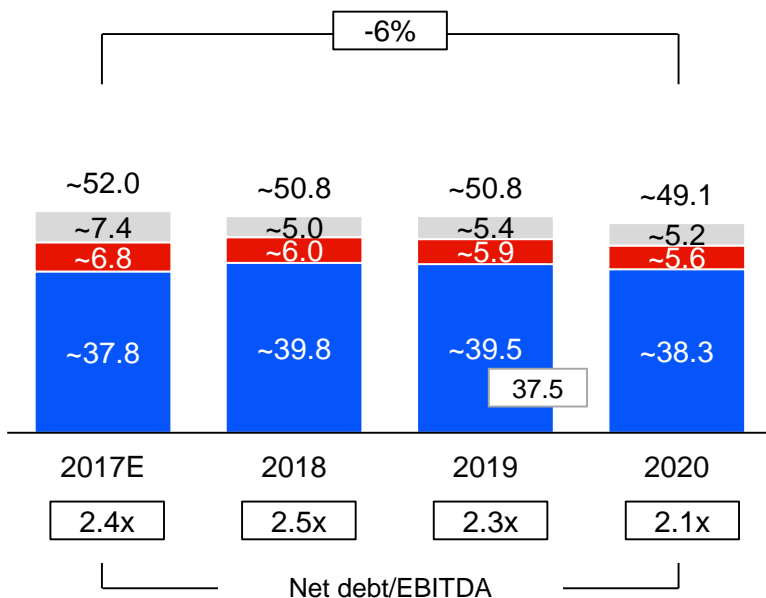
Additional reduction of financial expenses on debt of ~300 €mn by 2020

# Capital Markets Day

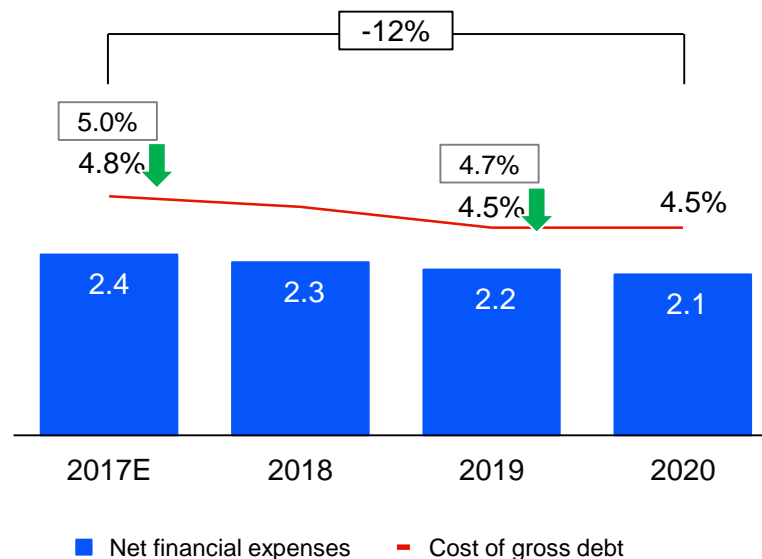
## Financial plan and strategy



Gross and net debt (€bn)



Net financial expenses on debt (€bn)

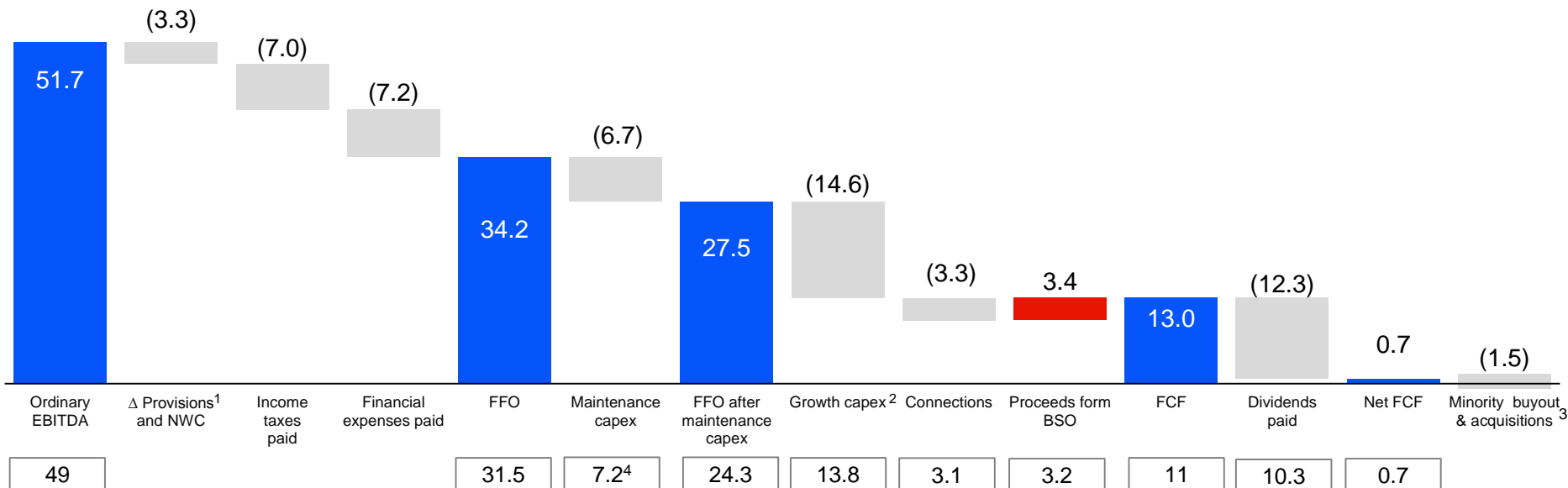


■ Net debt ■ Financial receivables ■ Cash

Old plan

# Capital Markets Day

2018-20 cumulated cash flow (€bn)



**Stronger organic cash flow generation versus the previous plan**

1. Accruals, releases, utilizations of provisions in EBITDA (i.e. personnel related and risks and charges). Inclusive of bad debt provision accruals
2. Including 3.4 €bn BSO capex
3. Including +3.2 €bn disposals and -4.7 €bn minority buyouts and acquisitions
4. Net of connections

- Old plan

# Capital Markets Day

## Group targets



	2017E	2018	2019	2020	CAGR (%) 2017-20
Ordinary EBITDA (€bn)	~15.5	~16.2	~17.2	~18.2	~+6%
Net ordinary income (€bn)	~3.6	~4.1	~4.8	~5.4	~+15%
Minimum dividend per share (€)	0.21	0.28	-	-	-
Pay-out ratio	65%	70%	70%	70%	+5 p.p.
Implicit DPS (€)	0.23	0.28	0.33	0.37	~+17%
FFO/Net Debt	27%	27%	29%	31%	~+4 p.p.

- Improved vs.  
old plan



# Capital Markets Day

Global Infrastructure and Networks

Livio Gallo

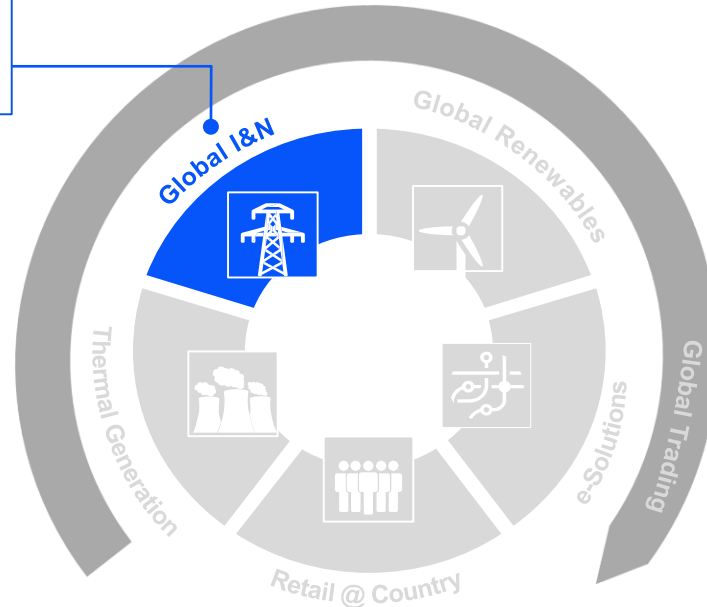


# Capital Markets Day – Global infrastructure and networks

Integrated model fit for digitalized, low carbon world



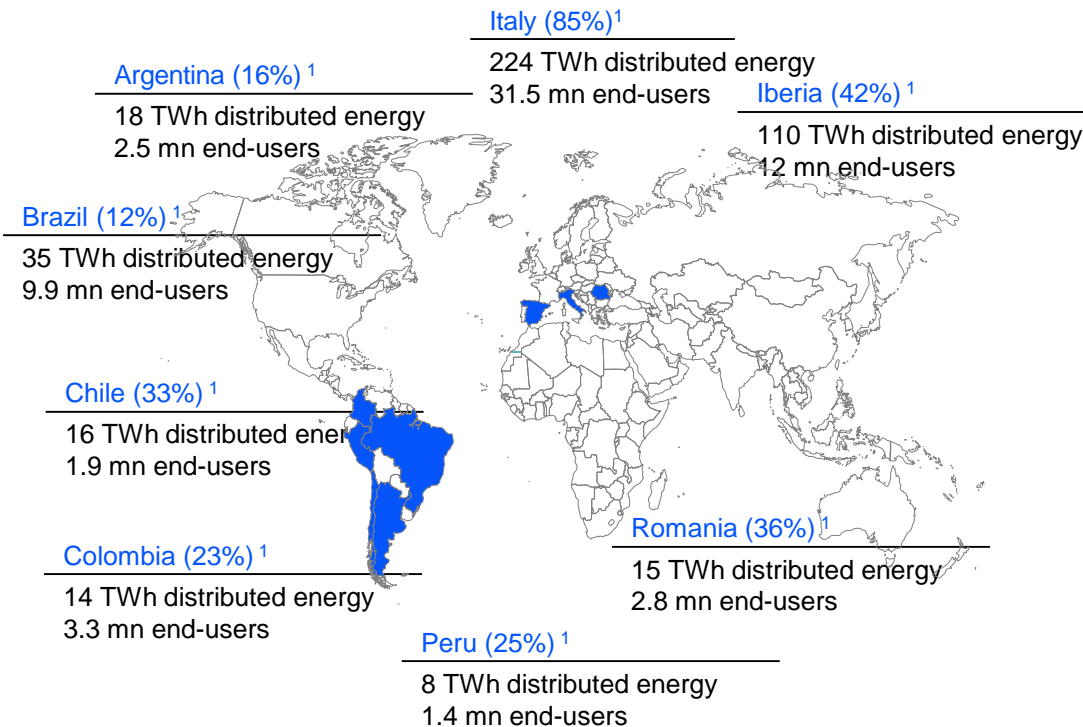
Cash flow generation  
Digital infrastructure platform  
Global risk mitigation



Solid backbone of our growth

# Capital Markets Day – Global infrastructure and networks

## Positioning and key figures



Key figures	2017
Distributed energy (TWh)	441
End-users (mn)	65

Financials (€bn)	2017
EBITDA	7.3
Opex	3.3
Maintenance capex	1.2
Growth capex	1.1
Connection capex	1.2
Total capex	3.5

1. 2016 market share in terms of number of end-users



# Capital Markets Day – Global infrastructure and networks

Regulatory scenario: Europe



Country	WACC	Next regulatory cycle	Highlights
Italy	5.6%	2024	Totex in 2020
Iberia	6.5% <sup>1</sup>	2020	Return revision in 2020
Romania	7.7%	2019	Smart meter roll-out

Regulatory framework

Stable regulatory frameworks

47% of Group EBITDA

Stable RAB of ~ 31 €bn over the plan

Long term stability

1. Nominal pre-tax

# Capital Markets Day – Global infrastructure and networks

Regulatory scenario: South America



	Country	WACC	Next regulatory cycle	Highlights
Regulatory framework	Argentina	12.5%	2022	Improved scenario in Argentina
	Brazil Rio/Celg	12.3%	2018	New Rio concession conditions from March 17
	Brazil Cearà	12.3%	2019	RAB maximization
	Chile	10%	Nov 2020	Regulatory framework already set
	Colombia	13.5%	2018	New regulatory framework
	Peru	12%	Nov 2018	Stable scenario

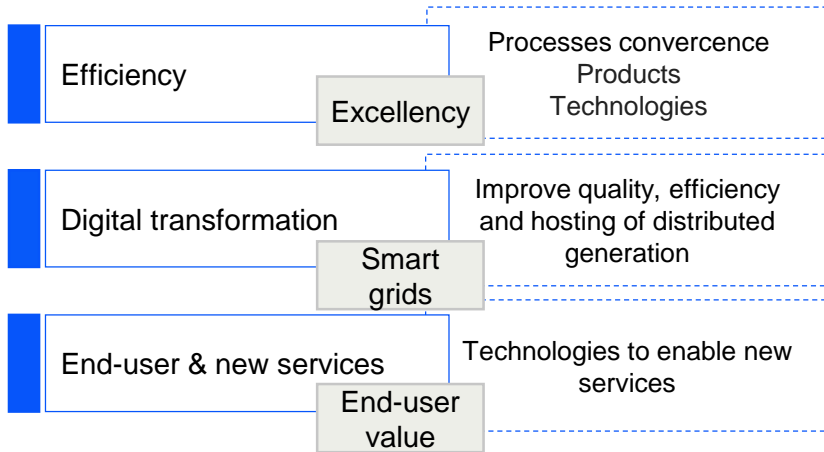
RAB of 10 €bn growing over 30% in the plan

# Capital Markets Day – Global infrastructure and networks

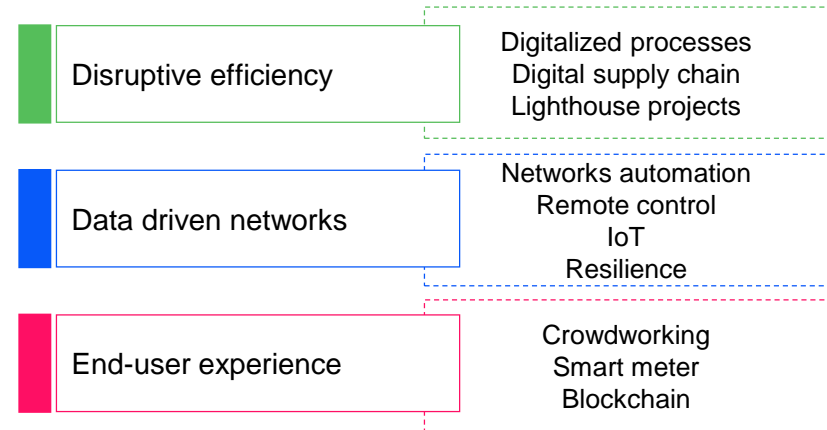
## Digitalization



### Pipeline model



### Platform model



Moving from a pipeline to a platform model

# Capital Markets Day – Global infrastructure and networks

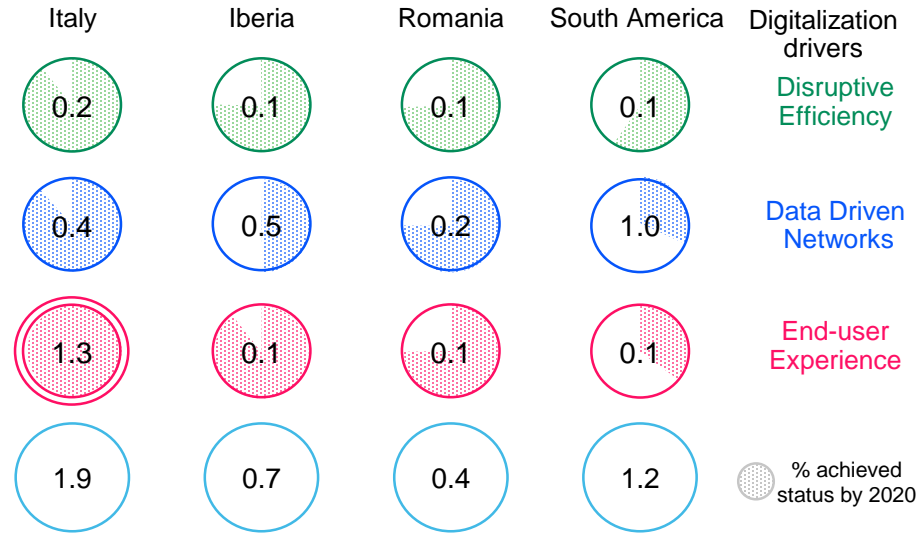
## Digitalization



2017E KPI	Italy	Iberia	Romania	South America
Digital process status <sup>1</sup>	3.1	2.8	2.9	2.5
Digital data network status	84%	41%	50%	24%
Advanced network metering <sup>2</sup>	99%	89%	26%	25%

Total capex  
4.2

Degree of digitalization and capex plan 2018-20 (€bn)



Long-term value creation

1. Digital process status: max level 5  
2. This KPI considers smart meters 1.0

# Capital Markets Day – Global infrastructure and networks

Disruptive efficiency pilot: Digitaly



## Project key figures

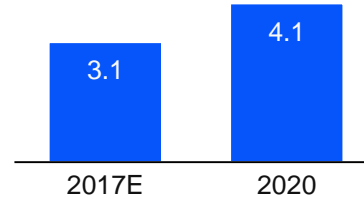
Analysed and reviewed all core processes end to end under operation and digital perspective

More than 50 initiatives identified

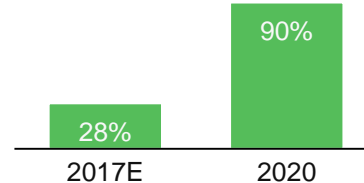
Expected ~120 €mn savings<sup>1</sup> per year

## Main achievements

Process digitalization



Networks monitored by smart tech



## Applied solutions

Asset

- Advanced sensors
- Drones
- Augmented reality
- Network images recognition and 3D modelling

End-users

- Digital agenda
- Customer storyline
- Chatbot and virtual assistant

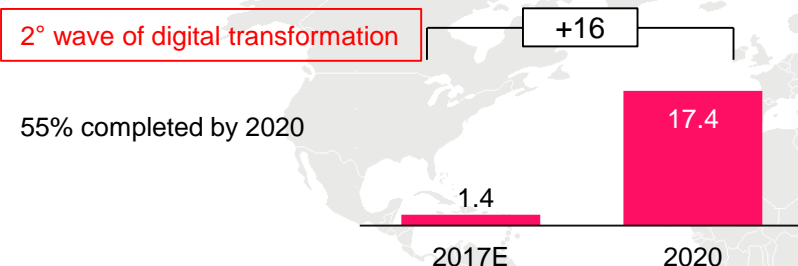
Digital disruption and saving achievement

# Capital Markets Day – Global infrastructure and networks

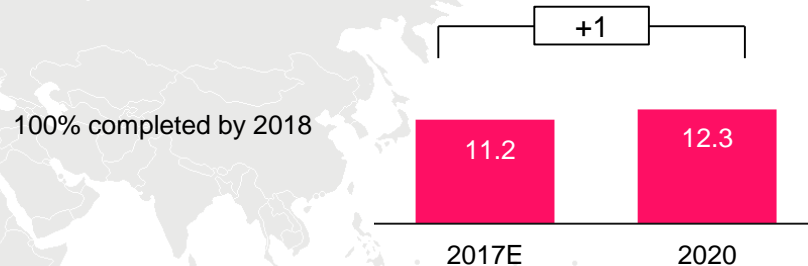


Industrial growth: focus on smart meter roll out

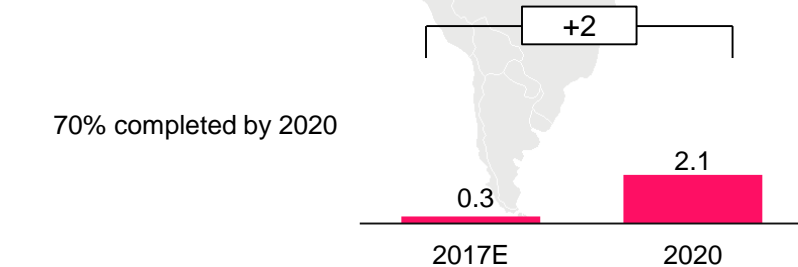
Italy - Smart meter 2.0 (#mn)



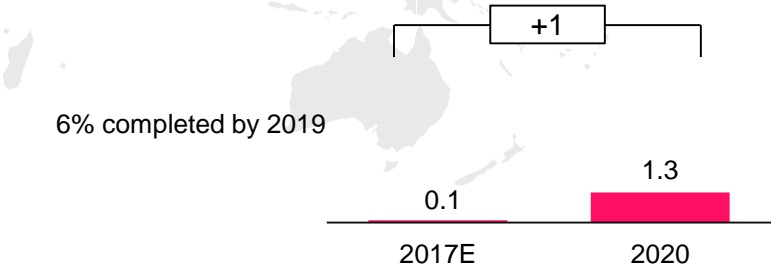
Iberia - Meters (#mn)



Romania - Meters (#mn)



South America - Meters (#mn)



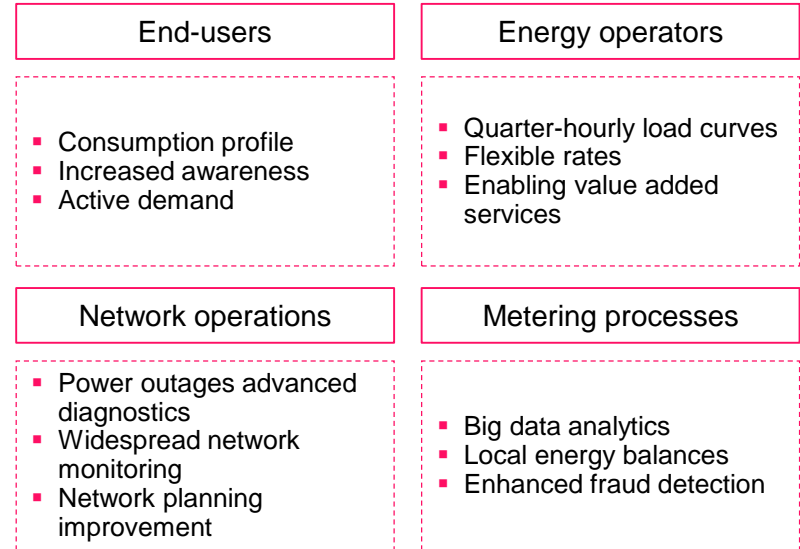
1.6 €bn capex, more than 20mn of meters installed

# Capital Markets Day – Global infrastructure and networks

Italy: Smart meter 2.0 's key features and benefits



- Replacement of 16 million meters with new generation ones
- 1.3 €bn investment in the 2018-20 period
- Totex regulation



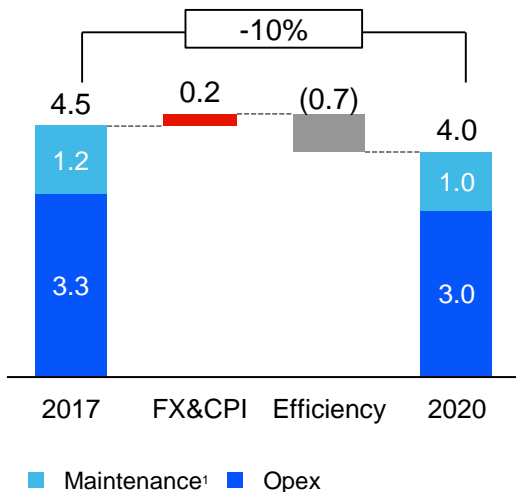
Key technology for network digitalization

# Capital Markets Day – Global infrastructure and networks

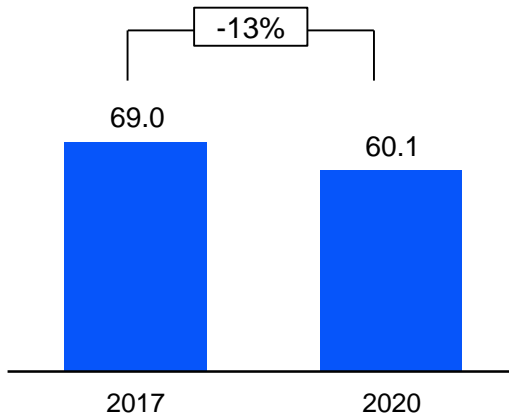
## Efficiency



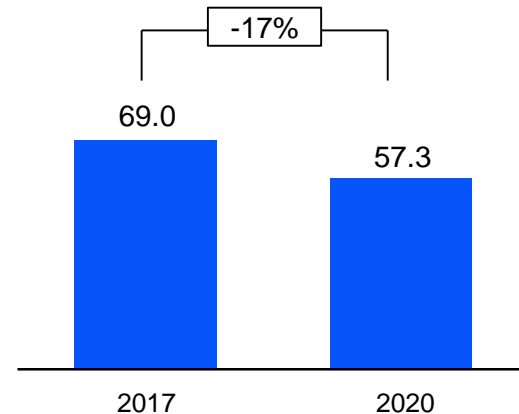
Cash cost evolution<sup>1</sup> (€bn)



Cash cost/end users nominal (€)



Cash cost/end users real (€)



Europe	66.1	-13.3%	57.3
South America	75.3	-12.0%	66.3

Europe	66.1	-17.0%	54.9
South America	75.3	-16.6%	62.8

1. Excluding one-off

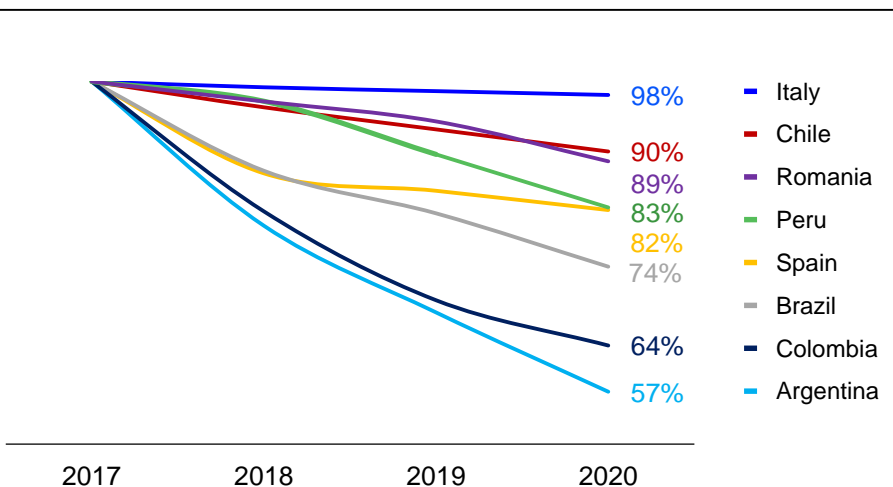


# Capital Markets Day – Global infrastructure and networks

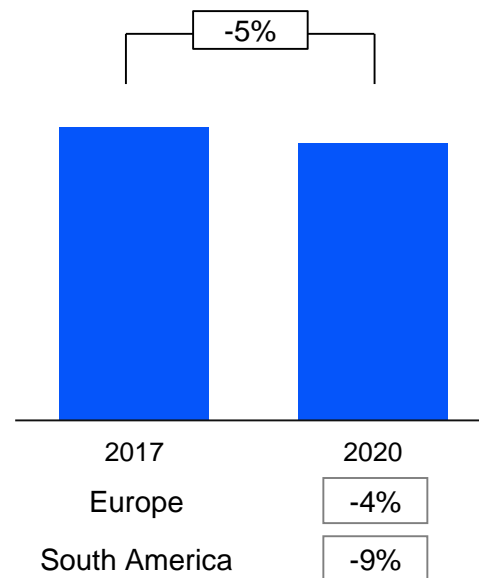
## Quality of Service and Network Losses



Minutes of interruption



Network Losses (%)

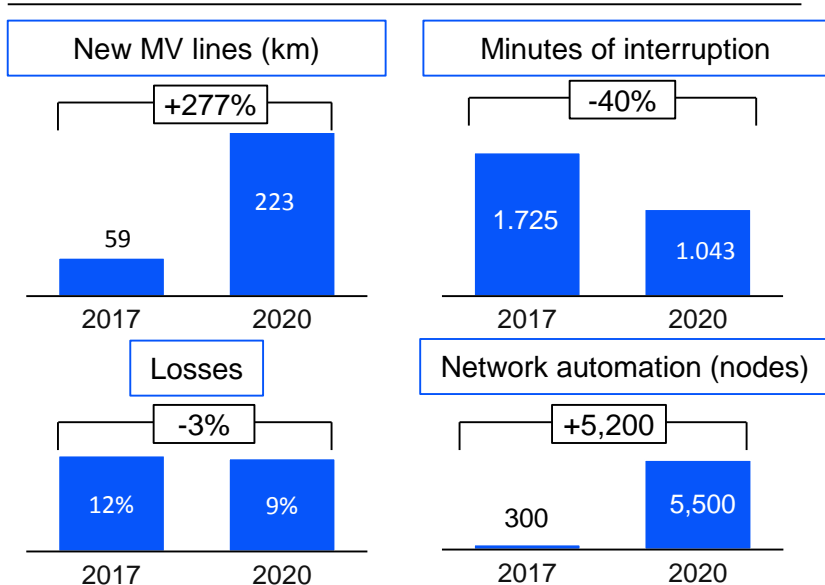


# Capital Markets Day – Global infrastructure and networks

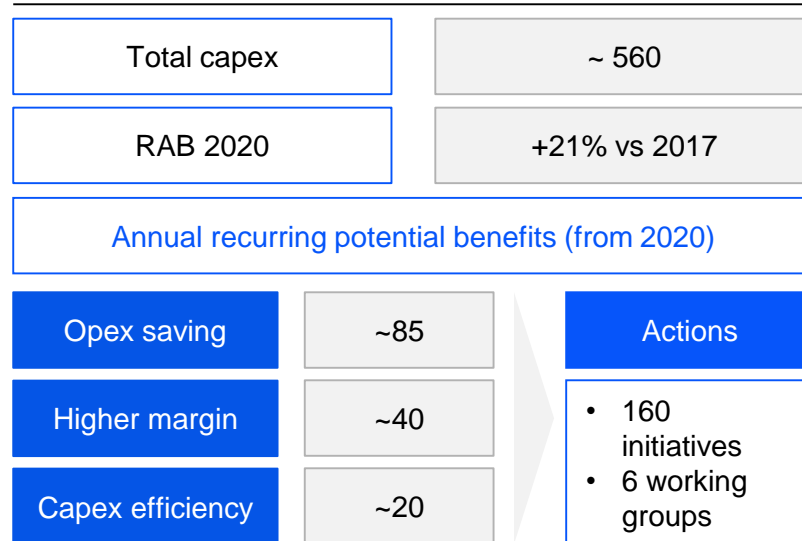
CELG 2020 Project



## Key performance indicators



## Project plan (€m)



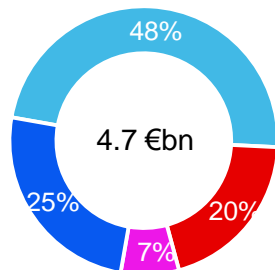
Remarkable restructuring leads to more than 200% EBITDA increase

# Capital Markets Day – Global infrastructure and networks

Industrial growth 2018-20

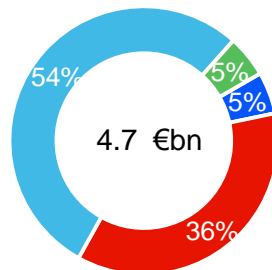


Growth capex<sup>1</sup> by area (€bn)



■ Italy ■ Iberia ■ Romania ■ South America

Growth capex<sup>1</sup> by technology (€bn)



■ Smart grid  
■ Smart meter  
■ Quality & efficiency  
■ ICT

Key figures

67.2 mn connected end users

Cumulative growth EBITDA<sup>1</sup> 1.7 €bn

Average time to EBITDA < 1.5 years

Spread over WACC ~ 400 bps

**Digitalization as key lever**

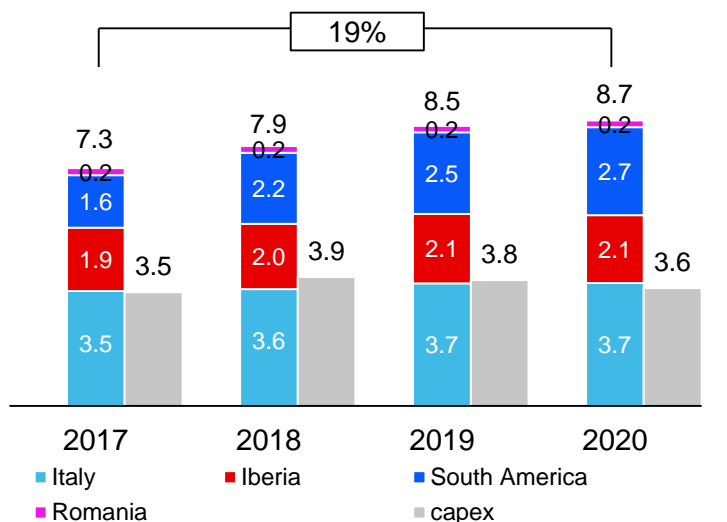
1. Excluding one-off

# Capital Markets Day – Global infrastructure and networks

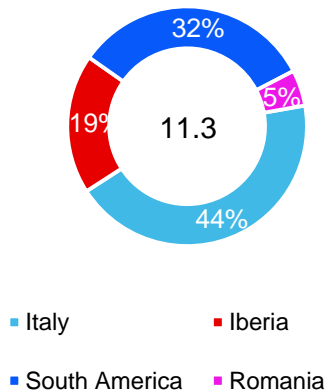
## Financial targets



EBITDA by geography and capex 2017-20 (€bn)



Capex by geography 2018-20 (€bn)



Key trends

- Diversified geographical footprint
- Stable regulatory framework with predictable returns
- Strong efficiencies
- Further growth through committed investments

**Strong and sustainable cash generating growth**



# Capital Markets Day

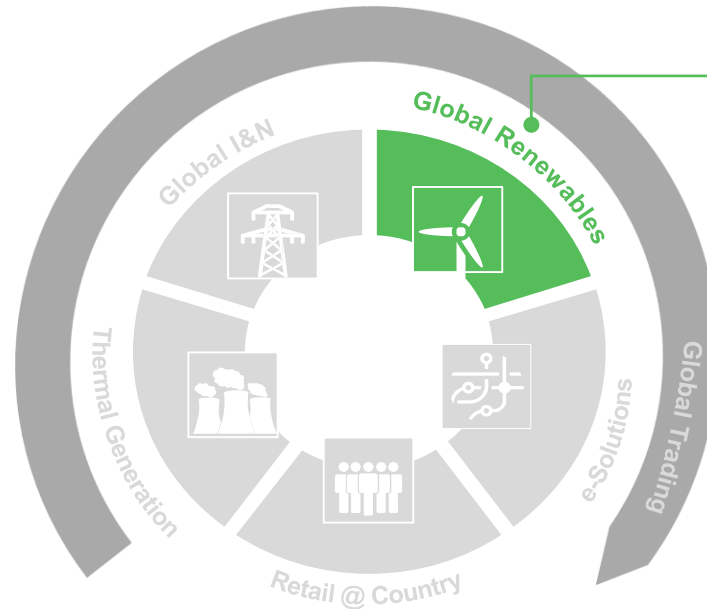
Global Renewable Energies

Antonio Cammisecra



# Capital Markets Day – Global renewable energies

Integrated model fit for digitalized, low carbon world

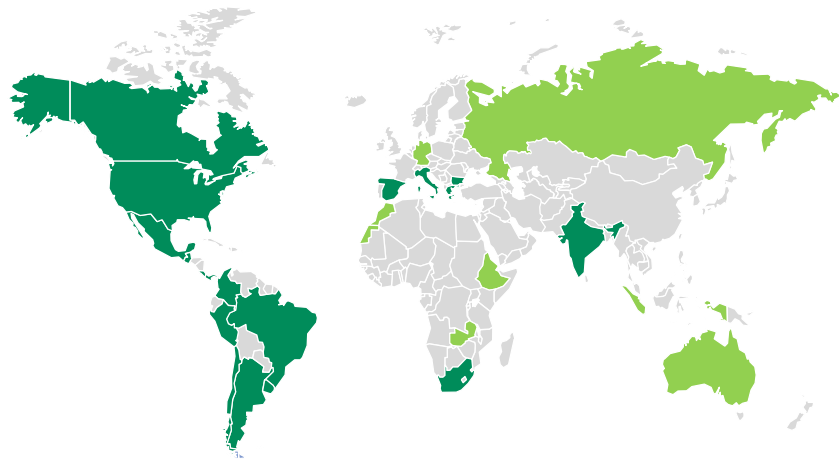


Generation growth engine  
Leading geographic expansion





Growth engine for the utility of the future

# Capital Markets Day – Global renewable energies

Presence and key figures



■ Countries of presence    ■ Countries with advanced stage of development

				
Consolidated capacity (GW)	6.6	2.2	27.5	0.8
Managed capacity (GW)	2.6	0.4	0.3	0.1

Key figures	2017	Managed
Capacity (GW)	37.1	40.5
Production (TWh)	85.1	92

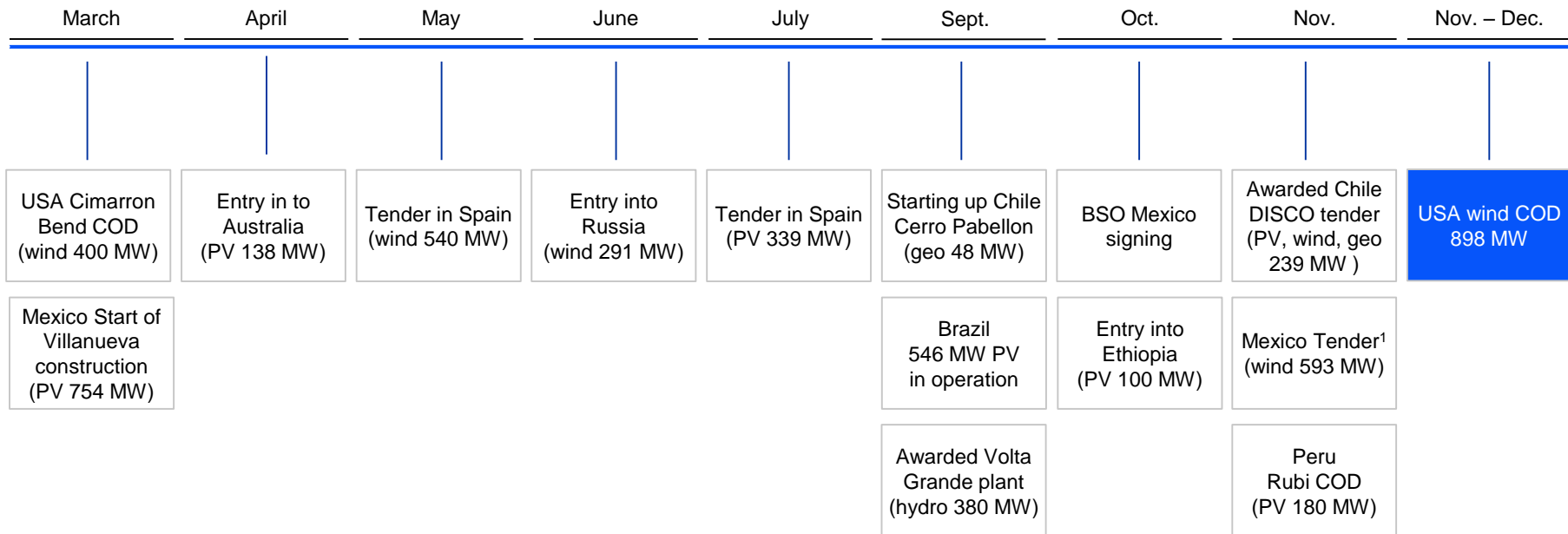
Key financials (€bn)	2017
EBITDA	4.1
Opex	1.4
Maintenance capex	0.3
Growth capex	3.4

Geo Hydro Wind Solar



# Capital Markets Day – Global renewable energies

2017 key relevant events: a very competitive battleground



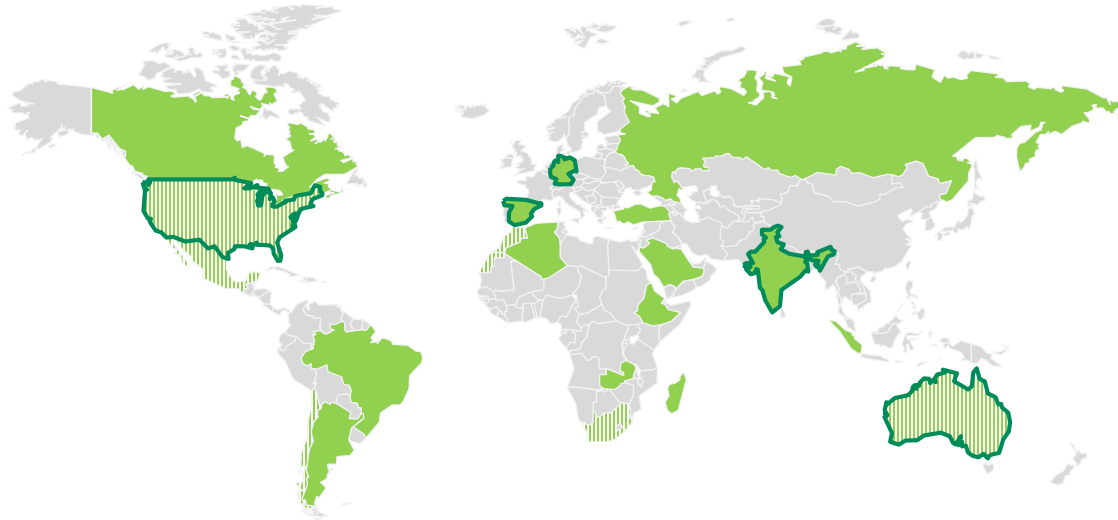
2.6 GW of additional capacity and over 2.5 GW of tender already awarded

1. Based on preliminary awarding



# Capital Markets Day – Global renewable energies

## Diversified regulatory framework



■ Renewable auctions

▨ Capacity auctions,  
PPA with customers C&I

□ No more incentives in the future

### Renewable auctions

- High competition and number of participants
- Price driven
- All operators
- Regulatory and local content risk
- Commodity

### PPA with customers C&I<sup>1</sup>

- High competition and low number of participants
- Product and services driven
- Global partnership
- Product flexibility
- Brand value

### The end of subsidies

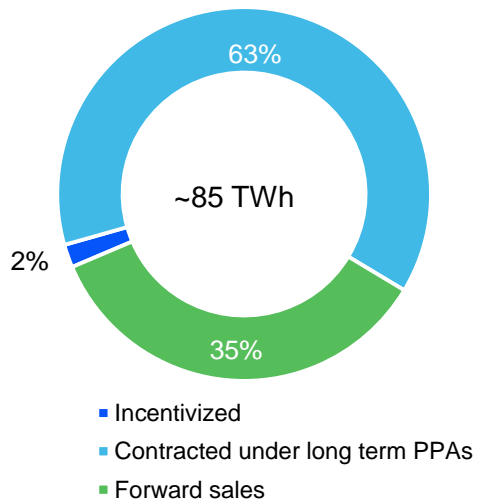
- Technological evolution as an enabler for the new role of renewable energies
- Opening towards market services
- Storage plus renewables to minimize system costs

# Capital Markets Day – Global renewable energies

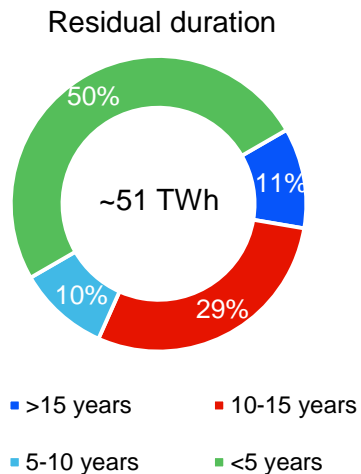
## Portfolio composition



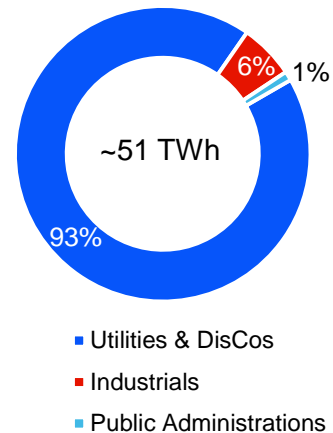
2017 sales portfolio composition



2017 sales: focus on PPA



Offtaker Segmentation



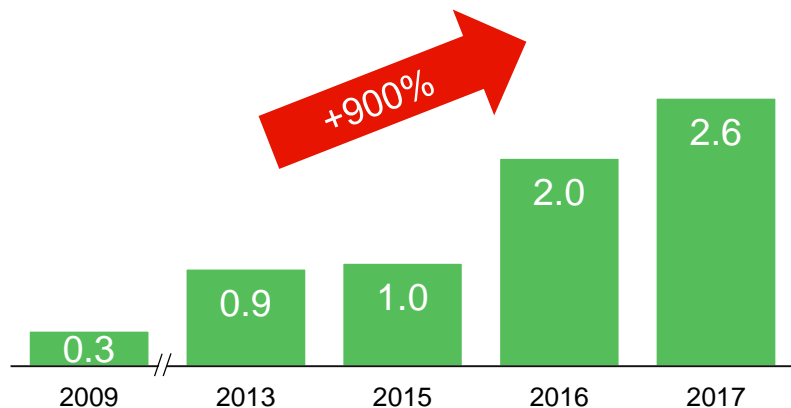
Long term PPAs and incentives account for ~65% of the total sales portfolio

# Capital Markets Day – Global renewable energies

## Additional capacity



Evolution per year<sup>1</sup> (GW)



Main achievements

Leadership in construction and plant commissioning

Increase in average size of plants

Construction across 5 continents

Implementation of technologically advanced and innovative solutions

**Solid industrial capability**

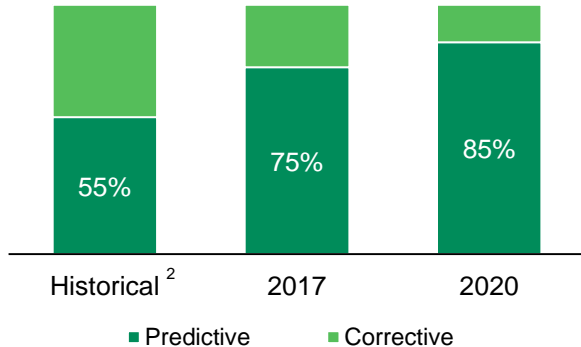
1. 2017 includes not consolidated capacity

# Capital Markets Day – Global renewable energies

## Digitalization strategy along plant lifecycle

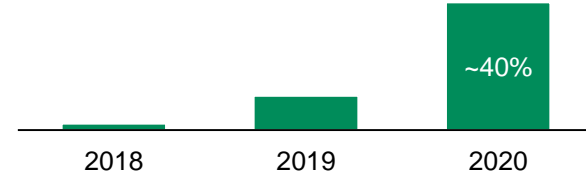


Predictive maintenance through big data<sup>1</sup>



Maintenance and lost production saving thanks to avoided failure

Digitalized and automated construction



Reduction in Capex/MW and time to EBITDA

**Digitalization and automation key drivers for competitiveness**

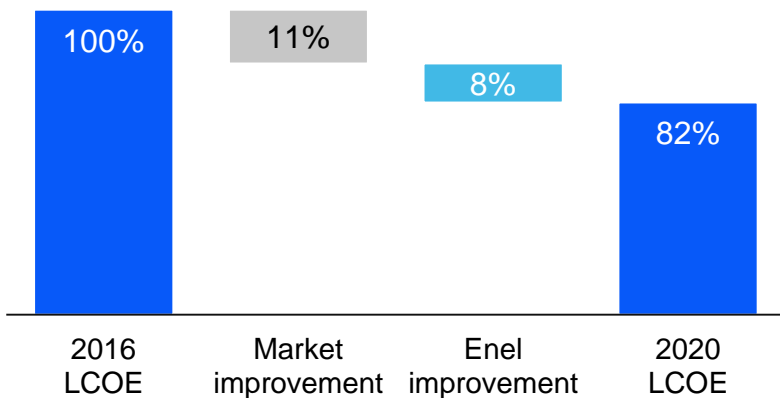
1. Refers to Wind Power Plants  
2. 2014-16 average data

# Capital Markets Day

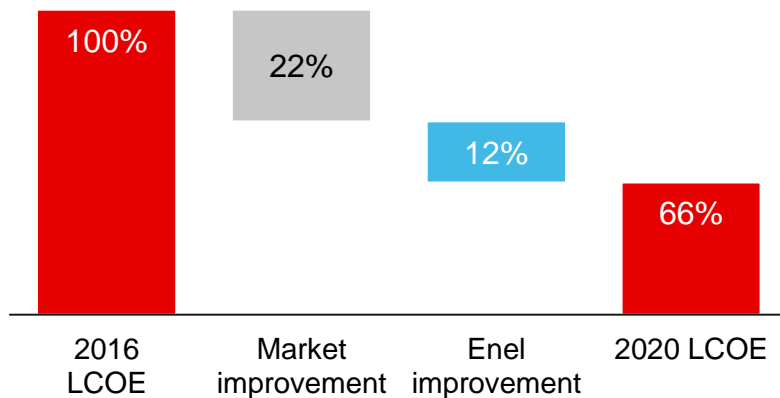
Engineering and technological leadership



Wind LCOE<sup>1</sup> evolution



Solar LCOE<sup>1</sup> evolution



Best in class in reducing costs and increasing our competitive advantage

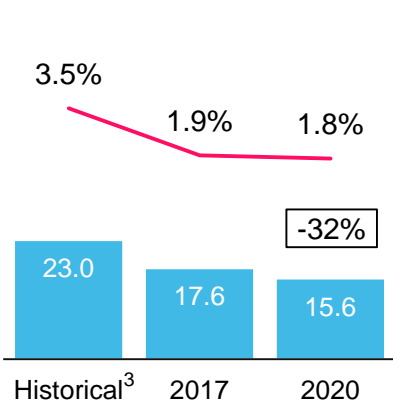
1. Normalised LCOE based on 2016 levels

# Capital Markets Day – Global renewable energies

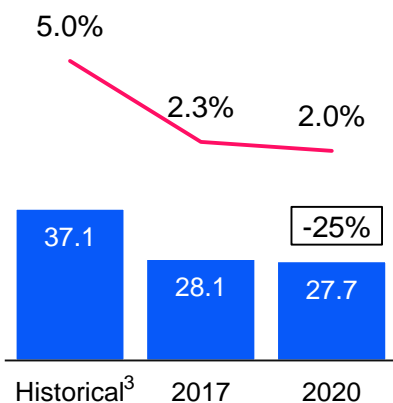
## Operational efficiency: key performance indicators<sup>1</sup>



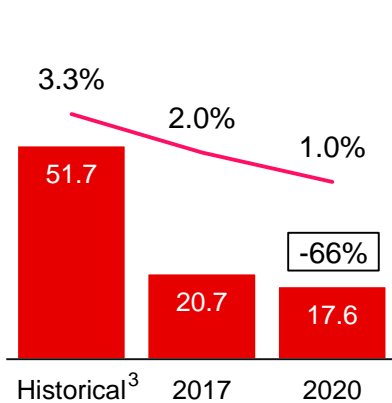
### Hydro<sup>2</sup> cash cost (k€/MW)



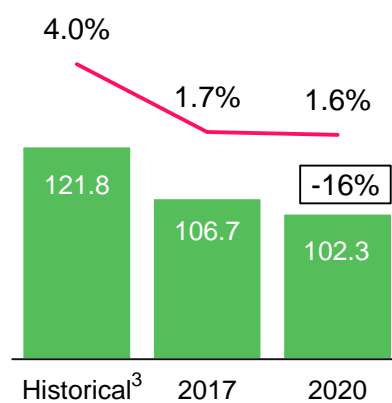
### Wind cash cost (k€/MW)



### Solar cash cost (k€/MW)



### Geothermal cash cost (k€/MW)



— Lost production factor

Continuous path of performance improvement and efficiency leveraging on digitalization and innovation

1. O&M Cash Costs/MW deflated and at forex 2017 excluding taxes, insurance, contribution and not recurring  
2. Hydro KPIs refer to the Total Hydro perimeter (~28 GW)  
3. Historical values refer to year 2009-11, except solar which refers to 2013-14

# Capital Markets Day – Global renewable energies

Asset value maximization: sample of projects in execution



	Spain	Chile	USA <sup>1</sup>	Australia	Russia
Technology	Wind/Solar	Solar/Wind/Geo	Wind	Solar/Wind	Wind
Capacity (MW)	~900	~240	~320	~320	~300
Capex (USD bn)	~0.9	~0.3	~0.4	~0.4	~0.4
COD	2019	2023-24	2018	2018-19	2020-21
Currency	EUR	USD	USD	AUD	RUB
Equity IRR	10-12%	12-15%	10-12%	10-12%	17-19%

**As demonstrated in Chile, Enel outbids competition preserving returns**

1. USA remuneration also includes NOLs (5 years) and PTCs (10 years)

# Capital Markets Day – Global renewable energies

BSO and equity partnership



## 2017 Track record

### Mexico – 2017 track record

20/80 with CDPQ & CKD  
0.4 GW in operation  
1.3 GW under construction

### US – 2017 ongoing transaction

20/80 of 0.3 GW in operation  
50/50 on 0.4 GW in operation

■ Partnership in place ■ Countries of interest

## Towards the future

Worldwide dedicated team

Negotiation ongoing in new countries

Pre-investment, during construction or post COD deal

Continuing the execution to further crystallize value

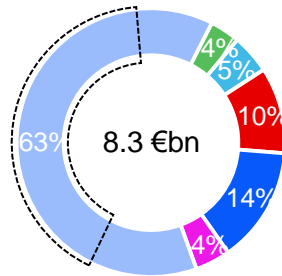


# Capital Markets Day – Global renewable energies

Industrial growth: 2018-20 capacity additions and growth capex



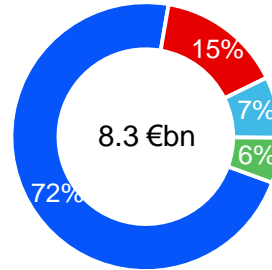
Growth capex by geography



- Italy
- Iberia
- South America
- Europe & North Africa
- North & Central America
- Subsaharian Africa & Asia

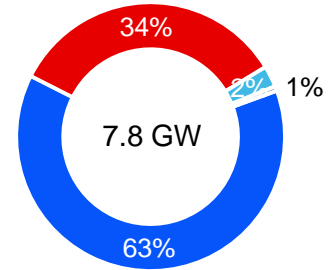


Growth capex by technology



- Wind
- Solar
- Hydro
- Other

Capacity additions<sup>1</sup> by technology



- Wind
- Solar
- Hydro
- Other

Balanced organic investment portfolio and accelerated pipeline monetization through BSO

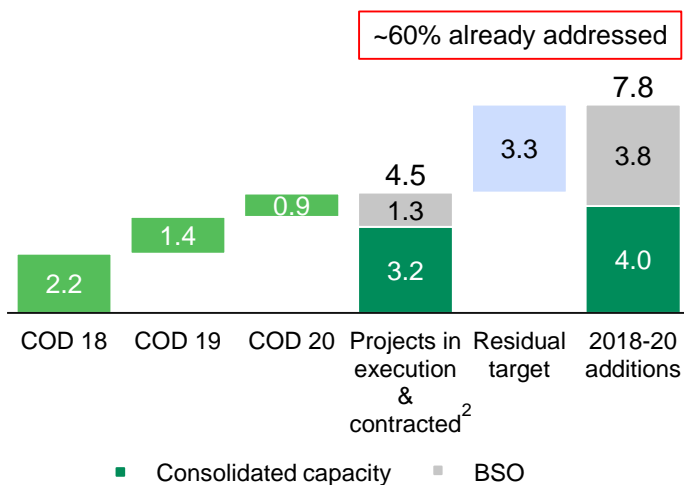
1. Additional capacity includes 1,3 GW of Mexican projects sold in 2017 and 0,3 GW Australia Solar projects consolidation

# Capital Markets Day – Global renewable energies

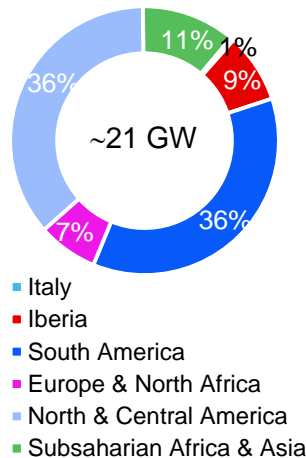
## Industrial growth: pipeline and capacity additions



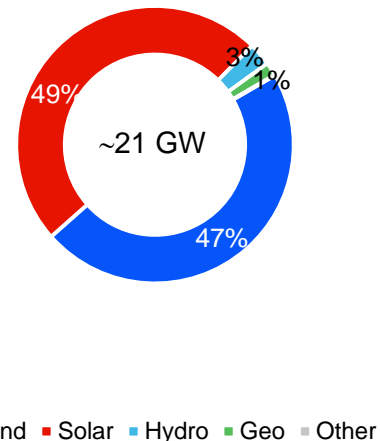
Capacity additions 2018-20<sup>1</sup> (GW)



Pipeline by geography



Pipeline by technology



**Leadership based on a competitive 21 GW pipeline to cover ~3 GW of residual target**

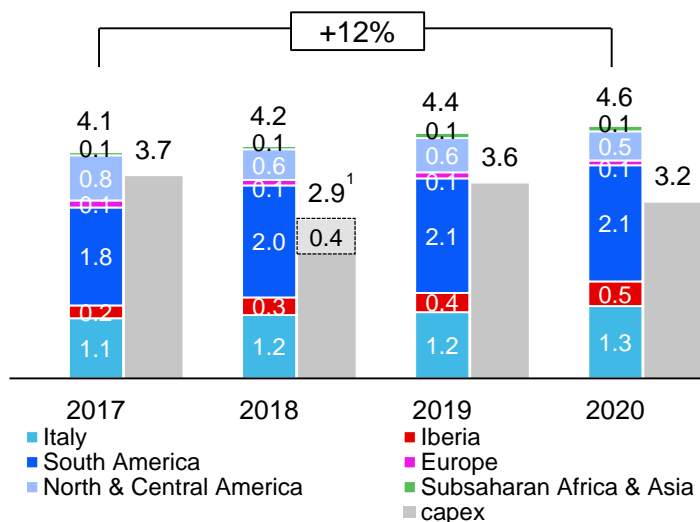
1. Additional capacity includes 1,3 GW of Mexican projects sold in 2017 and 0,3 GW Australia Solar projects consolidation  
 2. Excluding tender ongoing

# Capital Markets Day – Global renewable energies

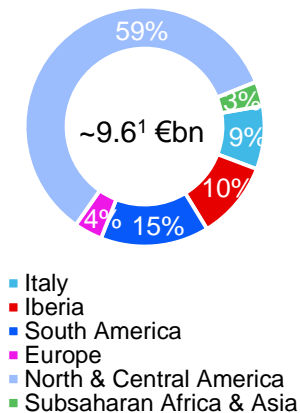
## Financial targets



EBITDA by geography and capex 2017-20 (€bn)



Capex by geography 2018-20



Key trends

EBITDA influenced by asset rotation strategy

Europe growth based on new capacity in Spain

North & Central America as the platform for BSO

South America leverages on 2016-17 additional capacity

Focus on Australia preparing next growth wave in new countries

**Growth and efficiencies ensure ~12% EBITDA increase over the period**

1. Including 0.4 €bn of BSO in Mexico



# Capital Markets Day

Global e-Solutions

Francesco Venturini



# Capital Markets Day – Global e-Solutions

New brand



Our vision

Create the new  
power economy

Our name

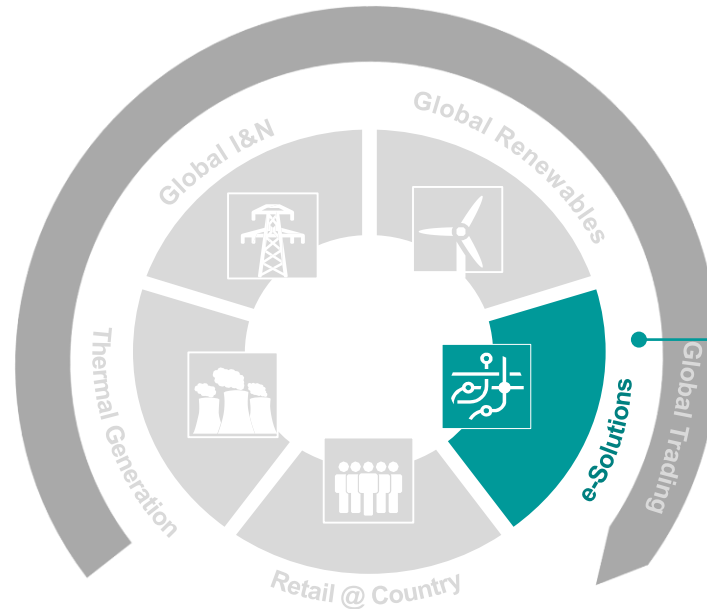
A name that builds on the trust  
and scale of Enel and signals  
distinctiveness and a new vision

enel x

A new brand for a distinctive positioning on the market

# Capital Markets Day – Global e-Solutions

Integrated model fit for digitalized, low carbon world



Leadership in energy transition  
Digital platform proposition  
Customer empowerment

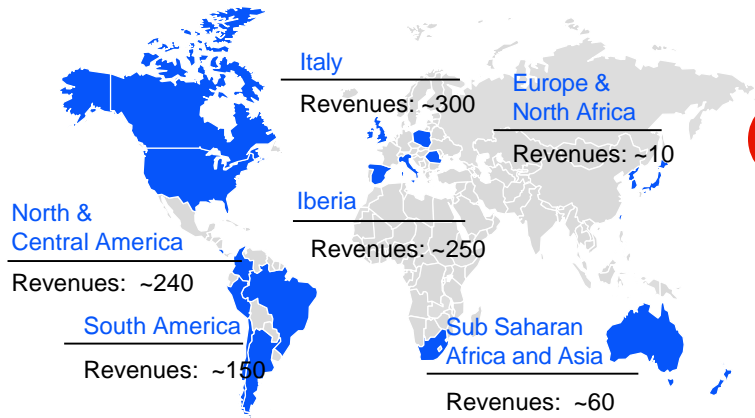
Focusing on new customers' needs through an asset light approach

# Capital Markets Day – Global e-Solutions

## Positioning and key figures



### Positioning<sup>1</sup> (€mn)



### Financials (€bn)

2017<sup>1</sup>

Revenues	1.0
Gross margin	0.4

### Key figures

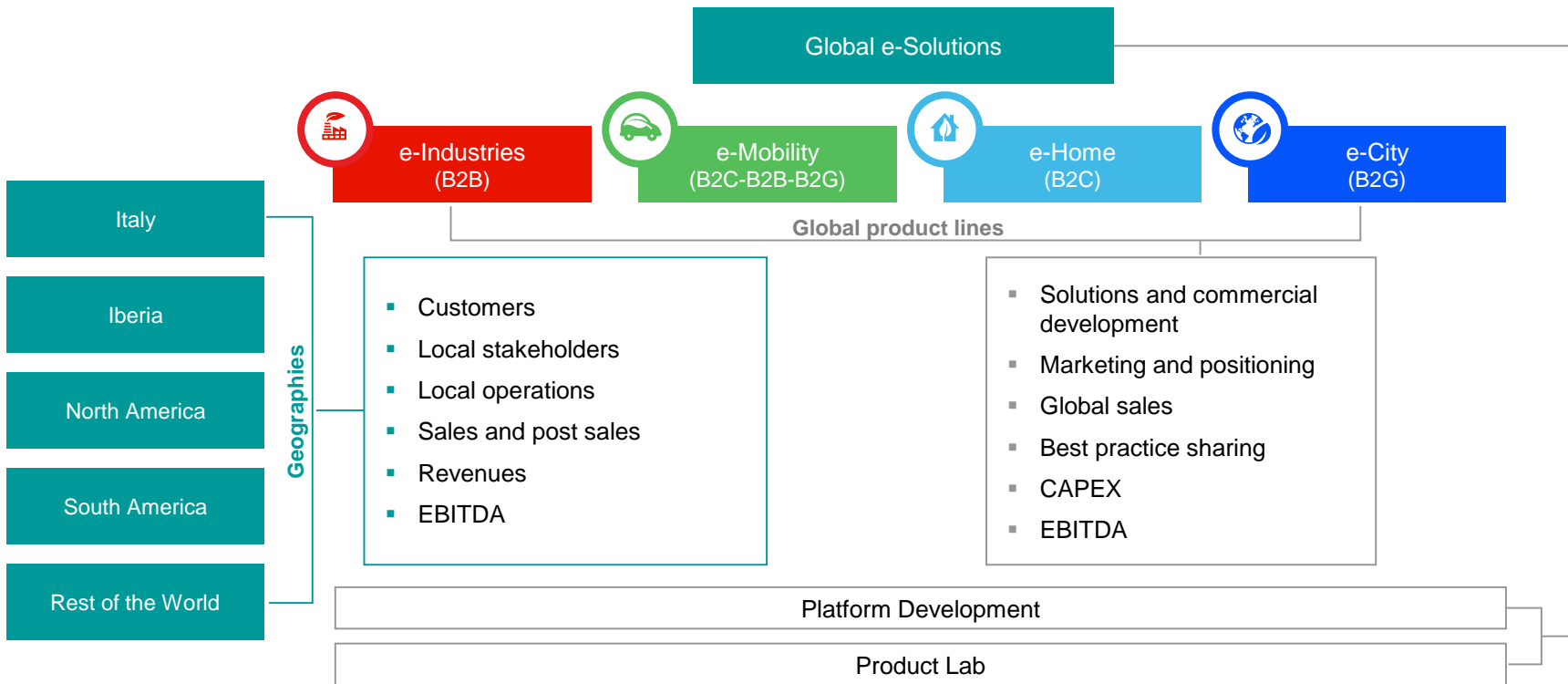
		2017		2017			
	Demand Response	GW sold	5.7		Maintenance and repair <sup>4</sup>	Customer base (#mn)	1.1
	Demand Side Management <sup>2</sup>	MW installed/year	3		Repair <sup>5</sup>	Customer base (#mn)	1.3
	Co-generation	MW managed	13		Credit cards	Credit cards (#mn)	0.9
	Public infrastructure <sup>3</sup>	Public charging installations (#k)	1.1		Smart Lighting	Light points (mn)	2.7
	Private Charging	Installed wallboxes (#k)	26		Fiber deployment <sup>6</sup>	Households passed (mn)	2.4

1. Preclosing 2017 figures include EnerNOC and eMotorWerks full year  
 2. Storage behind the meter  
 3. Including both owned and managed charging stations

4. Maintenance contracts (scheduled boiler maintenance) mainly on gas / electrical system  
 5. Repair contracts (urgency) through external partners  
 6. Italy, only A & B areas

# Capital Markets Day – Global e-Solutions

Customer driven organization





# Capital Markets Day – Global e-Solutions

Our portfolio of solutions in the 4 Global Product Lines



## *e-Industries*

Consulting and auditing service

Distributed generation on/off site

Energy efficiency

Demand response and demand side management



## *e-Mobility*

Public charging network

Private charging wall-box

Maintenance and other services

Vehicle 1 Grid  
Vehicle 2 Grid



## *e-Home*

Installation, maintenance and repair services

Automated home management

Financial services

Home 2 Grid



## *e-City*

Smart lighting

Fiber optic wholesale network

Distributed generation & energy services

Demand response and demand side management

Flexibility

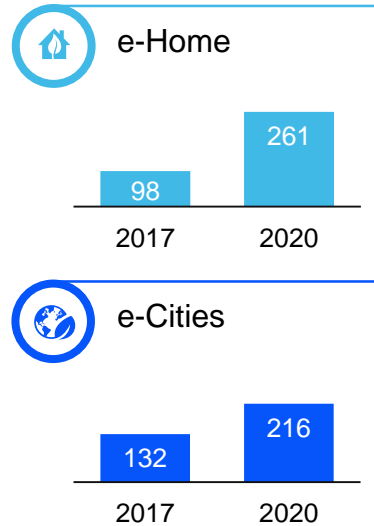
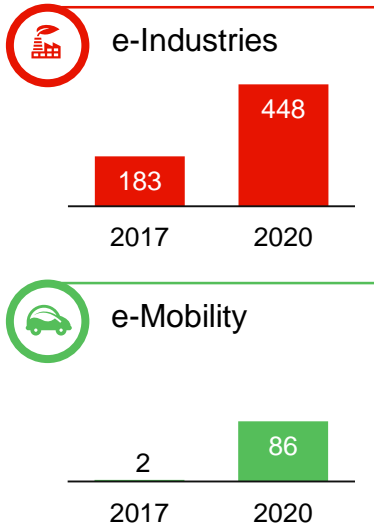
Addressing new customer needs with innovative technologies

# Capital Markets Day – Global e-Solutions

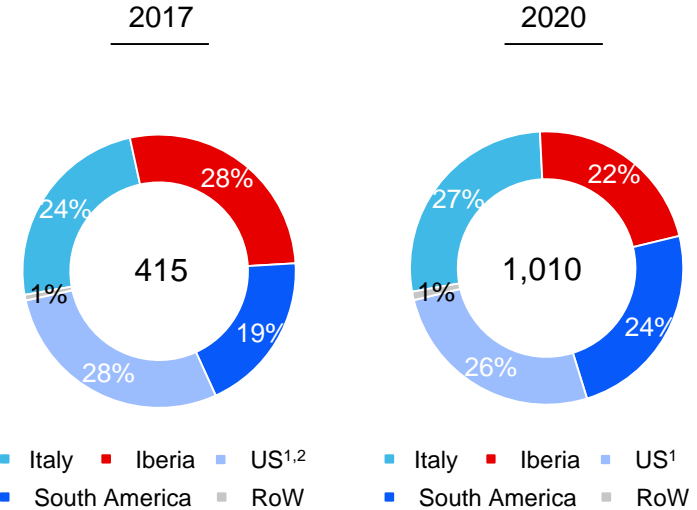


## Gross margin

Gross margin by technology (€mn)



Gross margin by geography (€mn)



2.5x growth in gross margin in 3 years



1. Including EnerNOC activities in Asia and Australia  
 2. Including EnerNOC and eMotorWerks FY Preclosing

# Capital Markets Day – Global e-Solutions

KPI figures



		2017	2020		
	<b>Demand Response</b>	GW sold	5.7	10.7	1.9x
	<b>Demand Side Management</b>	MW installed/year	3	224	75x
	<b>Public infrastructure</b>	Public charging installations (#k)	1.1	9.1	8x
	<b>Private Charging</b>	Wallboxes installed and managed (#k)	26	304	12x

		2017	2020		
	<b>Maintenance and repair<sup>1</sup></b>	Customer base (#mn)	1.1	2,1	1.9x
	<b>Repair<sup>2</sup></b>	Customer base (#mn)	1.3	2.4	1.9x
	<b>Credit cards</b>	Credit cards (#mn)	0.9	1.9	2.1x
	<b>Smart Lighting</b>	Lighting points (mn)	2.7	3.2	1.2x
	<b>Fiber deployment</b>	Households passed (mn) <sup>3</sup>	2.4	7.5	3.1x

1. Maintenance contracts (scheduled boiler maintenance) mainly on gas / electrical system
2. Repair contracts (urgency) through external partners
3. Italy, only A and B areas

# Capital Markets Day – Global e-Solutions

e-Industries business model focused on flexibility services



## Revenue streams

Energy as a service

Demand response

Demand response + storage

Demand side management / capacity  
peak shaving

Resiliency and micro-grids

Flexibility

## Enabled by 2 platforms

EnerNOC

Demand Energy

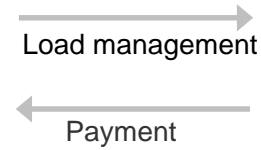
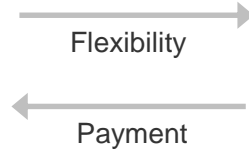
Four types of flexibility services enabled by advanced software solutions

# Capital Markets Day – Global e-Solutions

Focus on the Demand response business<sup>1</sup>



Commercial & industrial  
clients



Grid operator / utility  
customers



14,000 C&I sites

5,700 MW sold

Gross margin: 80 €mn

10 countries (~80% in US)

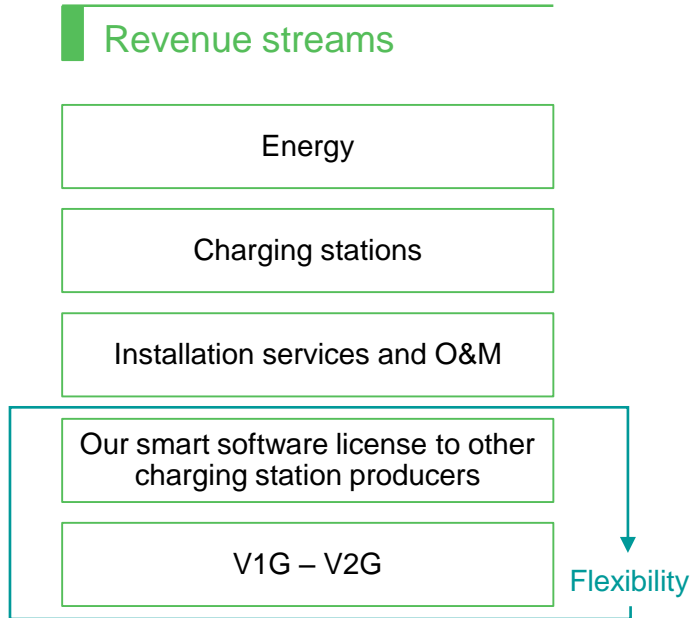
**Global leader operator in the Demand response business thanks to EnerNOC acquisition**

# Capital Markets Day – Global e-Solutions

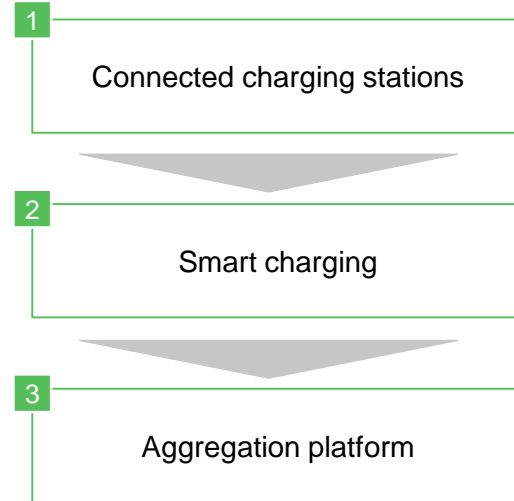
e-Mobility business model



## Revenue streams



## Enabled by 3 technological layers



Technological leader thanks to a consolidated expertise and the acquisition of eMotorWerks

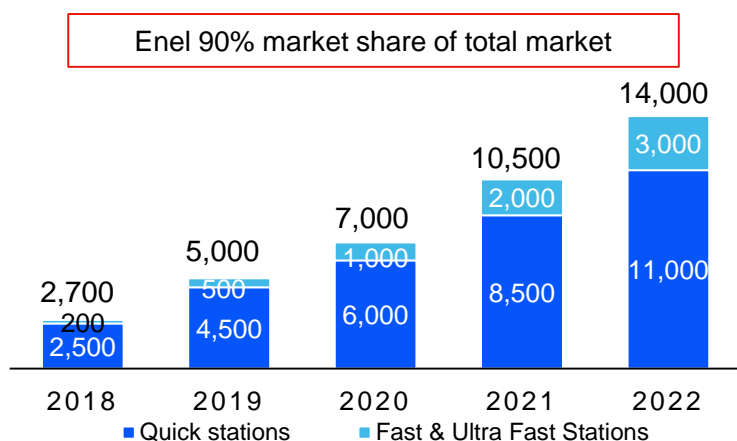
# Capital Markets Day – Global e-Solutions

Italy: public charging installations plan



e-Mobility

Enel public charging installation plan (# cumulated)



Up to 300 €mn capex by 2022

Enel products portfolio



Quick



Fast



Ultra fast

Enabling mobility take off in Italy

# Capital Markets Day – Global e-Solutions

e-Home business model



e-Home

## Revenue streams

Distributed generation  
(PV, storage, etc)

Maintenance and repair

Home 2 Grid

Flexibility

Financial services

## Enabled by 3 factors

Enel customer base

Network of partners

Aggregation platform

Create a new home ecosystem leveraging on our brand recognition



# Capital Markets Day – Global e-Solutions

Iberia and Colombia: business cases<sup>1</sup>



e-Home

## Enel home services in Iberia

Maintenance and repair of appliances  
Typically periodic interventions

On-demand interventions to fix emergencies or failures in  
electrical installations and other appliances

Bundle of equipment sales with additional services

Over 2 mn customers &  
Network of 290 partners

Gross Margin: 66 €mn

## Enel business in Colombia: Credito Facil Codensa

Partnership with Colpatria bank providing credit cards to  
our commodity customers with no easy access to credit

Credit collection through our energy bills

Usually used for purchase of appliances / education  
services and for house renovation

Colpatria credit card is n.1 in Colombia

>800K credit cards

Gross margin: 9.6 €mn

**Financing access to low income customers**

# Capital Markets Day – Global e-Solutions

e-City business model



## Revenue streams

Energy as a service

Public lighting

Demand response

Demand side management

Wholesale fiber optic network

Flexibility

## Enabled by 3 competitive levers

Enel capillarity presence in cities

Enel distribution networks

Enel digital platform

Integrated range of services to become a trusted partner for municipalities and public administration

# Capital Markets Day – Global e-Solutions

Italy: Open Fiber plan



open fiber

FTTH future proof technology

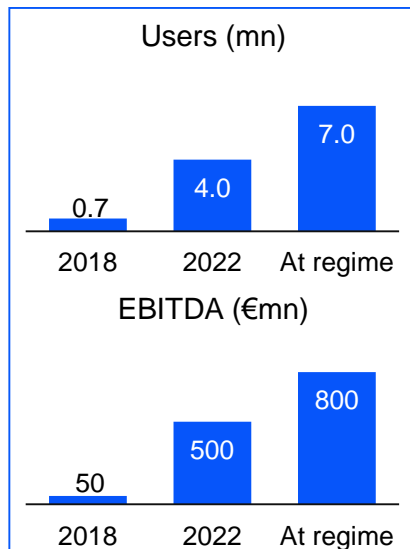
5-6 years time to complete Italy convergence

150k fiber km to be deployed

1 Gbps network speed

~6,500 municipalities connected

Total plan



A&B clusters roadmap

271 cities  
9.5 mn households  
3.9 €bn capex plan

Target	2017	2020
Households passed (mn) <sup>1</sup>	2.4	7.5

**Total plan**  
18.8 mn households<sup>2</sup>  
5.1 €bn capex plan<sup>3</sup>  
4.4 €bn (~85%) by 2022

C&D clusters plan

**Wave 1**  
5 lots  
6 regions  
~1.4 €bn funds available  
4.6 mn households

**Wave 2**  
6 lots  
11 regions  
~1.3 €bn funds available  
4.7 mn households

Player leading the digitalization of Italy

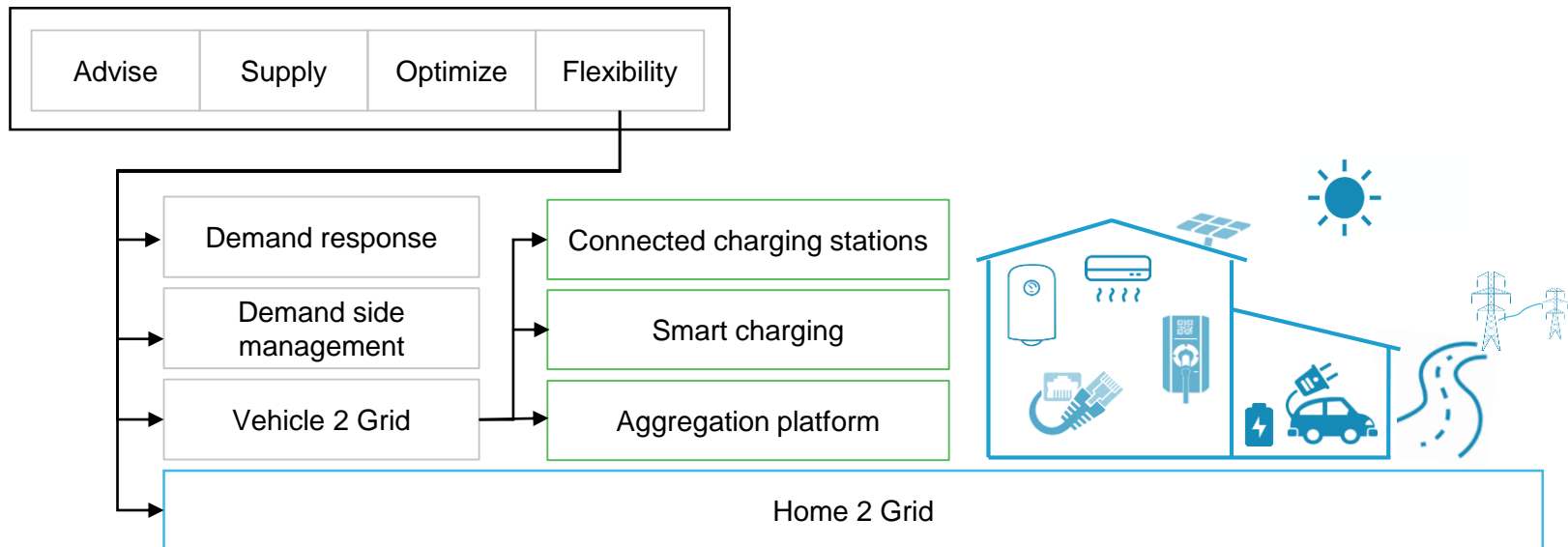
1. Italy, only A & B areas  
2. Including households from tender 1 and 2 for clusters C and D  
3. 6.5 €bn gross of Infratel contribution

# Capital Markets Day – Global e-Solutions

Flexible distributed energy system



Energy as a service value chain



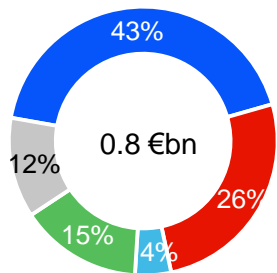
Best positioned to serve new customers' needs

# Capital Markets Day – Global e-Solutions

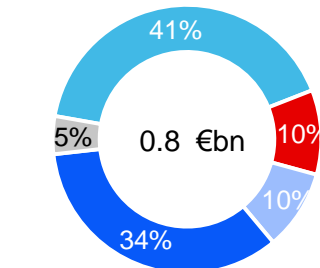
## Industrial growth 2018-20



2018-20 growth capex by product line and by geography



- e-City
- e-Industries
- e-Home
- e-Mobility
- ICT



- Italy
- US<sup>1</sup>
- RoW/Global
- South America
- Iberia

Key growth capex figures



Energy efficiency and distributed generation projects and flexibility services platform development



Public charging infrastructure development mainly in Italy

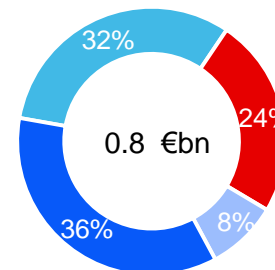


Business asset light



Investment mainly focused in Italy (50% of total) to increase efficiency in public lighting concession areas

2018-20 EBITDA by geography



- Italy
- South America
- US<sup>1</sup>
- Iberia

**EBITDA 2018-20 fully cover capex effort**

1. Including EnerNOC activities in Asia and Australia



# Capital Markets Day

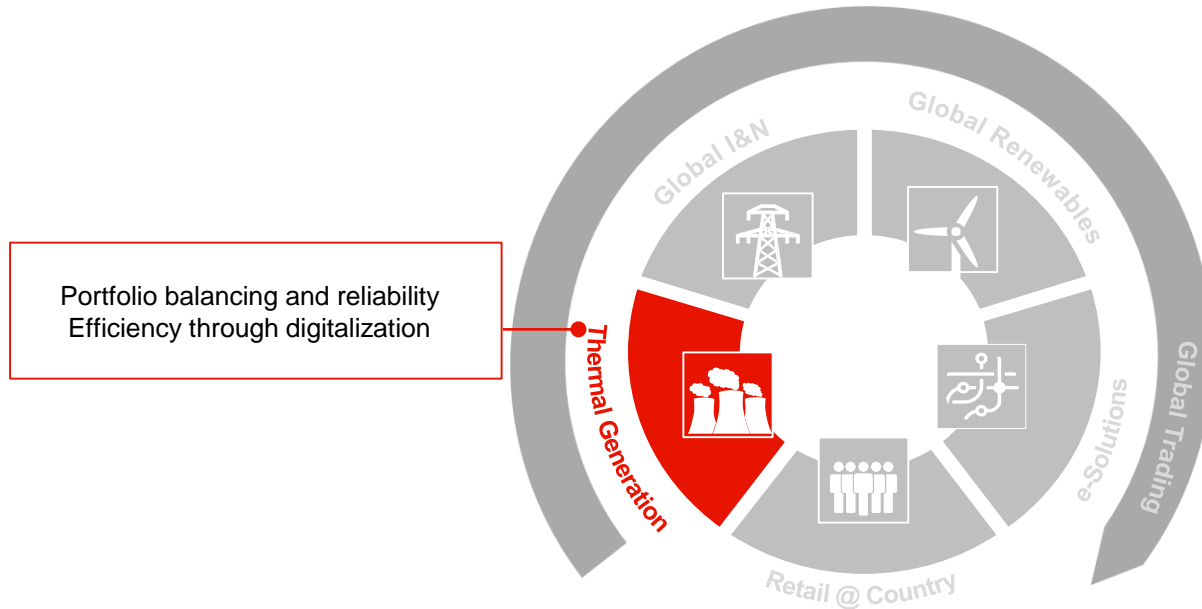
Global Thermal Generation

Enrico Viale



# Capital Markets Day – Global thermal generation

Integrated model fit for digitalized, low carbon world



Maximizing value creation in residual asset life

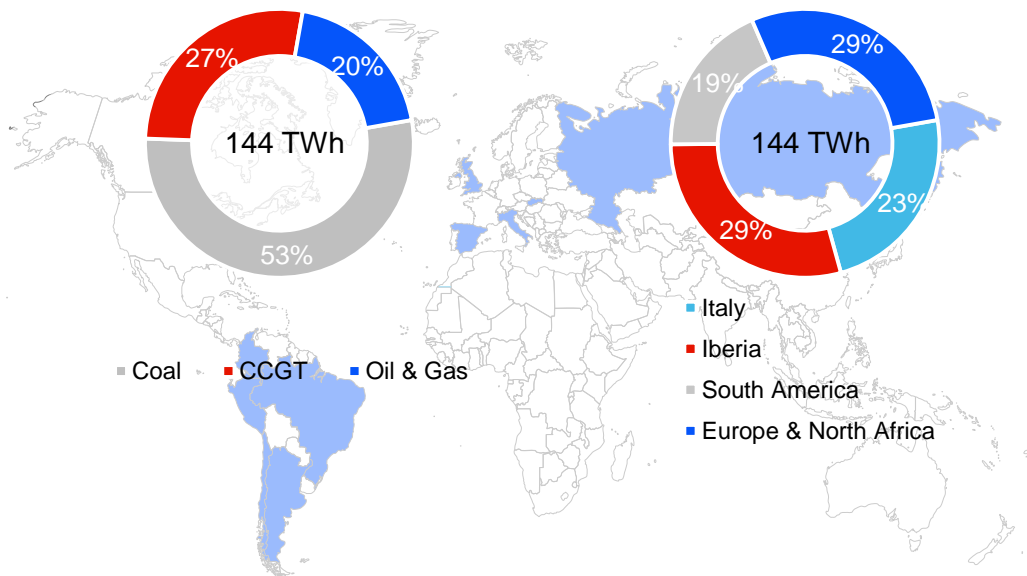
# Capital Markets Day – Global thermal generation

## Positioning and key figures



2017 net production by technology<sup>1</sup>

2017 net production by geography<sup>1</sup>



Key figures

2017

Installed capacity <sup>1</sup> (GW)	43
Net production (TWh)	144

Financials<sup>2</sup> (€bn)

EBITDA	1.5
Cash cost	2.1
Opex	1.6
Maintenance capex	0.5
Growth capex	0.2
Total capex	0.7

1. Excluding nuclear contribution equal to 3.32 GW of installed capacity
2. Excluding nuclear and trading

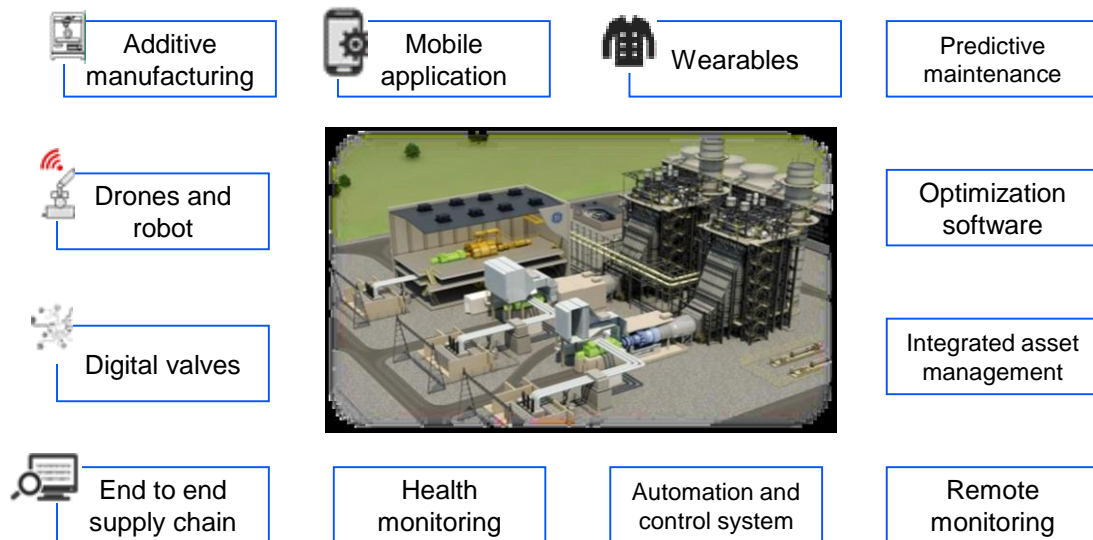


# Capital Markets Day – Global thermal generation

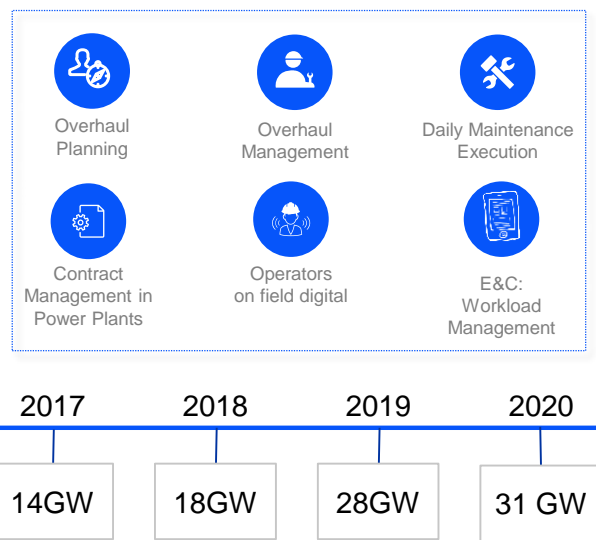
## Digital transformation: project status



### Digitally integrated smart plant – reference model



### Processes digital re-design



**31GW digitalized, about 90% of whole thermal generation fleet<sup>1</sup>**

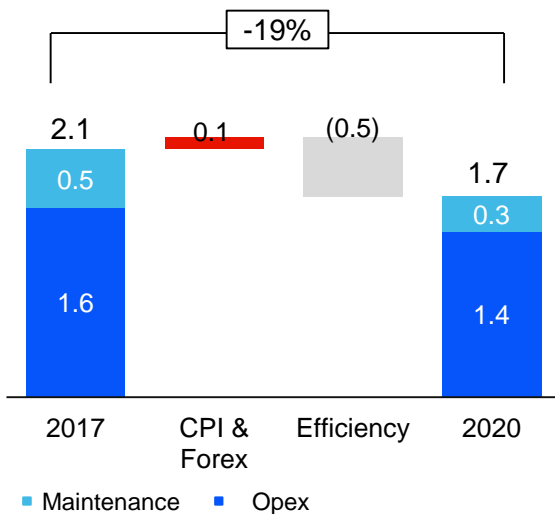
1. Excluding nuclear

# Capital Markets Day – Global thermal generation

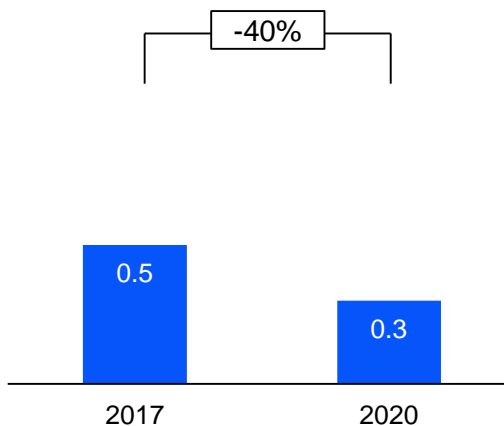
## Efficiency



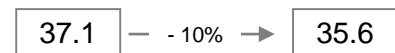
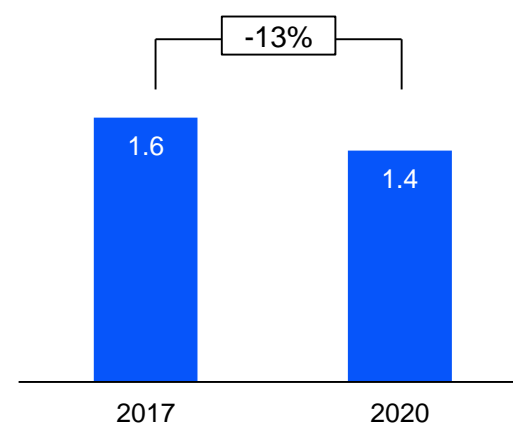
Cash cost evolution<sup>1</sup> (€bn)



Maintenance<sup>1</sup> (€bn)



Opex<sup>1</sup> (€bn)



1. In nominal terms, excluding nuclear  
 2. At 2017 real values - Net marginal assets and non recurrent items

# Capital Markets Day – Global thermal generation

## Capacity strategy



### Key levers

Spending allocation based on plant profitability

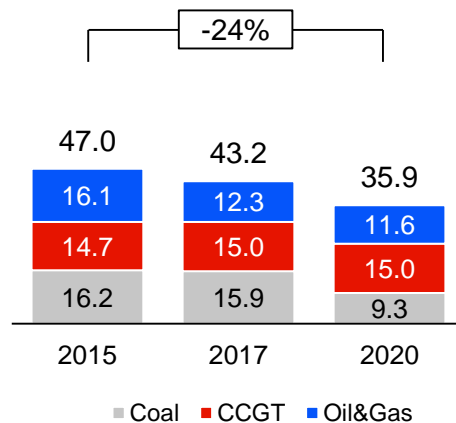
Portfolio optimization, leveraging on strategic positioning

Progressive coal phase out

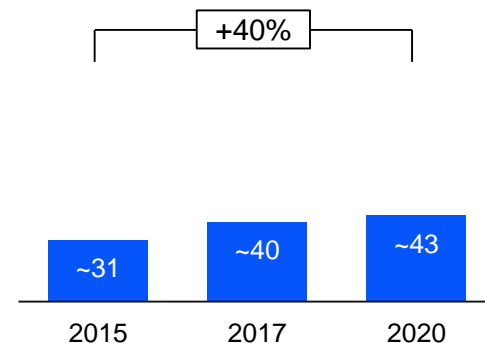
Clear path to decarbonization



### Installed capacity<sup>1</sup> (GW)



### EBITDA per MW<sup>2</sup> (k€/MW)



Ongoing installed capacity optimization

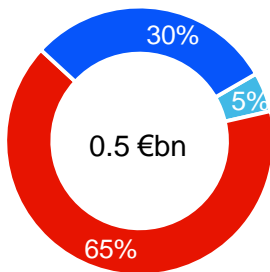
1. Excluding nuclear  
2. Excluding Italian marginal assets effects

# Capital Markets Day – Global thermal generation

Capacity strategy: focus on coal

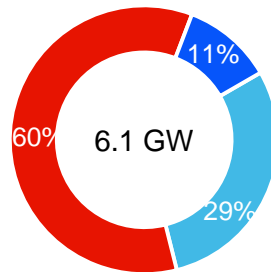


2018-20 environmental capex



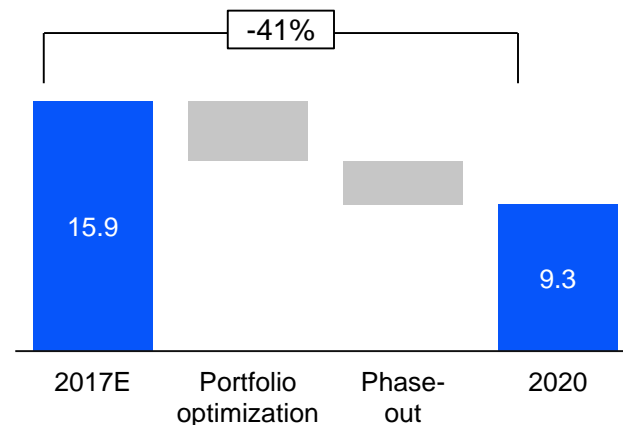
■ Italy ■ Iberia ■ South America

Capacity covered by environmental upgrade<sup>1</sup>



■ Italy ■ Iberia ■ South America

Coal fleet evolution (GW)



Relevant role in the Group mix decarbonization

<sup>1</sup>On the total thermal capacity

# Capital Markets Day – Global thermal generation

## Environmental performance



New challenges @2020

**CO<sub>2</sub>**

Base year 2007



**Thermal Gen.**



**NO<sub>x</sub>**

Base year 2010



**SO<sub>2</sub>**

Base year 2010



**Particulates**

Base year 2010



Worldwide deployment of best environmental practices

Emissions' levels improvement through environmental investments

Phasing out of 6.5 GW of coal plants by 2020

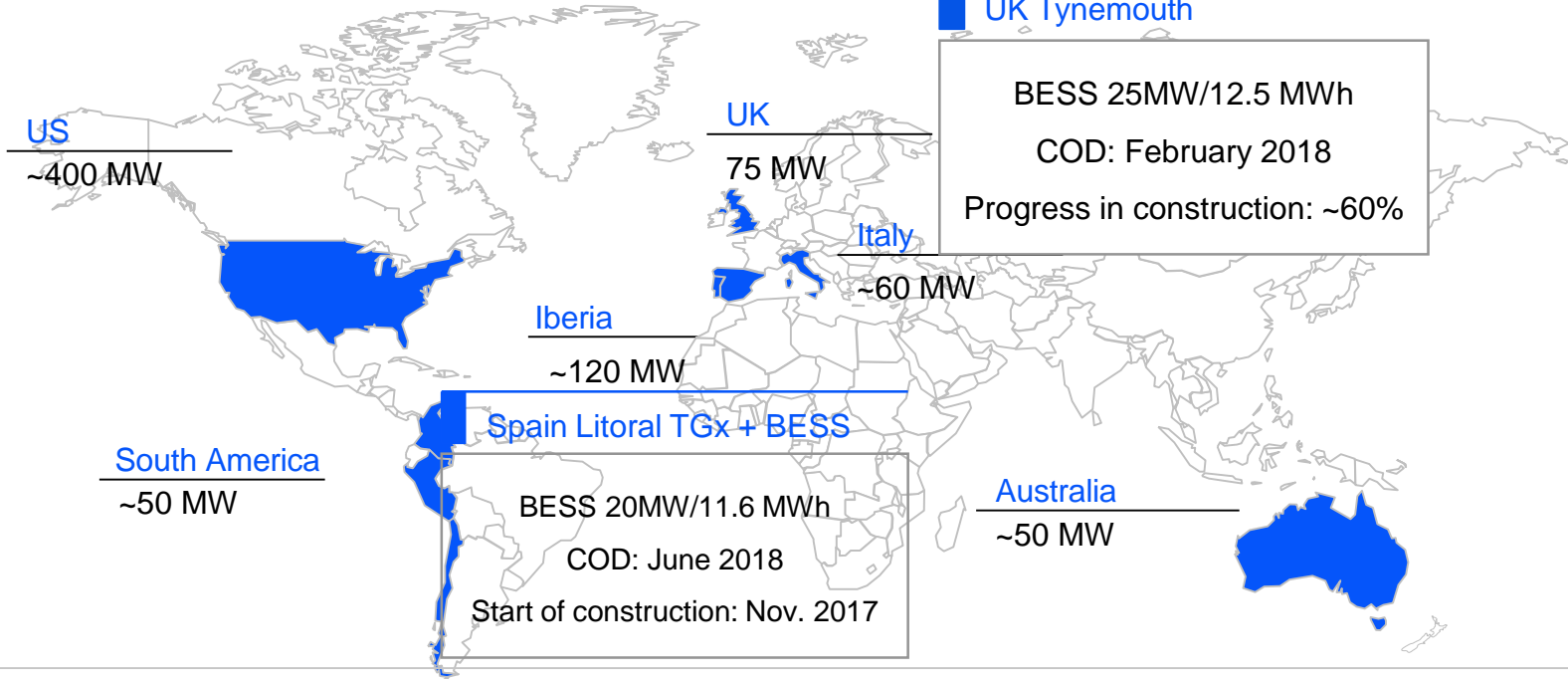
Relevant contribution to group commitments

**Environmental footprint improvement as a driver for the industrial strategy**

# Capital Markets Day – Global thermal generation



Energy storage development: utility scale BESS<sup>1</sup>



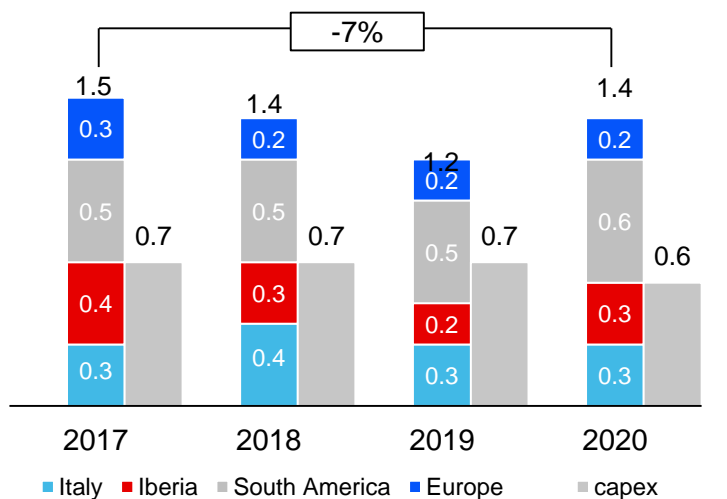
>750 MW of projects under development, 350 MW by 2020

# Capital Markets Day – Global thermal generation

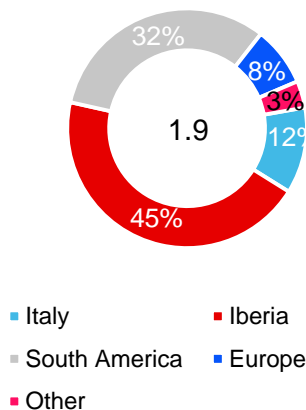
## Financial targets<sup>1</sup>



EBITDA<sup>2</sup> by geography and capex 2017-20 (€bn)



Capex by geography 2018-20 (€bn)



Key trends

Resilience to worsening scenario

Decommissioning program in Italy reduces spending

Investment focalized in environmental improvement and selective growth

Margins sustained by increasing asset availability, digitalization and new business model (BESS)

**All investments sustained by internal profitability**

1. Excluding nuclear and trading  
2. Excluding gas Swap in Italy



# Capital Markets Day

Global Trading

Claudio Machetti





# Capital Markets Day – Global trading

Integrated model fit for digitalized, low carbon world



Global portfolio optimization  
Integrated margin management

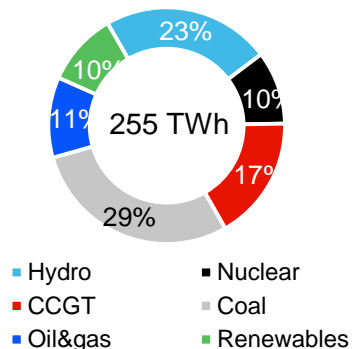
Diversified global portfolio evolution leading to integrated margin optimization

# Capital Markets Day – Global trading

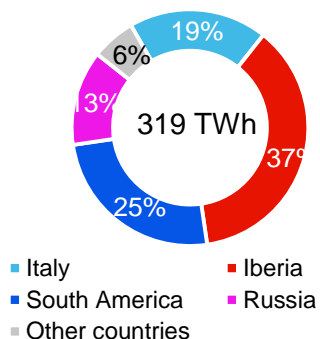
## Positioning and 2017 key figures



Net production by technology



Net power sales by destination

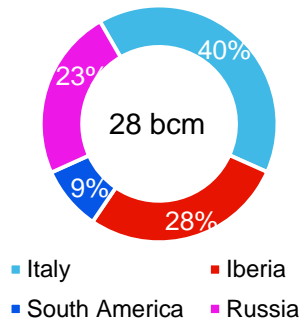


Key figures

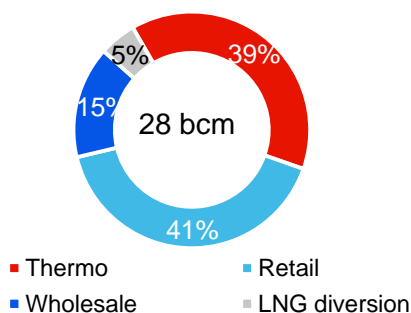
2017

Net power sales (TWh)	319
Net production (TWh)	255
Power purchased (TWh)	64
Coal purchased (Mt)	37
Gas purchased (bcm)	28

Gas purchased by destination



Gas purchased by final use



Key financials (€bn)

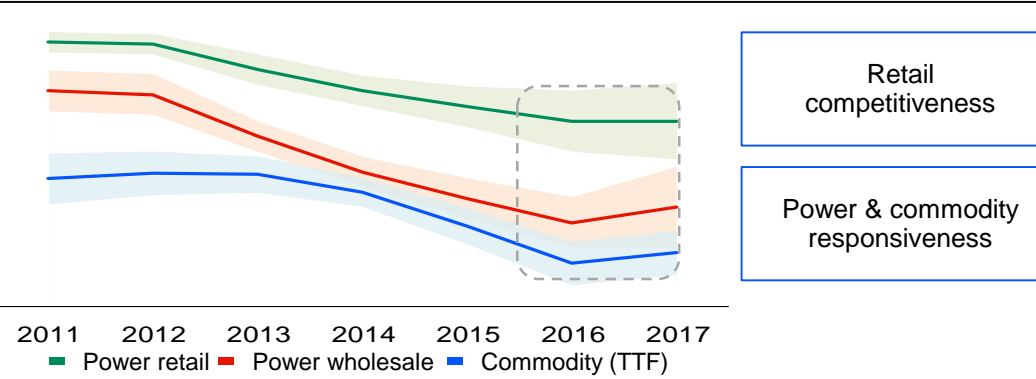
Gross margin	12.3
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# Capital Markets Day – Global trading

## Role of energy management



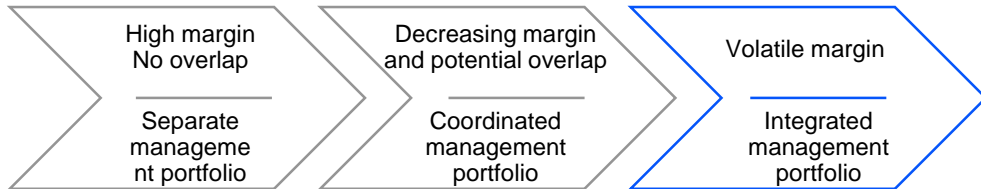
Energy management vs competitive landscape (€/MWh)



Digitalization as a strategic enabler of continuous improvement and more sophisticated approaches

Centralization and integration of activities as a key strategic driver of portfolio management

Continuous re-thinking and improvement of gas & power portfolio management



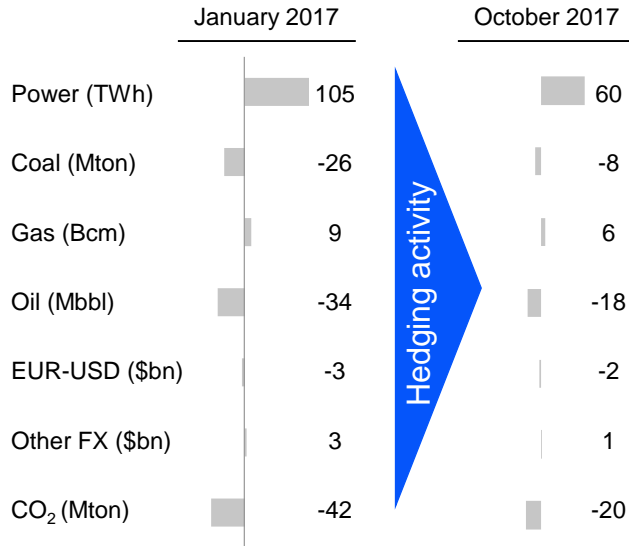
**Full integration of conventional generation, renewables and retail gas & power portfolios**

# Capital Markets Day – Global trading

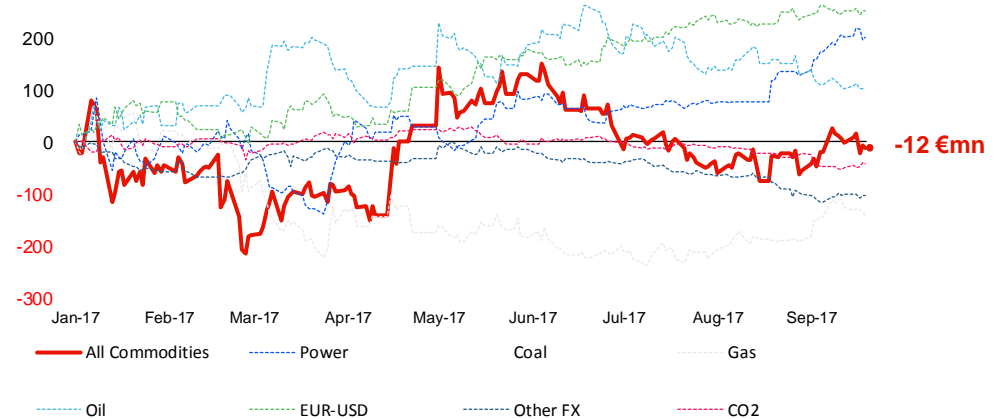
The group's resilience to the volatility of commodity prices



Global exposure year 2018



Commodity price volatility generates significant margin variation



Impact on the overall margin is reduced thanks to combined hedging strategies of individual exposures

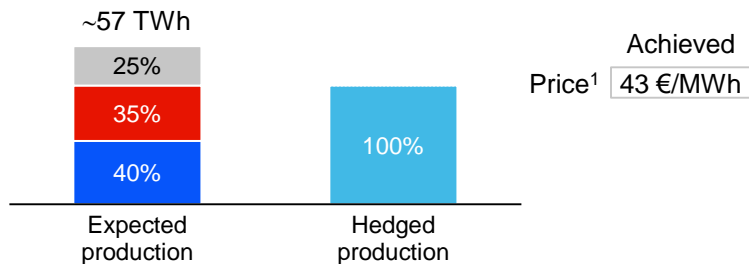
Hedging activities aimed at reducing exposures by maintaining a balanced portfolio

# Capital Markets Day – Global trading

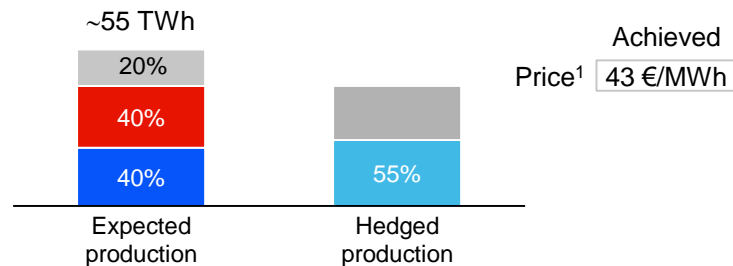
## Forward sales Italy and Spain



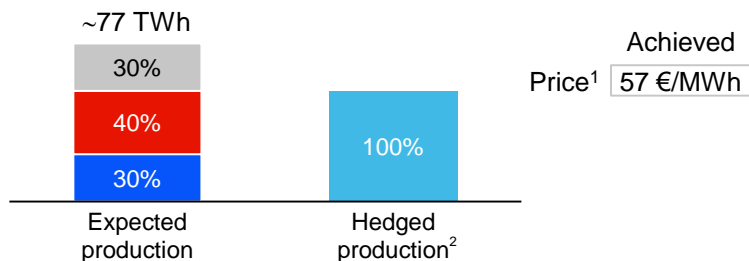
### Italy 2017



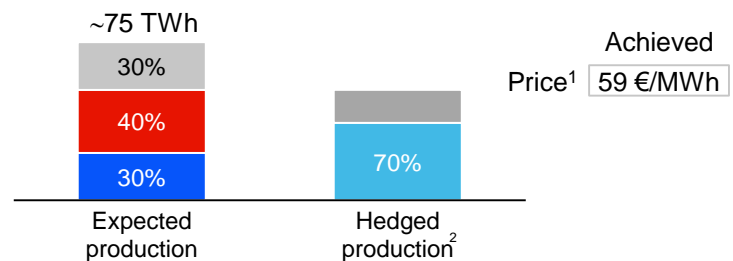
### Italy 2018



### Spain 2017



### Spain 2018



■ Spread driven ■ Price driven ■ Regulated / quasi regulated

■ Spread driven ■ Price driven ■ Regulated / quasi regulated

1. Average hedged price. Wholesale price for Italy, Retail price for Spain

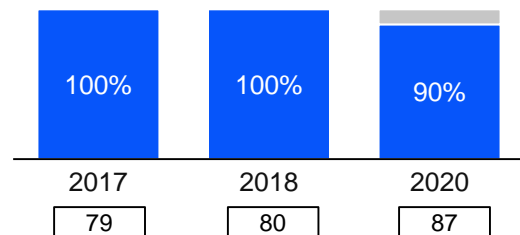
2. Including only mainland production

# Capital Markets Day – Global trading

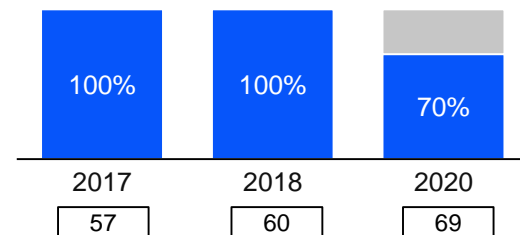
## Forward sales South America



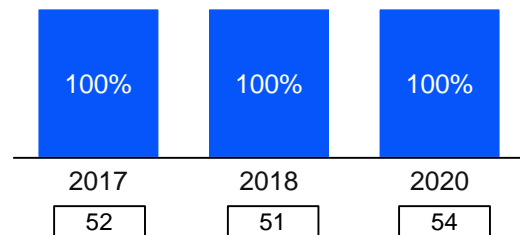
### Chile



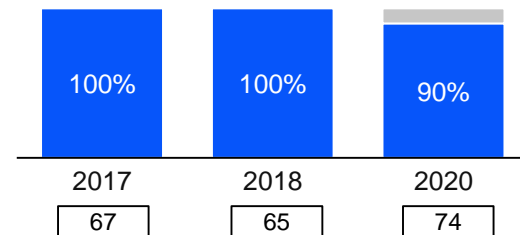
### Colombia



### Peru



### Brazil



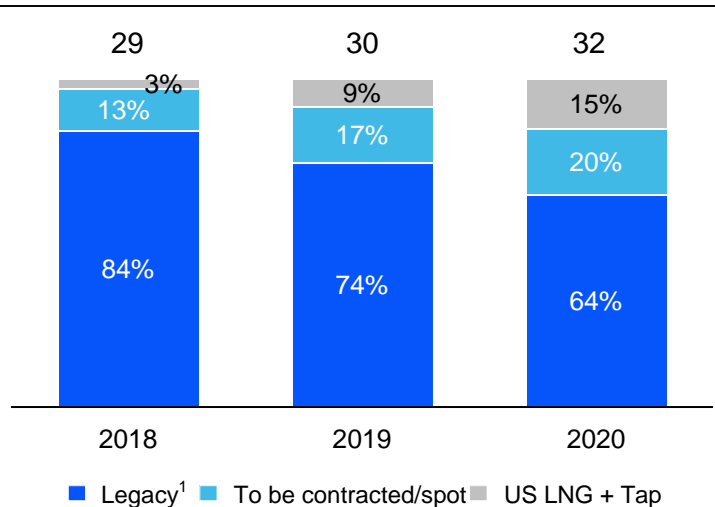
■ Hedged production   ■ Unhedged production   □ - Average price (USD/MWh)

# Capital Markets Day – Global trading

## Delivery on gas contract renegotiation

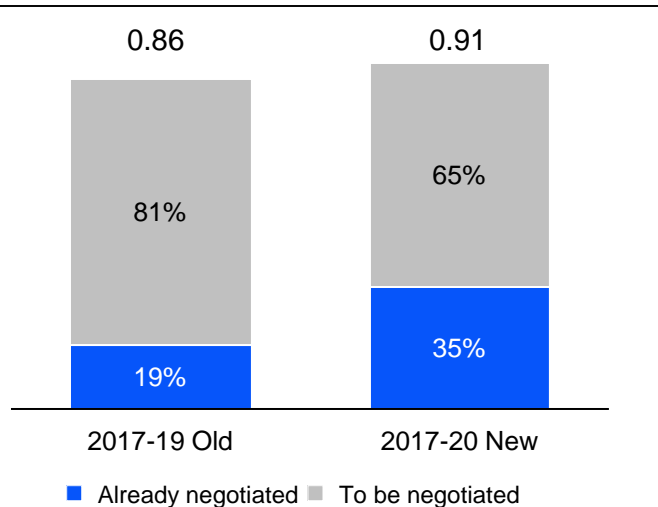


Portfolio evolution (bcm, %)



Increasing flexibility over the plan period

Price review impact (€bn)



Improved renegotiation targets and reduced execution risk

1. Mainly oil-linked take or pay contracts

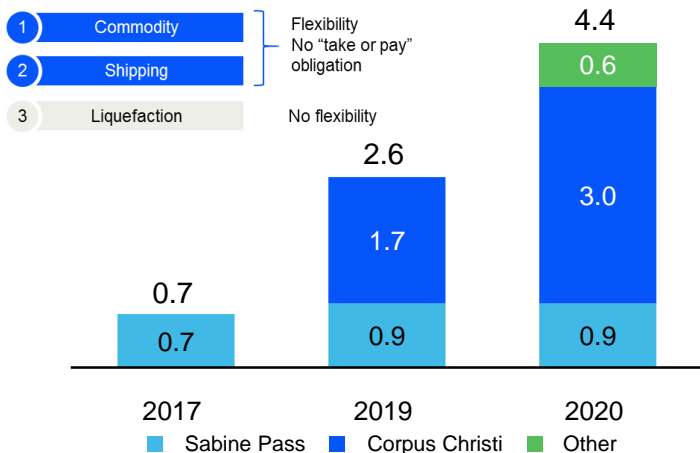
# Capital Markets Day – Global trading

## US LNG gas portfolio

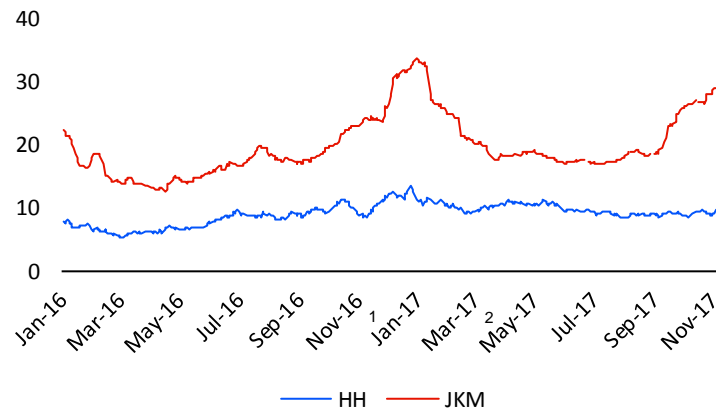


### Portfolio evolution (bcm)

Typical long term LNG contracts exposure



### LNG (€/cm)



**High price volatility enhances value of US LNG optionality**

1. Henry Hub natural gas spot price
2. Far East LNG price reference

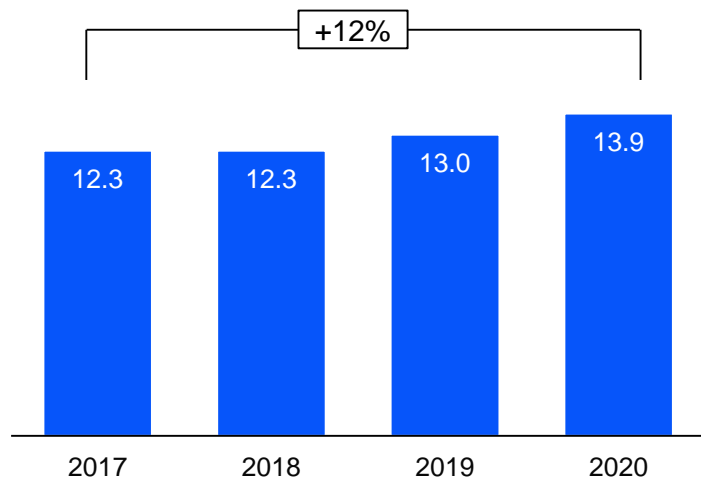


# Capital Markets Day – Global trading

## Financial targets



### Gross Margin (€bn)



### Key drivers

Generation: enhanced results mainly due to renewables growth

Gas: increasing gross margin thanks to price review and portfolio optimization actions

Power Retail: positive trend in power retail activities in all regions

**Growth and portfolio optimization leading to gross margin increase**

# Capital Markets Day

Closing remarks



Delivered on all targets

Continued excellent execution in strategic pillars

Well positioned for digitalized, low carbon world

Operating model driving long term shared value for all our stakeholders

Increasing our financial targets, with dividend floor reflecting confidence



# Capital Markets Day

Annexes





# Capital Markets Day

2018-20 strategic plan

Key financials

Annexes

# Capital Markets Day - annexes

Assumptions: Commodities, prices, macroeconomics and FX



Scenario	2017		2018		2019		2020	
	New Plan	Old Plan	New Plan	Old Plan	New Plan	Old Plan	New Plan	Old Plan
Brent \$/bbl	53	48	57	52	60	55	65	-
Coal \$/ton	83	50	68	52	65	53	62	-
Gas TTF €/MWh	17	14	16	15	16	16	17	-
CO2 €/ton	6	7	6	9	8	10	9	-
Italy €/MWh	51	41	45	43	46	45	46	-
Spain €/MWh	48	43	45	46	47	50	47	-
Chile €/MWh	53	60	46	37	31	30	35	-
Colombia €/MWh	38	51	44	51	44	49	36	-
Italy GDP (%)	1.1	0.9	1.0	1.0	0.9	1.0	0.9	-
Italy electricity demand (% Change YoY)	1.1	0.8	0.5	0.7	0.7	0.7	1.0	-
Spain GDP (%)	3.0	2.1	2.3	1.9	1.9	1.8	1.8	-
Spain electricity demand (% Change YoY)	0.2	1.2	1.1	1.2	1.3	1.2	1.4	-
South America GDP <sup>1</sup> (%)	0.9	1.1	2.2	2.1	2.4	2.5	2.6	-
South America electricity demand <sup>2</sup> (% Change YoY)	0.2	3.2	2.9	3.4	2.8	3.6	3.0	-
EUR/USD	1.1	1.1	1.2	1.1	1.2	1.1	1.2	-
EUR/BRL	3.6	4.1	3.9	4.2	4.1	4.3	4.3	-
EUR/COP	3,337	3,268	3,573	3,535	3,730	3,678	3,924	-
EUR/CLP	731	734	777	718	774	704	781	-

1. Argentina, Brazil, Chile (CIS), Colombia, Peru .GDP weighted by real levels  
 2. Argentina, Brazil, Chile (CIS), Colombia, Peru. Average growth weighted by Enel's production

# Capital Markets Day - annexes

EBITDA<sup>1</sup> targets by Country and Global Business Line<sup>2</sup> (€bn)



	2017	2018	2019	2020
<b>Italy</b>	<b>6.9</b>	<b>7.0</b>	<b>7.4</b>	<b>7.8</b>
Global Thermal Generation	0.1	0.1	0.1	0.3
Global I&N	3.5	3.5	3.7	3.7
Global Renewable Energies	1.1	1.2	1.2	1.3
Retail	2.0	2.0	2.1	2.1
e-Solutions	0.0	0.0	0.1	0.1
Service & Other	0.2	0.1	0.1	0.1
<b>Iberia</b>	<b>3.4</b>	<b>3.4</b>	<b>3.5</b>	<b>3.8</b>
Global Thermal Generation	0.7	0.5	0.5	0.6
Global I&N	1.9	2.0	2.1	2.1
Global Renewable Energies	0.2	0.3	0.4	0.5
Retail	0.4	0.4	0.5	0.6
e-Solutions	0.0	0.1	0.1	0.1
Service & Other	0.1	0.1	0.0	0.0
<b>South America</b>	<b>4.0</b>	<b>4.8</b>	<b>5.3</b>	<b>5.6</b>
Global Thermal Generation	0.5	0.5	0.5	0.6
Global I&N	1.6	2.2	2.5	2.7
Global Renewable Energies	1.8	2.0	2.1	2.1
Retail	0.1	0.1	0.1	0.2
e-Solutions	0.0	0.1	0.1	0.1
Service & Other	(0.1)	(0.1)	(0.0)	(0.0)
<b>Europe &amp; North Africa</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>
<b>North &amp; Central America</b>	<b>0.8</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>
<b>Sub-Saharan Africa &amp; Asia</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>Other</b>	<b>(0.3)</b>	<b>(0.0)</b>	<b>(0.2)</b>	<b>(0.1)</b>
<b>Total</b>	<b>15.5</b>	<b>16.2</b>	<b>17.2</b>	<b>18.2</b>

1. Rounding figures

2. Global Thermal Generation includes nuclear and trading

# Capital Markets Day - annexes

EBITDA<sup>1</sup> targets new vs old perimeter (€bn)



	Global Renewables Energies											
	2017			2018			2019			2020		
	EGP <sup>2</sup>	Large Hydro	Global Renewable Energies	EGP <sup>2</sup>	Large Hydro	Global Renewable Energies	EGP <sup>2</sup>	Large Hydro	Global Renewable Energies	EGP <sup>2</sup>	Large Hydro	Global Renewable Energies
Italy	0.6	0.6	1.1	0.5	0.7	1.2	0.5	0.7	1.2	0.6	0.7	1.3
Iberia	0.2	0.1	0.2	0.2	0.1	0.3	0.2	0.2	0.4	0.3	0.2	0.5
South America	0.3	1.5	1.8	0.6	1.4	2.0	0.6	1.5	2.1	0.6	1.5	2.1
Europe & North Africa	0.1	-	0.1	0.1	-	0.1	0.1	-	0.1	0.1	-	0.1
North & Central America	0.8	-	0.8	0.6	-	0.6	0.6	-	0.6	0.5	-	0.5
Sub-Saharan Africa & Asia	0.0	-	0.1	0.1	-	0.1	0.1	-	0.1	0.1	-	0.1
Other	(0.1)	-	(0.1)	(0.1)	-	(0.1)	(0.1)	-	(0.1)	(0.1)	-	(0.1)
<b>Total</b>	<b>2.0</b>	<b>2.2</b>	<b>4.1</b>	<b>2.0</b>	<b>2.2</b>	<b>4.2</b>	<b>2.1</b>	<b>2.3</b>	<b>4.4</b>	<b>2.2</b>	<b>2.4</b>	<b>4.6</b>

	Global Thermal Generation											
	2017			2018			2019			2020		
	Global Thermal Generation	Large Hydro	Global Generation <sup>3</sup>	Global Thermal Generation	Large Hydro	Global Generation <sup>3</sup>	Global Thermal Generation	Large Hydro	Global Generation <sup>3</sup>	Global Thermal Generation	Large Hydro	Global Generation <sup>3</sup>
Italy	0.1	0.6	0.7	0.1	0.7	0.7	0.1	0.7	0.8	0.3	0.7	1.0
Iberia	0.7	0.1	0.9	0.5	0.1	0.7	0.5	0.2	0.7	0.6	0.2	0.8
South America	0.5	1.5	2.0	0.5	1.4	1.9	0.5	1.5	2.0	0.6	1.5	2.1
Europe & North Africa	0.3	-	0.4	0.2	-	0.2	0.2	-	0.2	0.2	-	0.2
North & Central America	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Saharan Africa & Asia	-	-	-	-	-	-	-	-	-	-	-	-
Other	(0.0)	-	(0.0)	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1.5</b>	<b>2.2</b>	<b>3.9</b>	<b>1.3</b>	<b>2.2</b>	<b>3.5</b>	<b>1.3</b>	<b>2.3</b>	<b>3.6</b>	<b>1.6</b>	<b>2.4</b>	<b>4.0</b>

1. Reconciliation, rounding figures. Global Thermal Generation and Global Generation include nuclear and trading

2. Renewables old organizational structure

3. Global Generation old organizational structure

# Capital Markets Day - annexes

Capex<sup>1,2</sup> plan 2017-20 (€bn)



	2017			2018			2019			2020		
	Growth	Maintenance	Connections	Growth	Maintenance	Connections	Growth	Maintenance	Connections	Growth	Maintenance	Connections
<b>Italy</b>	<b>0.6</b>	<b>0.9</b>	<b>0.4</b>	<b>1.2</b>	<b>0.8</b>	<b>0.4</b>	<b>1.1</b>	<b>0.8</b>	<b>0.5</b>	<b>0.9</b>	<b>0.7</b>	<b>0.5</b>
Global Thermal Generation	0.1	0.1	-	0.0	0.1	-	0.0	0.1	-	0.0	0.0	-
Global I&N	0.4	0.5	0.4	0.8	0.5	0.4	0.7	0.5	0.5	0.7	0.4	0.5
Global Renewable Energies	0.1	0.1	-	0.1	0.1	-	0.1	0.1	-	0.1	0.1	-
Retail	0.0	0.1	-	-	0.1	-	-	0.1	-	-	0.1	-
e-Solutions	-	-	-	0.1	-	-	0.1	-	-	0.1	-	-
Service & Other	0.0	0.0	-	0.1	0.0	-	0.1	0.0	-	0.0	0.0	-
<b>Iberia</b>	<b>0.3</b>	<b>0.6</b>	<b>0.2</b>	<b>0.6</b>	<b>0.7</b>	<b>0.2</b>	<b>1.1</b>	<b>0.6</b>	<b>0.2</b>	<b>0.6</b>	<b>0.5</b>	<b>0.2</b>
Global Thermal Generation	0.0	0.3	-	0.0	0.3	-	0.1	0.3	-	0.2	0.2	-
Global I&N	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.3	0.2	0.2
Global Renewable Energies	0.0	0.1	-	0.2	0.1	-	0.6	0.1	-	0.1	0.1	-
Retail	0.0	0.0	-	-	0.0	-	-	0.0	-	-	0.1	-
e-Solutions	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-
Service & Other	0.0	0.0	-	-	0.1	-	-	0.0	-	-	0.0	-
<b>South America</b>	<b>1.9</b>	<b>0.8</b>	<b>0.5</b>	<b>0.9</b>	<b>0.8</b>	<b>0.4</b>	<b>0.8</b>	<b>0.7</b>	<b>0.4</b>	<b>1.0</b>	<b>0.6</b>	<b>0.4</b>
Global Thermal Generation	0.1	0.2	-	0.1	0.2	-	0.0	0.2	-	0.0	0.1	-
Global I&N	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4
Global Renewable Energies	1.3	0.1	-	0.3	0.1	-	0.3	0.1	-	0.6	0.1	-
Retail	-	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-
e-Solutions	0.0	0.0	-	0.1	0.0	-	0.1	0.0	-	0.1	0.0	-
Service & Other	0.0	0.0	-	0.0	0.0	-	-	0.0	-	-	0.0	-
<b>Europe &amp; North Africa</b>	<b>0.1</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.3</b>	<b>0.1</b>	<b>0.0</b>	<b>0.3</b>	<b>0.1</b>	<b>0.0</b>
<b>North &amp; Central America</b>	<b>1.8</b>	<b>0.0</b>	<b>-</b>	<b>1.3</b>	<b>0.0</b>	<b>-</b>	<b>2.0</b>	<b>0.0</b>	<b>-</b>	<b>2.1</b>	<b>0.0</b>	<b>-</b>
<b>Sub-Saharan Africa &amp; Asia</b>	<b>0.1</b>	<b>0.0</b>	<b>-</b>	<b>0.1</b>	<b>0.0</b>	<b>-</b>	<b>0.1</b>	<b>0.0</b>	<b>-</b>	<b>0.1</b>	<b>0.0</b>	<b>-</b>
<b>Other</b>	<b>0.0</b>	<b>0.0</b>	<b>-</b>	<b>0.1</b>	<b>0.0</b>	<b>-</b>	<b>0.0</b>	<b>-</b>	<b>-</b>	<b>0.0</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>4.7</b>	<b>2.5</b>	<b>1.2</b>	<b>4.3</b>	<b>2.5</b>	<b>1.1</b>	<b>5.4</b>	<b>2.2</b>	<b>1.1</b>	<b>5.0</b>	<b>2.0</b>	<b>1.1</b>
<b>Total Capex</b>	<b>8.4</b>			<b>7.9</b>			<b>8.8</b>			<b>8.0</b>		

1. Rounding figures

2. Global Thermal Generation includes nuclear and trading



# Capital Markets Day - annexes

## Industrial growth: main drivers and projects



	Infrastructure & Networks	Renewable Energies	Thermal generation	e-Solutions
Italy	2.3 €bn capex +16 mn digital meters 2.0 Stable RAB	0.3 €bn capex COD > 2020	0.1 €bn capex Storage	+0.3 €bn capex >+0.1 €bn EBITDA
Iberia	0.9 €bn capex + 1.2 mn digital meters RAB increase by 5%	0.9 €bn capex +1 GW	0.4 €bn capex Refurbishment projects in the islands and storage	0.1 €bn capex <+0.1 €bn EBITDA
South America	1.2 €bn capex RAB increase by 26% +1.4 mn customers	1.2 €bn capex +0.6 GW <sup>1</sup>	0.1 €bn capex Storage and environmental refurbishment	0.3 €bn capex >+0.1 €bn EBITDA
North and Central America		5.2 €bn capex +1.7 GW; BSO +3.8 GW		0.1 €bn capex <+0.1 €bn EBITDA
Other Europe-Africa&Asia	0.3 €bn capex RAB increase by 8%	0.7 €bn capex +0.6 GW		
Total growth capex	4.7 €bn capex	4.9 €bn capex <sup>2</sup>	0.6 €bn capex	0.8 €bn capex

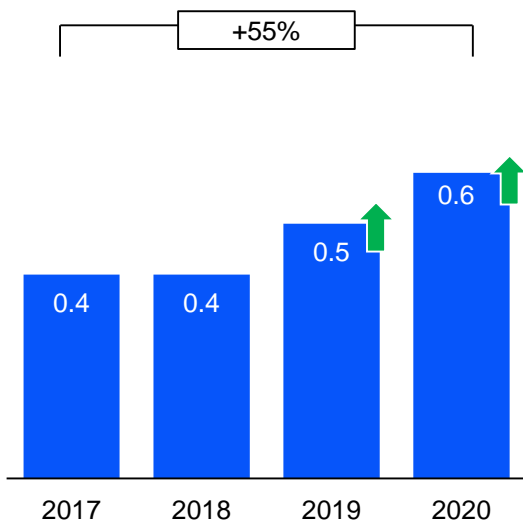
1. Excluding 380 MW hydro Volta Grande in Brazil
2. Excluding BSO for 3.4

# Capital Markets Day - annexes

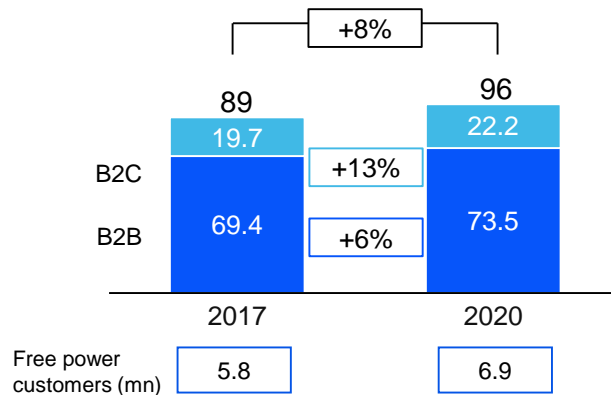
Customer focus: retail in Iberia



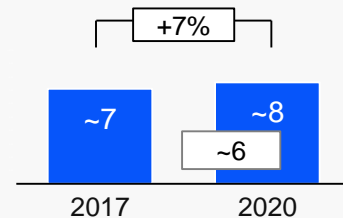
EBITDA (€bn)



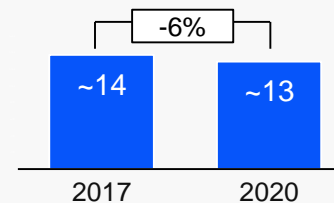
Free power market (TWh)



Power unitary margin in free market (€/MWh)



Cost-to-serve (€/customer)



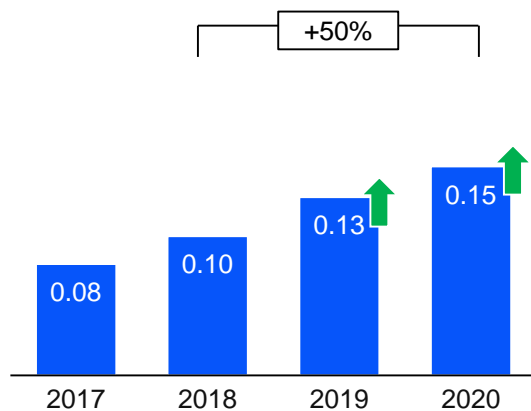
- Old plan

# Capital Markets Day - annexes

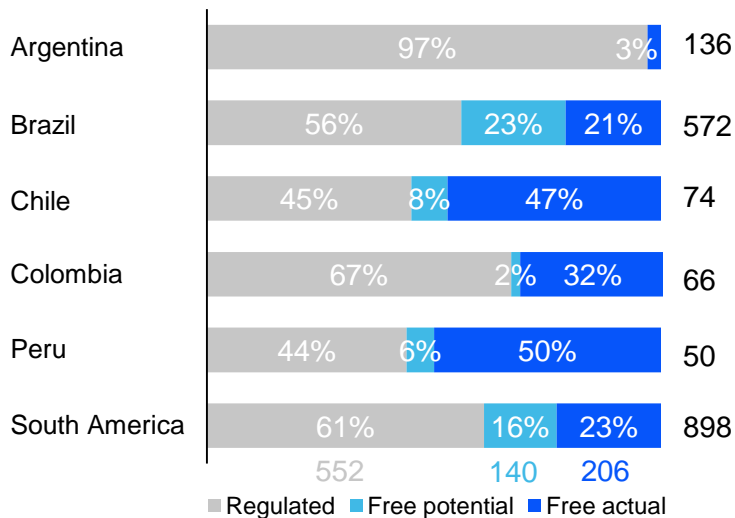
Customer focus: retail in South America



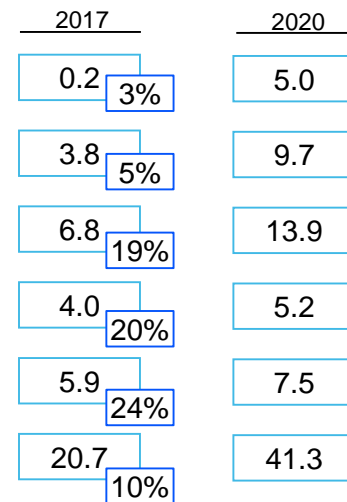
EBITDA (€bn)



2017 Total free market sales (TWh)



Enel Free energy sold (TWh)



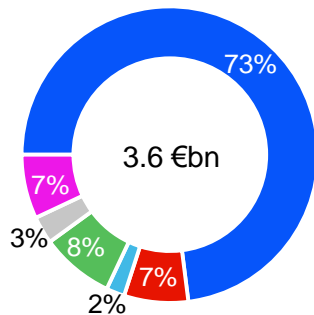
- Market share

# Capital Markets Day - annexes

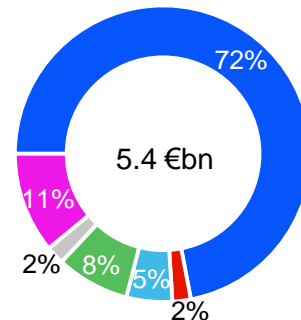
Group net income by currency



2017



2020

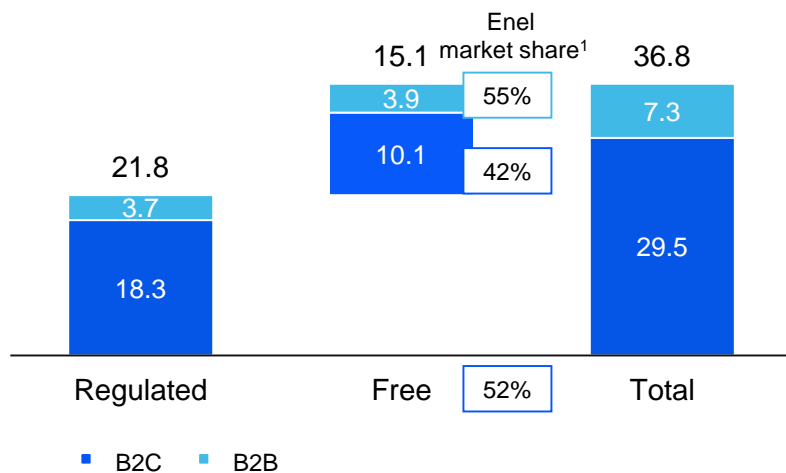


# Capital Markets Day - annexes

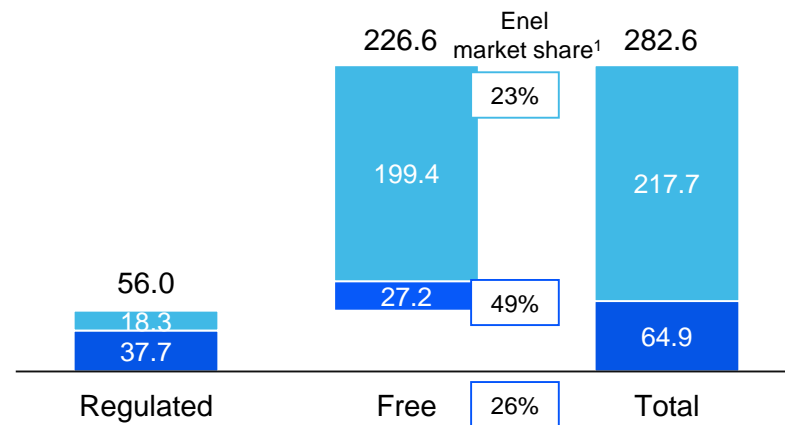
## Retail: Italian power market



Customers (mn)



Energy sold (TWh)



1. Enel estimate based on 2017 figures from AEEGSI, Terna



# Capital Markets Day

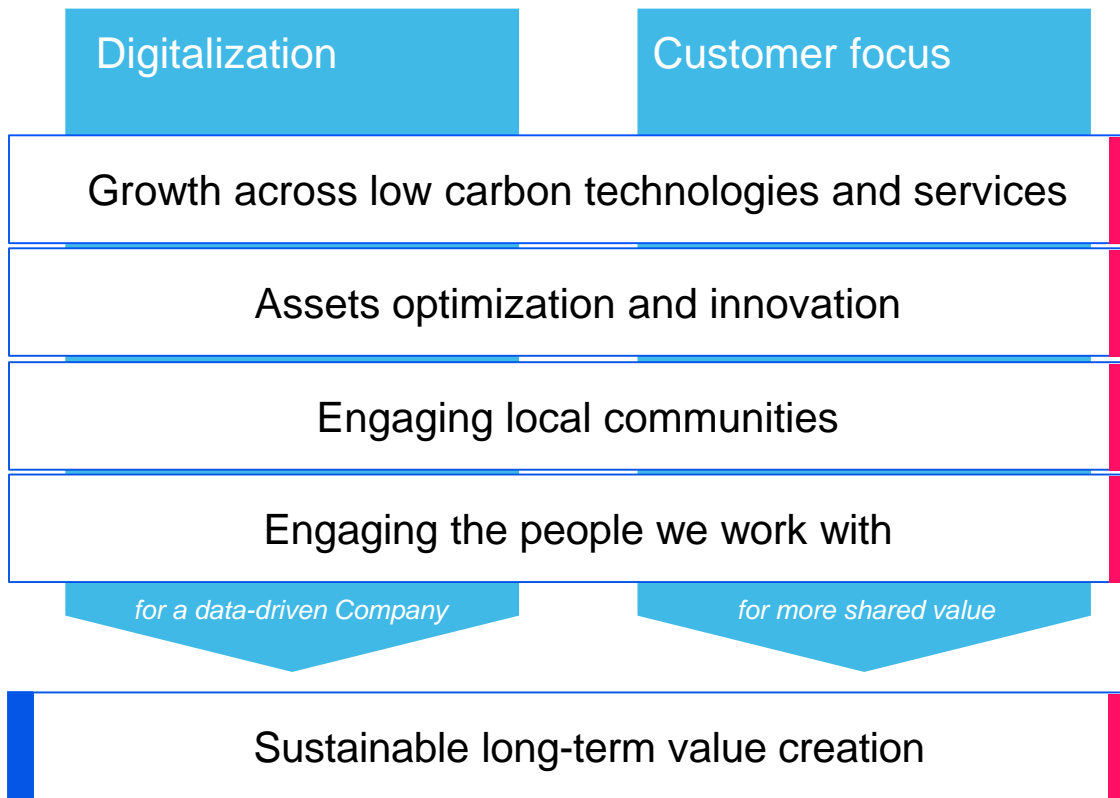
2018-20 strategic plan

Key ESG

Annexes

# Capital Markets Day - ESG annexes

ESG strategic pillars



# Capital Markets Day - ESG annexes

Enel's plan pillars and backbones: cross-reference with SDGs



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
<b>Pillars</b>	Growth across low carbon technologies & services						●		●		●		enel					●
	Assets optimization and Innovation						●		●									●
	Engaging local communities	●	●	●	enel	●		enel	enel	●	●							●
	Engaging the people we work with			●	●	●			●									●
<b>Enablers</b>	Customer focus						●		●		●							
	Digitalization								●		●	●						
<b>Backbones</b>	Occupational Health & Safety			●														
	Sound governance																●	●
	Environmental sustainability						●						●	●	●	●		
	Sustainable supply chain												●					
	Economic and financial value creation								●	●								



# Capital Markets Day - ESG annexes

Growth across low carbon technologies and services



## Plan actions

Electrification, storage & demand response

Development of renewable capacity and reduction of thermal capacity

Implementation of environmental international best practices to selected coal plants

Specific CO<sub>2</sub> emissions reduction

Promote actions in line with UN 'Making cities resilient' campaign

## Related targets/commitments

+0.6 GW storage capacity

+5 GW demand response

+7.8 GW renewable capacity<sup>1</sup>  
-7.3 GW thermal capacity

~500 €mn investment

< 350 gCO<sub>2</sub> /KWheq (-25% base year 2007)

300 cities

1. Including managed capacity

# Capital Markets Day - ESG annexes


## Assets optimization and innovation



### Plan actions

- Large scale infrastructure innovation mostly in grid digitization, smart meters and charging stations
- Digitally integrated smart plants
- Foster global partnerships and 'high potential' startups to reap new technologies and ways to 'service' energy

### Related targets/commitments

- +20.4 mn smart meters installed
- 5.3 €bn digitalization capex
- +300k charging stations
- Digitalization of 31 GW of thermal capacity
- Selection of 50 new innovative startups 
- Opening of at least 3 new Innovation hubs NEW

# Capital Markets Day - ESG annexes

## Engaging local communities



### Plan actions

- High-quality, inclusive and fair education
- Access to affordable and clean energy mainly in Africa, Asia and Latin America
- Employment and sustainable and inclusive economic growth

### Related targets/commitments



1. 2015-20 cumulated target

# Capital Markets Day - ESG annexes

Engaging the people we work with



## Plan actions

- Appraise performance of people we work with<sup>1</sup>
- Survey corporate climate with a focus on safety
- Global implementation of the diversity and inclusion policy
- Enable digital skills diffusion among people we work with
- Promote a 'safe travels' culture
- Ongoing improvement of supply chain safety standards through checking on-site

## Related targets/commitments

- 100% of people<sup>1</sup> involved  
99% of people<sup>1</sup> appraised  
95% of people<sup>1</sup> interviewed (feedback) ↑
- 100% of people<sup>1</sup> involved  
86% of people<sup>1</sup> participating ↑
- Recruiting should ensure equal gender splitting of the candidates accessing selection (c. 50%)
- NEW** 100% of people involved in digital skills training
- 100% of international and intercontinental travels authorized and monitored by integrated Travel Security Process
- 120 planned Extra Checking on Site (ECoS)

1. Eligible and reachable people having worked in the Group for at least 3 months in the Group

# Capital Markets Day - ESG annexes

## Environmental sustainability



### Plan actions

### Related targets/commitments

Reduction of SO<sub>2</sub> specific emissions

-30% (vs 2010)

Reduction of NO<sub>x</sub> specific emissions

-30% (vs 2010)

Reduction of particulates specific emissions

-70% (vs 2010)

Reduction of water specific consumption

-30% (vs 2010)

Reduction of waste produced

-20% (vs 2015)

# Capital Markets Day - ESG annexes

## Digitalization and related risks: cyber security framework



### Plan actions

Single strategy approach based on business risk management

Business lines involved in key processes: risk assessment, response and recovery criteria definition and prioritization of actions

Integrated information systems (IT), industrial systems (OT) and Internet of Things (IoT) assessment and management

'Cyber security by design' to define and spread secure system development standards

### Related targets/commitments

100% of internet web applications protected through advanced cyber security solutions

Setting up of Enel's CERT<sup>1</sup>, acknowledgement by CERTs<sup>1</sup> of 8 main countries of presence and affiliation with international organizations<sup>2</sup>

15 cyber security knowledge sharing events per year on average

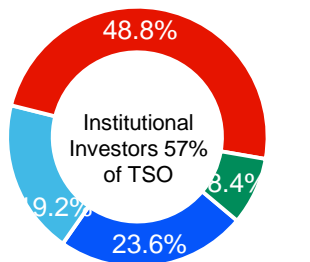
1. Computer Emergency Response Team  
2. First and Trust introducer

# Capital Markets Day - ESG annexes

## Shareholders structure

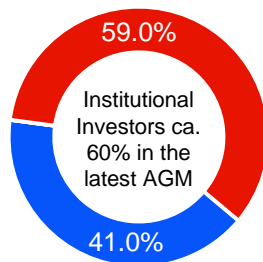


### Current shareholder's structure<sup>1</sup>



- MEF
- Retail
- Other Institutional Investors
- SRI Investors

### 2017 Annual General Meeting: Quorum



- MEF
- Retail
- Institutional Investors

### Corporate Governance in a nutshell

Institutional investors account for 57% on Enel's TSO and 60% in the latest Enel's AGM

No special power to Italian Government: the clause that assigned to the Italian Government certain special powers ceased to be effective and was deleted in 2014

No anti-takeover measures: ownership ceiling set at 3% of share capital but it will lapse in case of a takeover bid following which the bidder holds at least 75% of the capital

3/10 of BoDs granted to minorities: according to Enel's bylaws the first slate in terms of votes will elect 7/10 of the BoD members while 3/10 of BoDs is granted to minorities

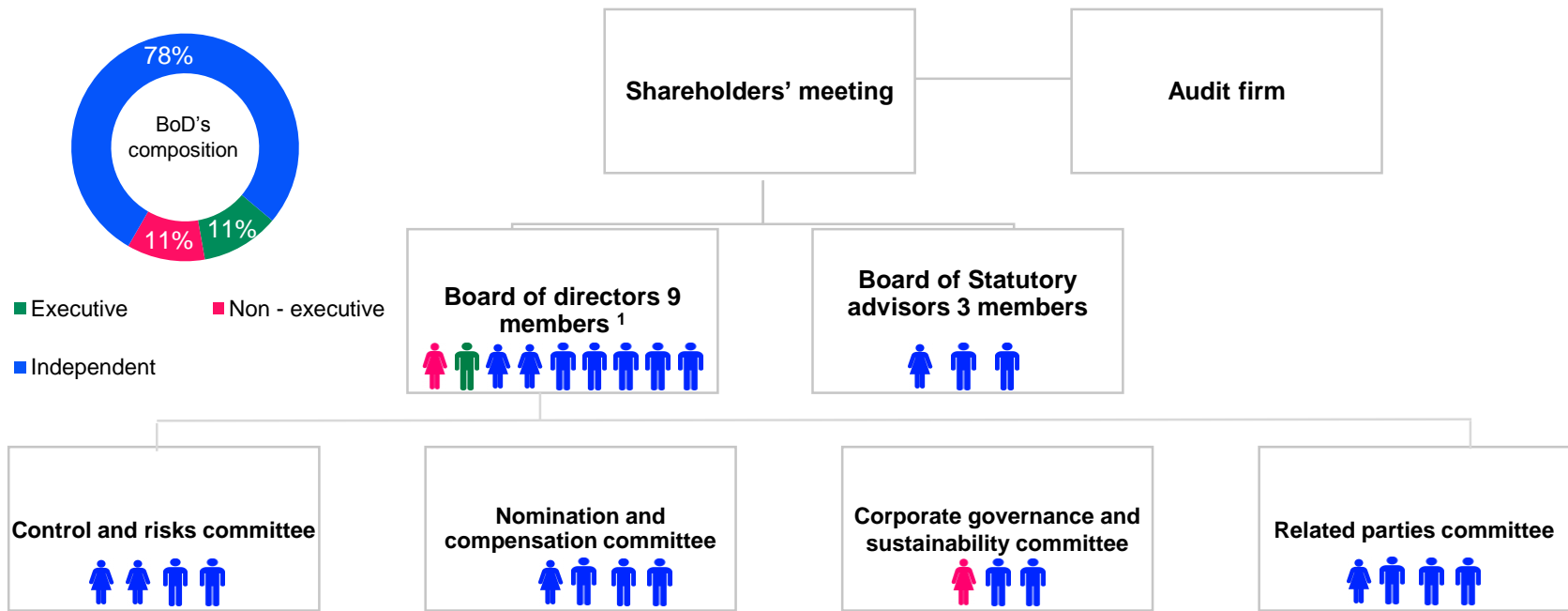
If the first slate does not have enough candidates to cover the 7/10 of the BoD, the remaining directors shall be drawn from the minority slate that obtained the next highest number of votes

**Increasing weight of institutional investors in Enel's share capital and AGM**  
**No special power granted to Italian Government**

1. Data as of end of Sept. 2017

# Capital Markets Day - ESG annexes

Focus on corporate governance structure



Well diversified BoD and Committees

The BoD and two Committees (CG&SC and RPC) are chaired by women

1. Chairperson can be considered independent in accordance with TUF criteria



# Capital Markets Day - ESG annexes

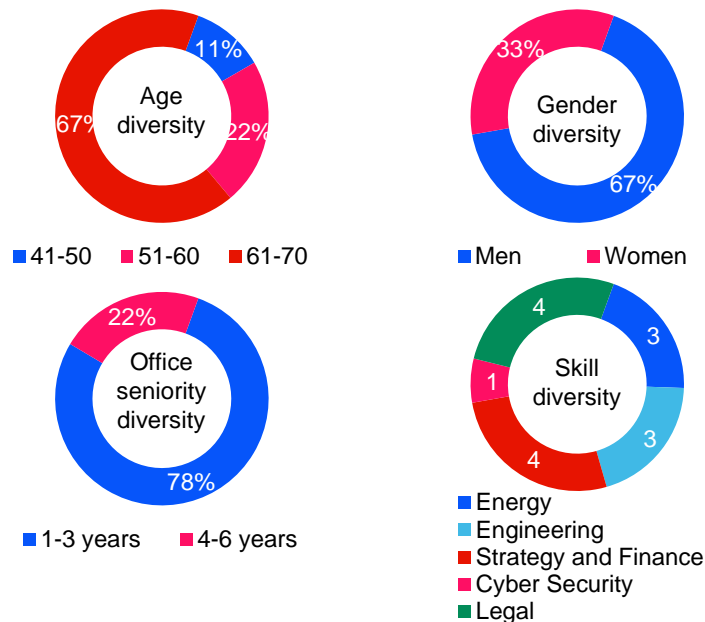
## Board composition



### BoD's members

P. Grieco		Non ex (Chairperson) CGSC
F. Starace		Executive
A. Antoniozzi		Independent CGSC RPC
C. Calari		Independent NCC RPC
A. Bianchi		Independent NCC RPC
P. Girdinio		Independent CRC NCC
A. Pera		Independent CRC NCC
A. Svelto		Independent CRC RPC
A. Taraborrelli		Independent CRC CGSC

### BoD's Diversity<sup>1</sup>



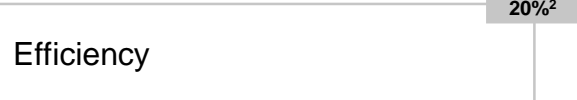
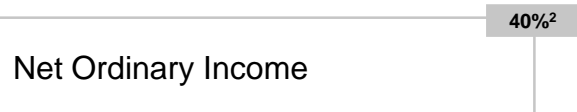
1. Data as of 16 March 2017

# Capital Markets Day - ESG annexes

Focus on remuneration policy: short-term variable remuneration



## Short-term variable remuneration<sup>1</sup>



## Related targets

- Entry point (50% premium) = 3.5 €bn
- **Target (100% premium) = 2017 Group Guidance**
- Overperformance (120% premium) = 3.7 €bn

- Entry point (50% premium) = 25%
- **Target (100% premium) = 2017 Group Guidance**
- Overperformance (120% premium) = 27%

- Entry point (50% premium) = 11.8 €bn
- **Target (100% premium) = 2017 Group Guidance**
- Overperformance (120% premium) = 11.4 €bn

- Entry point (50% premium): FI<sup>3</sup>=1.40 n. FA<sup>4</sup> <=11
- Target (100% premium): FI=1.37 n. FA <=11
- Overperformance (120% premium): FI=1.33 n. FA <=11

## Strategic Pillars involved

- Industrial growth
- Shareholder remuneration
- Group simplification & active portfolio management

- Industrial growth
- Group simplification & active portfolio management

- Operational efficiency

- Sustainability

1. Management by objectives (MBO)  
 2. (%) Weight in the variable remuneration  
 3. FI: Frequency Index  
 4. FA: Fatal Accidents in the year

# Capital Markets Day - ESG annexes

Focus on remuneration policy: long-term variable remuneration

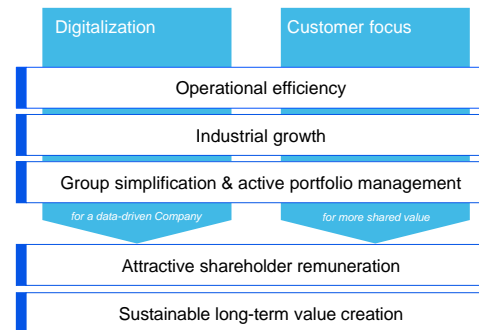


## Long-term variable remuneration<sup>1</sup>

## Related targets

## Strategic Pillars involved

<p style="text-align: right;"><b>60%<sup>2</sup></b></p> <p>Enel TSR vs Euro Stoxx Utilities index TSR</p>	<ul style="list-style-type: none"> <li>• Entry point (50% premium): Enel TSR <math>\geq</math> 90% Index TSR</li> <li>• Target (100% premium): Enel TSR <math>\geq</math> 100% Index TSR</li> <li>• Overperformance I (150% premium): Enel TSR <math>\geq</math> 110% Index TSR</li> <li>• Overperformance II (180% premium): Enel TSR <math>\geq</math> 115% Index TSR</li> </ul>
<p>Regressive scale in case of Enel's negative TSR</p>	<ul style="list-style-type: none"> <li>• <b>Greater alignment of the variable remuneration</b> with the main target of <b>creating value for shareholders</b>.</li> <li>• In case the absolute TSR of Enel is negative, the incentive (if any) is reduced of the same negative percentage of the absolute TSR of Enel's stock, multiplied for a constant value equal to 1.5.</li> </ul>
<p style="text-align: right;"><b>40%<sup>2</sup></b></p> <p>3 year cumulated ROACE</p>	<ul style="list-style-type: none"> <li>• Entry point (50% premium): Cumulated ROACE <math>\geq</math> 33.3%</li> <li>• Target (100% premium): Cumulated ROACE <math>\geq</math> 34.3%</li> <li>• Overperformance I (150% premium): Cumulated ROACE <math>\geq</math> 35.5%</li> <li>• Overperformance II (180% premium): Cumulated ROACE <math>\geq</math> 36.2%</li> </ul>
<p>5 years plan</p>	<ul style="list-style-type: none"> <li>• 3 years vesting period</li> <li>• 30% payment (if any) in the 4<sup>th</sup> year (control year)</li> <li>• 70% payment (if any) in the 5<sup>th</sup> year (deferred payment)</li> </ul>



1. Long-Term Incentive Plan (LTI)  
 2. (%) Weight in the variable remuneration  
 3. 3.FI: Frequency Index  
 4. FA: Fatal Accidents in the year



# Capital Markets Day

2018-20 strategic plan

9M 2017 results

Annexes

# 9M 2017 consolidated results

## Financial highlights (€mn)



	9M 2017	9M 2016	Δ yoy	Adjusted
Revenues	54,188	51,459	+5%	
Reported EBITDA	11,450	12,010	-5%	
<i>Ordinary EBITDA<sup>1</sup></i>	11,306	11,896	-5%	-3% <sup>4</sup>
Reported EBIT	7,217	7,689	-7%	
<i>Ordinary EBIT</i>	7,073	7,666	-8%	
Reported Group net income	2,621	2,757	-5%	
<i>Group net ordinary income</i>	2,583	2,700	-4%	+3% <sup>5</sup>
Capex <sup>2</sup>	5,547	5,504	+1%	
Net debt	37,941	37,553 <sup>3</sup>	+1%	
FFO	7,161	6,766	+6%	

1. Excludes extraordinary items for 114 €mn in 9M 2016 and for 144 €mn in 2017

2. Includes 27 €mn for capex related to asset held for sale in 9M 2017 and 287 €mn in 9M 2016

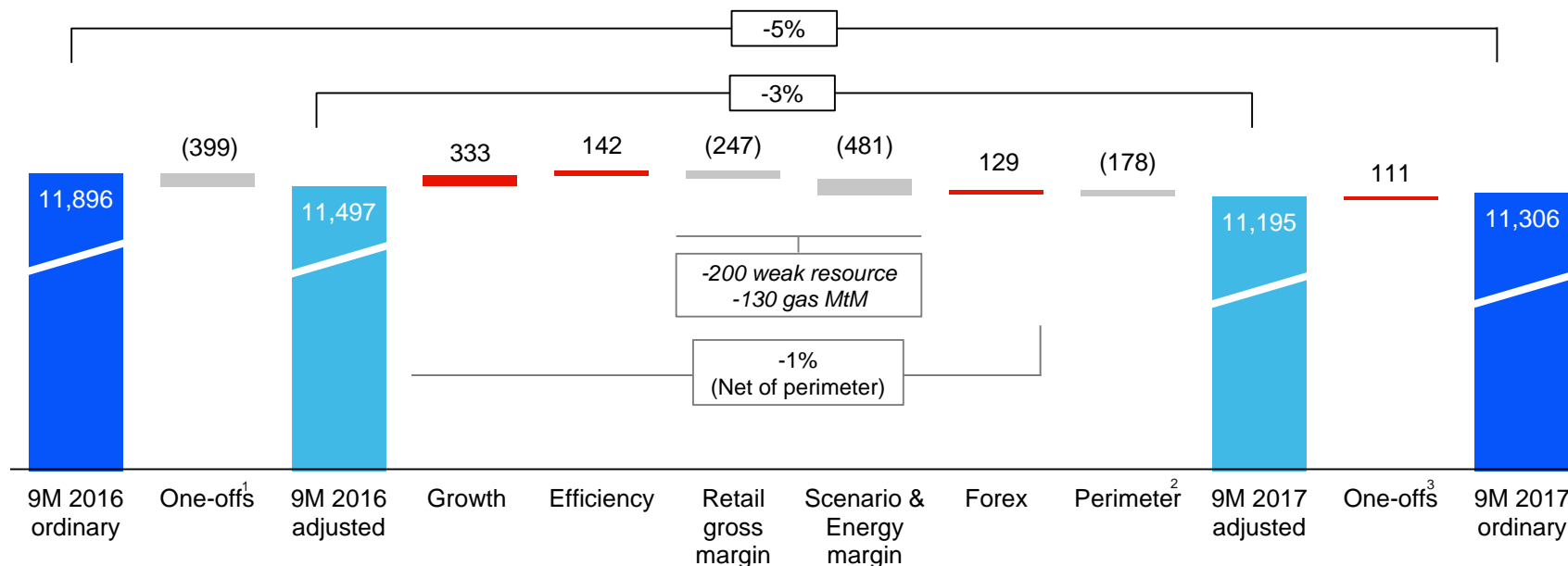
3. As of December 2016

4. Excludes +399 €mn one-offs in 9M 2016 and +111 €mn in 9M 2017

5. Excluding +269 €mn one-offs in 9M 2016 and +79 €mn in 9M 2017

# 9M 2017 consolidated results

Ordinary EBITDA evolution (€mn)



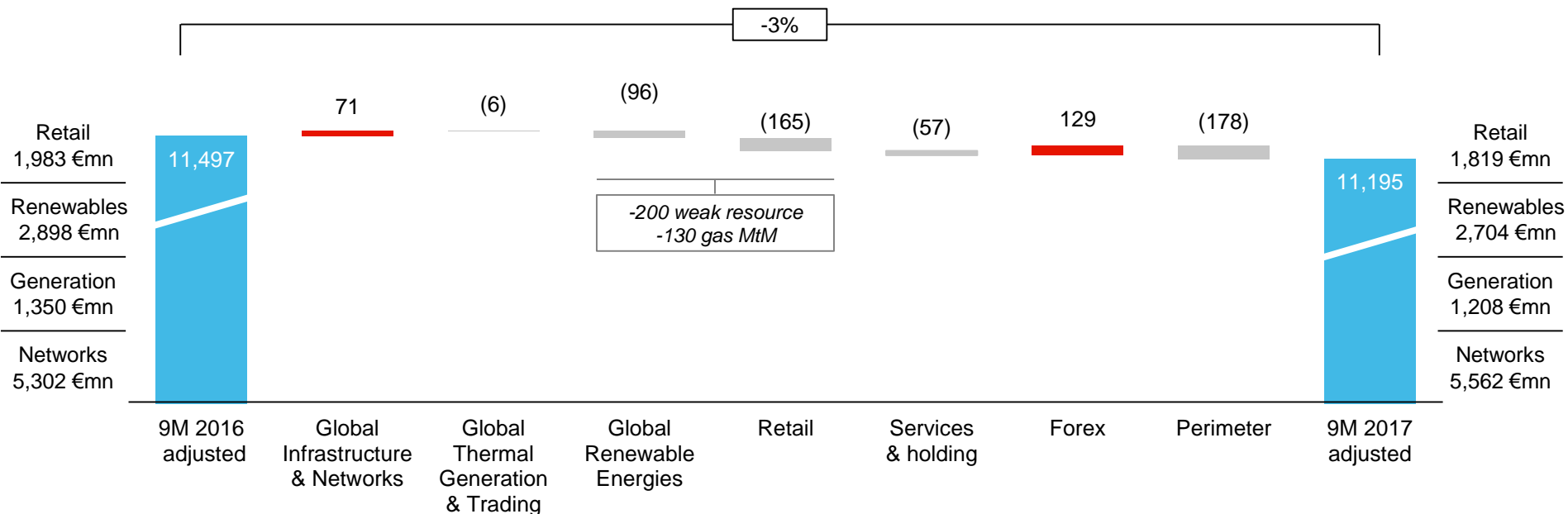
1. Includes: Gas price review in Italy +311 €mn, +78 €mn Ecotax in Iberia generation, +28 €mn provision release and +19 €mn capital gain on Compostilla RE in Iberia, -37 €mn other

2. Relates mainly to Slovenske Elektrarne and North America JV deconsolidation

3. Includes -45 €mn for personnel provisions for CELG, -38 €mn for penalties revaluation in Argentina, +52 €mn for islands settlement in Iberia and +142 €mn Bono Social in Iberia

# 9M 2017 consolidated results

Adjusted EBITDA by business (€mn)

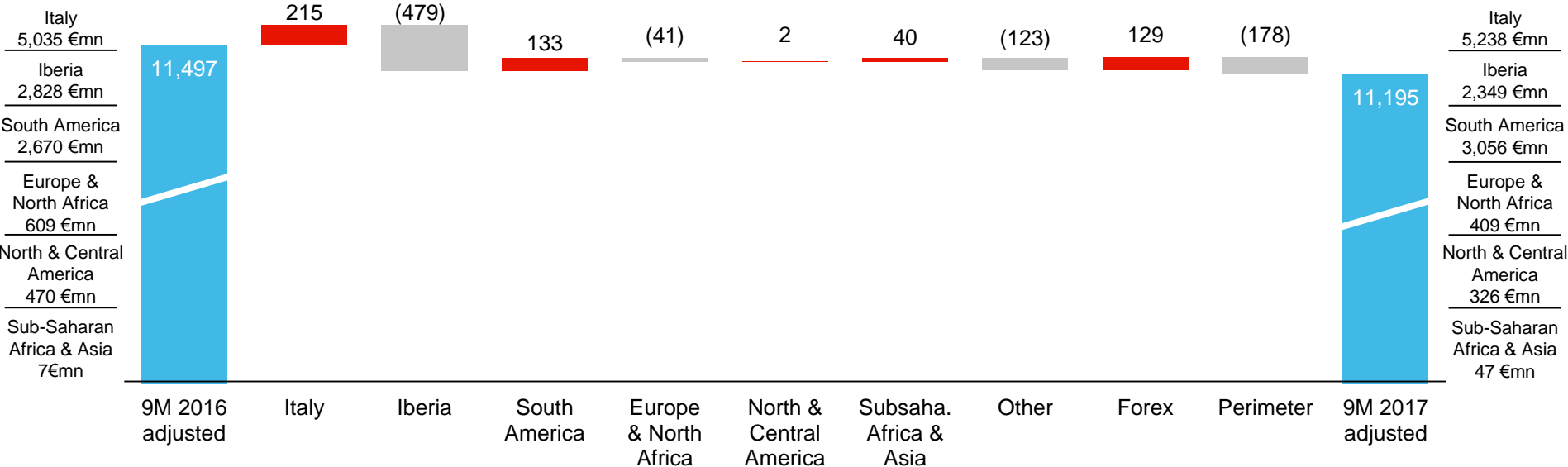


# 9M 2017 consolidated results

Adjusted EBITDA by geography (€mn)



-3%





# 9M 2017 consolidated results

Ordinary<sup>1</sup> EBITDA matrix (€mn)



	Global Generation & Trading		Global Infrastructures & Networks		Renewable Energies		Retail		Services & Other		Total	Total
	9M 2017	9M 2016	9M 2017	9M 2016	9M 2017	9M 2016	9M 2017	9M 2016	9M 2017	9M 2016	9M 2017	9M 2016
<b>Italy</b>	178	405	2,649	2,670	805	792	1,534	1,373	72	81	5,238	5,321
<b>Iberia</b>	597	668	1,389	1,393	176	308	331	592	50	9	2,543	2,970
<b>South America</b>	425	393	1,314	1,042	1,292	1,263	-	-	(58)	(76)	2,973	2,622
Argentina	76	61	171	123	24	19	-	-	-	-	271	203
Brazil	98	55	453	292	183	144	-	-	(27)	(25)	707	466
Chile	125	179	190	186	552	568	-	-	(31)	(51)	858	917
Colombia	37	30	350	296	428	421	-	-	-	1	815	747
Peru	89	68	150	145	98	105	-	-	-	-	337	318
Other	-	-	-	-	7	6	-	-	-	-	(15)	(29)
<b>Europe and North Africa</b>	202	309	136	173	116	95	(46)	31	1	1	409	609
Romania	2	4	136	173	78	55	(46)	33	1	1	171	266
Russia	200	126	-	-	-	-	-	-	-	-	200	126
Slovakia	-	191	-	-	-	-	-	-	-	-	-	191
Other <sup>2</sup>	-	(12)	-	-	38	40	-	(2)	-	-	38	26
<b>North &amp; Central America<sup>3</sup></b>	-	-	-	-	326	470	-	-	-	-	326	470
<b>Africa &amp; Asia<sup>4</sup></b>	-	-	-	-	47	7	-	-	-	-	47	7
<b>Other Countries</b>	-	(26)	(9)	-	(58)	(37)	-	-	(163)	(40)	(230)	(103)
<b>Total</b>	<b>1,402</b>	<b>1,749</b>	<b>5,479</b>	<b>5,278</b>	<b>2,704</b>	<b>2,898</b>	<b>1,819</b>	<b>1,996</b>	<b>(98)</b>	<b>(25)</b>	<b>11,306</b>	<b>11,896</b>

1. Excludes extraordinary items for +144 €mn in 2017 of Electrogas Chile capital gain and for +124 €mn in 2016 of Hydro Dolomiti capital gain

2. Includes Belgium, Greece, France, Bulgaria

3. Includes Mexico, USA, Panama, Canada, Guatemala, Costa Rica

4. Includes South Africa, India

# 9M 2017 consolidated results

Ordinary EBITDA matrix (€mn): new vs old perimeter



	Global Thermal Generation & Trading				Global Renewable Energies			
	9M 2017		9M 2016		9M 2017		9M 2016	
	Global Thermal Generation	Global Generation	Global Thermal Generation	Global Generation	Global Renewable Energies	EGP	Global Renewable Energies	EGP
<b>Italy</b>	<b>178</b>	<b>571</b>	<b>405</b>	<b>727</b>	<b>805</b>	<b>412</b>	<b>792</b>	<b>470</b>
<b>Iberia</b>	<b>597</b>	<b>660</b>	<b>668</b>	<b>799</b>	<b>176</b>	<b>113</b>	<b>308</b>	<b>177</b>
<b>South America</b>	<b>425</b>	<b>1,462</b>	<b>393</b>	<b>1,467</b>	<b>1,292</b>	<b>255</b>	<b>1,263</b>	<b>189</b>
Argentina	76	101	61	80	24	(1)	19	-
Brazil	98	187	55	136	183	94	144	63
Chile	125	517	179	624	552	160	568	123
Colombia	37	468	30	453	428	(3)	421	(2)
Peru	89	189	68	174	98	(2)	105	(1)
Uruguay	-	-	-	-	7	7	6	6
<b>Europe &amp; North Africa</b>	<b>202</b>	<b>202</b>	<b>309</b>	<b>309</b>	<b>116</b>	<b>116</b>	<b>95</b>	<b>95</b>
Romania	2	2	4	4	78	78	55	55
Russia	200	200	126	126	-	-	-	-
Slovakia	-	-	191	191	-	-	-	-
Other <sup>1</sup>	-	-	(12)	(12)	38	38	40	40
<b>North &amp; Central America<sup>2</sup></b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>326</b>	<b>326</b>	<b>470</b>	<b>470</b>
<b>Sub-Saharan Africa &amp; Asia<sup>3</sup></b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>47</b>	<b>47</b>	<b>7</b>	<b>7</b>
<b>Other</b>	<b>-</b>	<b>-</b>	<b>(26)</b>	<b>(26)</b>	<b>(58)</b>	<b>(58)</b>	<b>(37)</b>	<b>(37)</b>
<b>Total</b>	<b>1,402</b>	<b>2,895</b>	<b>1,749</b>	<b>3,276</b>	<b>2,704</b>	<b>1,211</b>	<b>2,898</b>	<b>1,371</b>

1. Includes Belgium, Greece, France, Bulgaria

2. Includes Mexico, USA, Panama, Canada, Guatemala, Costa Rica

3. Includes South Africa, India

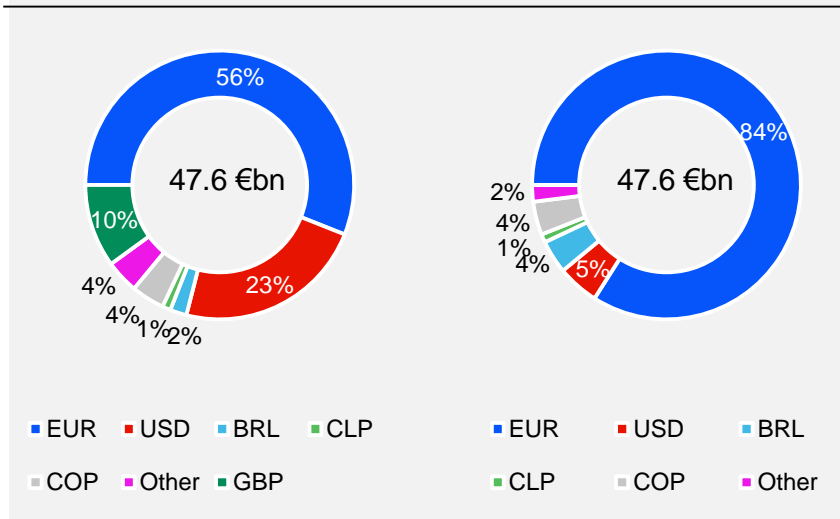
# 9M 2017 consolidated results

## Gross debt<sup>1</sup> structure

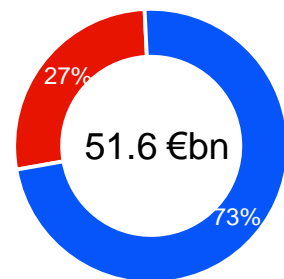


Long term debt by currency

After swap



Interest rate composition



■ Floating ■ Fixed + Hedged

Long term credit ratings

	Rating	Outlook
Standard & Poors	BBB	Positive
Moody's	Baa2	Stable
Fitch	BBB+	Stable

1. In nominal terms

# 9M 2017 consolidated results

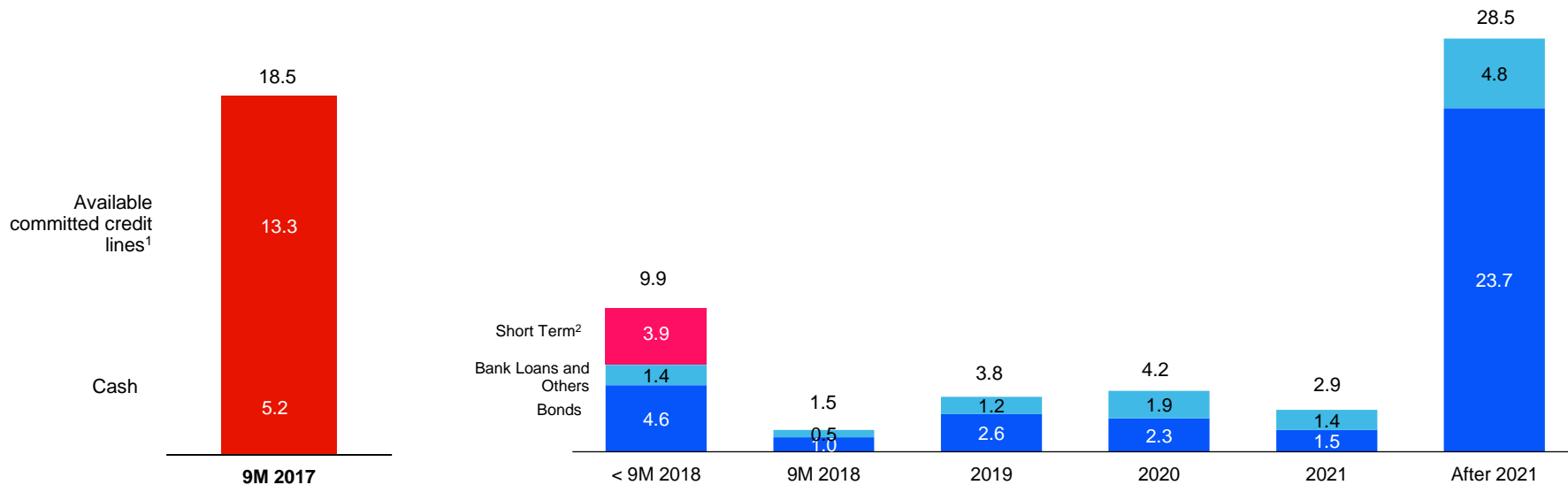
Debt structure by instrument (€bn)



Debt by instrument	Enel Spa	EFI	Central Others	Italy	Iberia	South America	North & Central America	Europe & North Africa	Sub-Saharan Africa & Asia	Total
Bonds	12.25	19.73	-	-	0.06	3.59	-	0.15	-	35.78
Bank Loans	1.04	-	-	4.51	0.95	2.26	0.24	0.23	0.24	9.47
Tax Partnership	-	-	-	-	-	-	0.46	-	-	0.46
Other Loans	-	-	-	0.10	0.52	0.31	0.04	-	0.18	1.15
Other short term debt	0.30	-	-	0.91	0.06	-	-	-	-	1.27
Commercial Paper	-	1.44	-	-	1.20	-	-	-	-	2.64
<b>Gross debt</b>	<b>13.59</b>	<b>21.17</b>	<b>-</b>	<b>5.52</b>	<b>2.79</b>	<b>6.16</b>	<b>0.74</b>	<b>0.38</b>	<b>0.42</b>	<b>50.77</b>
Financial Receivables	-0.01	-0.28	-0.39	-1.06	-0.52	-0.89	-0.34	-	-	-3.49
Tariff Deficit	-	-	-	-	-0.60	-	-	-	-	-0.60
Other short term financial receivables	-2.05	-0.99	-	-0.28	-0.04	-0.04	-0.12	-0.01	-0.02	-3.55
Cash and cash equivalents	-0.98	-0.01	-0.19	-0.38	-0.43	-1.63	-0.26	-1.24	-0.07	-5.19
<b>Net Debt – Third Parties</b>	<b>10.55</b>	<b>19.89</b>	<b>-0.58</b>	<b>3.80</b>	<b>1.20</b>	<b>3.60</b>	<b>0.02</b>	<b>-0.87</b>	<b>0.33</b>	<b>37.94</b>
Net Debt – Intercompany	2.56	-22.22	3.79	9.89	3.39	0.65	1.66	0.30	-0.02	-
<b>Net Debt – Group View</b>	<b>13.11</b>	<b>-2.33</b>	<b>3.21</b>	<b>13.69</b>	<b>4.59</b>	<b>4.25</b>	<b>1.68</b>	<b>-0.57</b>	<b>0.31</b>	<b>37.94</b>

# 9M 2017 consolidated results

Debt maturity coverage split by typology (€bn)



1. Of which 13 €bn of long term committed credit lines with maturities beyond September 2018

2. Includes commercial paper

# Capital Markets Day

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# Capital Markets Day

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