



Forum per la finanza sostenibile

Milano

Marzo 6, 2018



1

Enel current footprint and key perspective highlights

2

Enel and the TCFD

1

Enel current footprint and key perspective highlights

2

Enel and the TCFD

Investor presentation

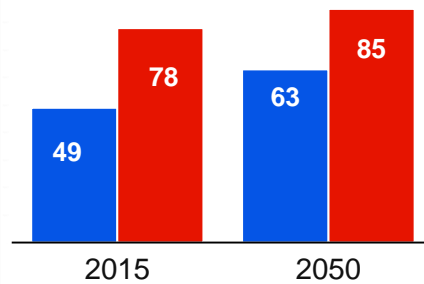
Sector trends (1/2)



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 rate¹ (%)

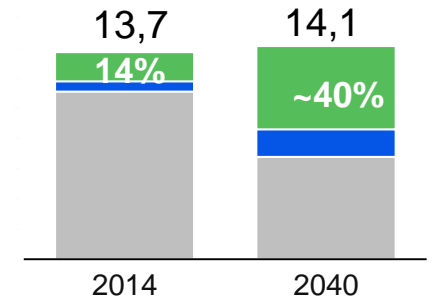


■ Developing countries ■ Developed countries

Decarbonization

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

Primary energy mix² ('000 Mtoe)

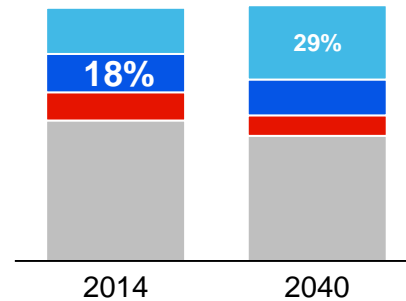


■ Renewables ■ Fossil ■ Nuclear

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 demand³

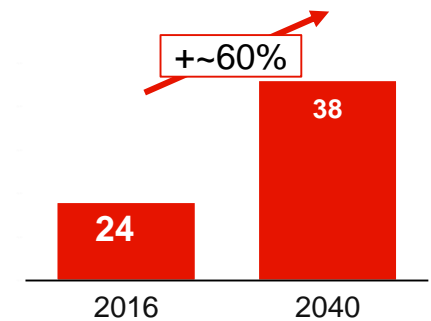


■ Power ■ Gas ■ Coal ■ Other⁴

Demand increase

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

Electricity demand⁵ ('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

Investor presentation

Sector trends (2/2)

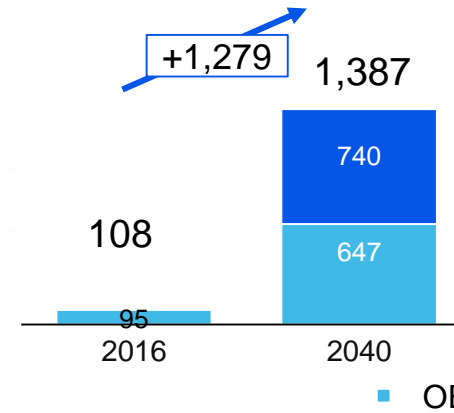


Small scale PV and demand response

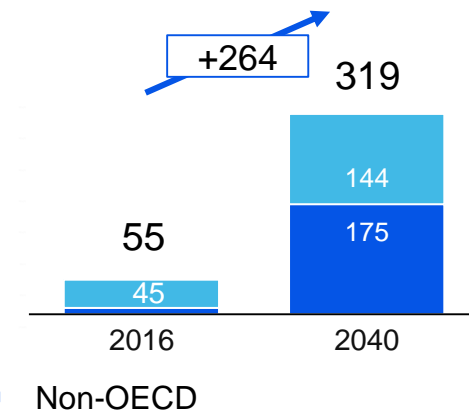
Distributed generation and demand response will drive the increase in number of “prosumers”

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)¹



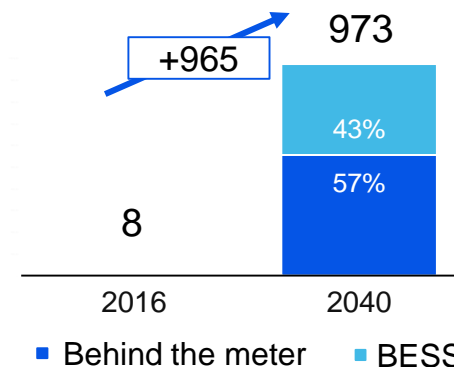
Demand response (GW)¹



Storage and electric vehicles¹

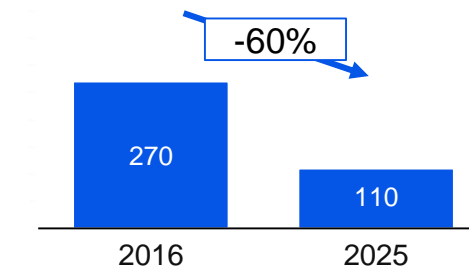
Storage is in the uptake path, will ease renewable integration into the market and push distributed solutions penetration transforming the customer journey

Energy storage (GW)¹



Electric Vehicles¹

Lithium battery cost (\$/KWh)

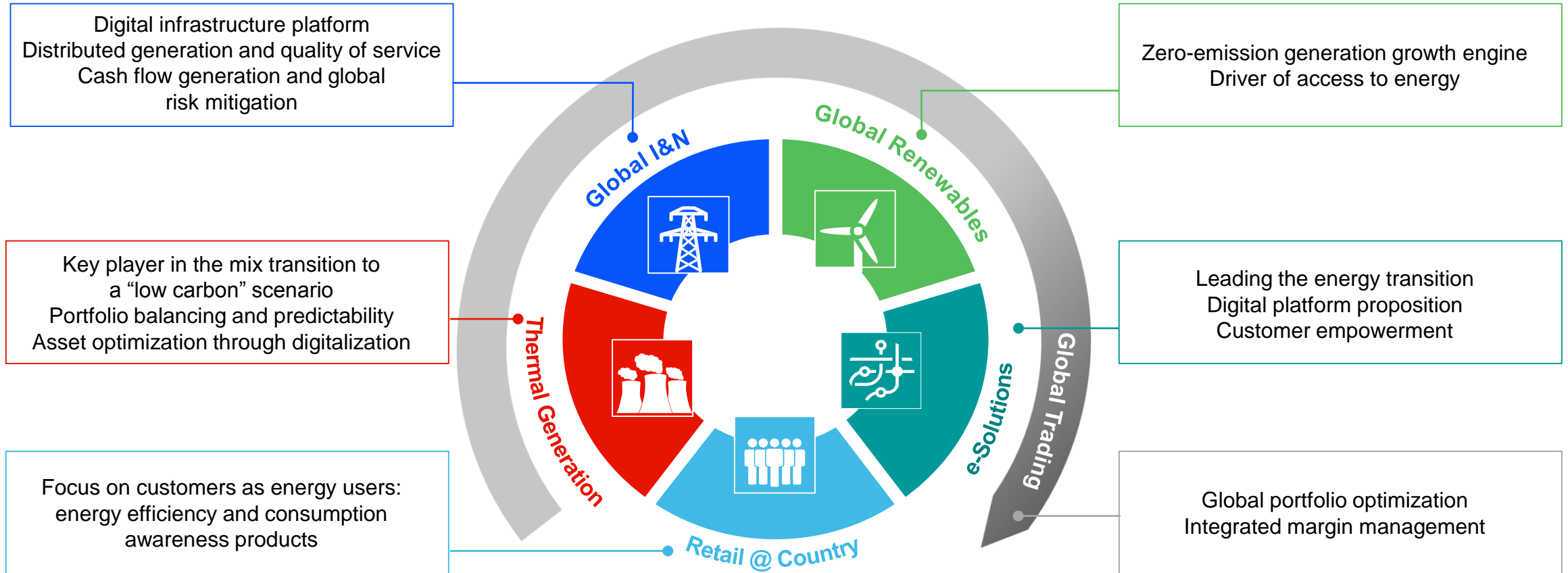


1. BNEF NEO 2017, June 2017
 2. Battery Energy Storage Systems

Investor presentation



Enel integrated model fit for digitalized, low carbon world



Fully integrated business model drives value and synergies

Investor presentation

Integrated model fit for digitalized, low carbon world



Decarbonization

Enel 2020 targets

- ~48 GW renewables (+7.8 GW)
- ~36 GW thermal (-7.3 GW)
- Specific CO₂ emissions < 350 gCO₂/Kwhe

Enel current positioning

- ~40 GW renewables (+6 GW vs 2014)
- ~43 GW thermal (-10 GW vs 2014)
- Specific CO₂ emissions 399 gCO₂/Kwhe (-14% vs base year 2007)

Electrification, Storage, Demand Response

Enel 2020 targets

- 600 MW storage capacity NEW
- ~11 GW demand response (+ 5 GW)
- ~310,000 charging stations (+280,000)

Enel current positioning

- ~6 GW demand response
- ~30,000 charging stations

Urbanization

Enel 2020 targets

- ~67 mn end-users
- ~48 mn smart meters
- ~17 mn 2nd generation smart meters

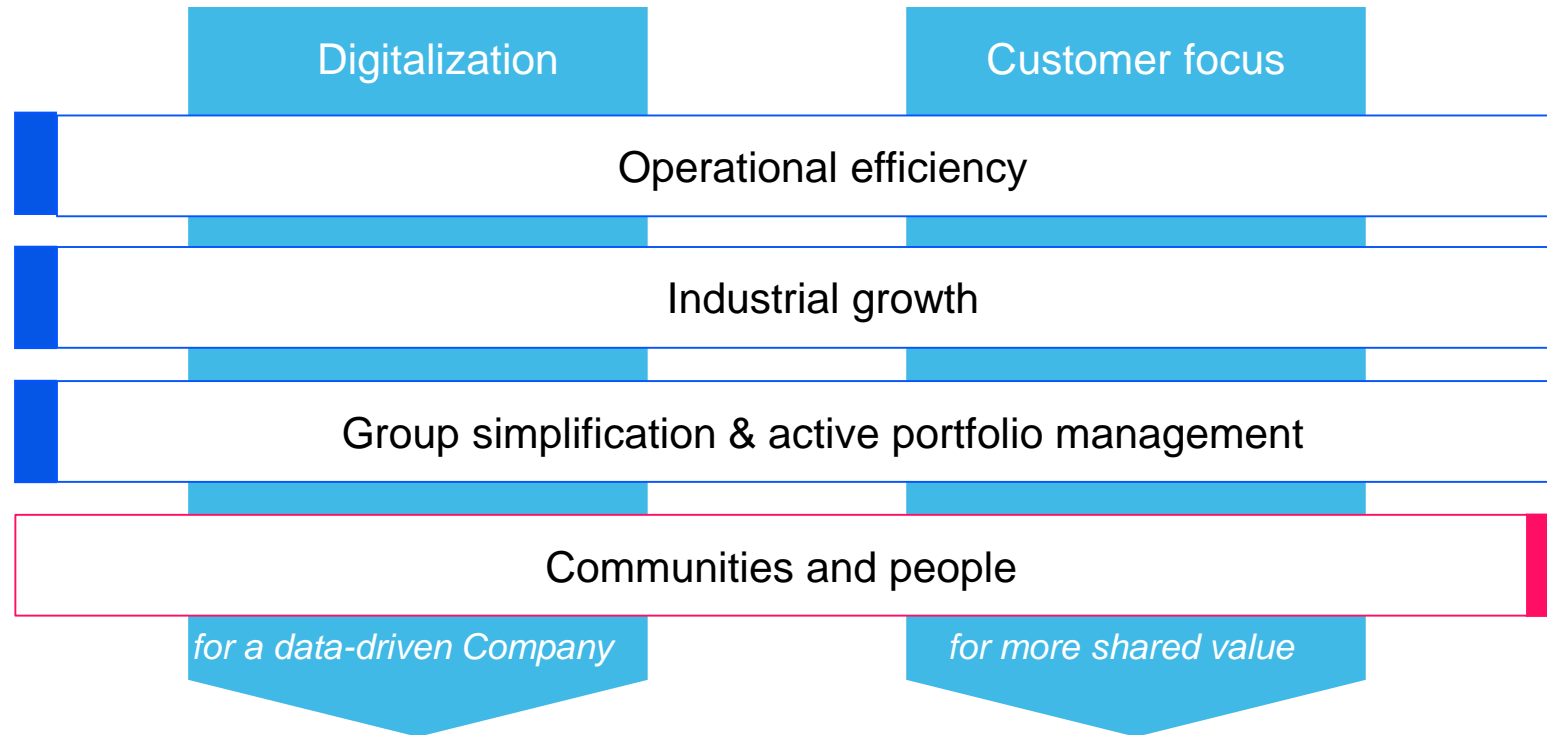
Enel current positioning

- ~65 mn end users
- ~43 mn smart meters
- ~1 mn second generation smart meters

Leading the energy transition

Investor presentation

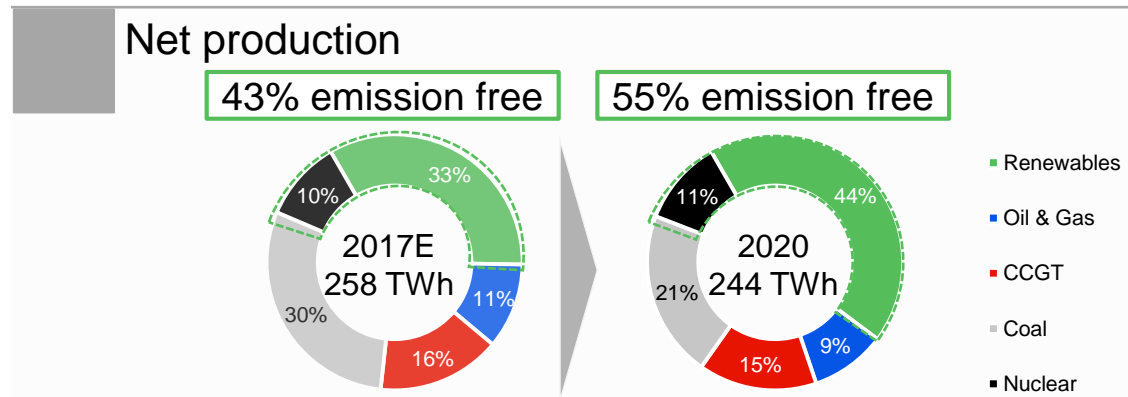
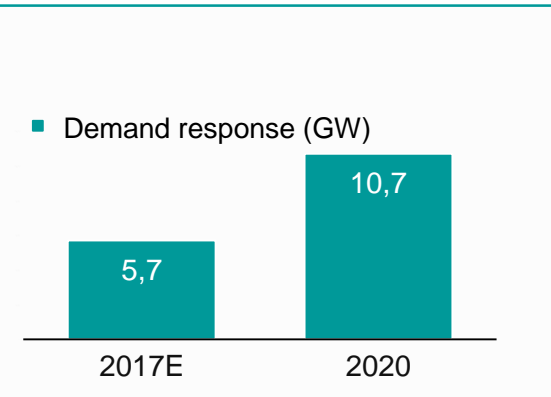
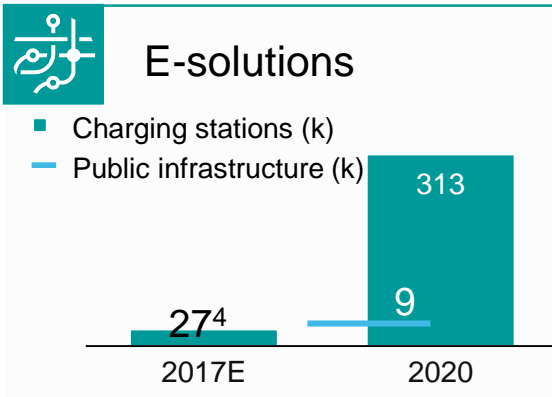
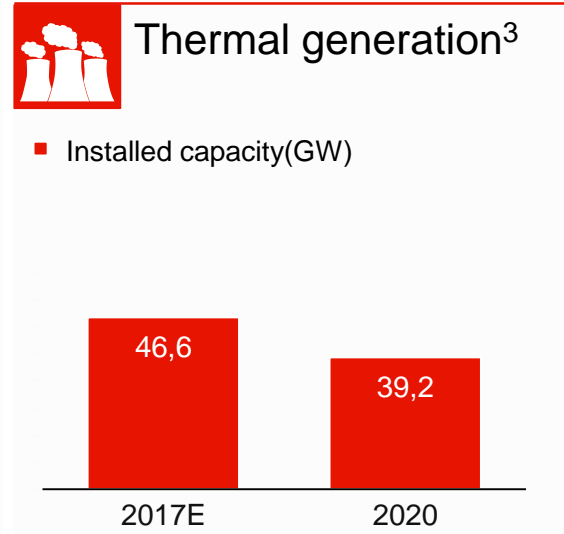
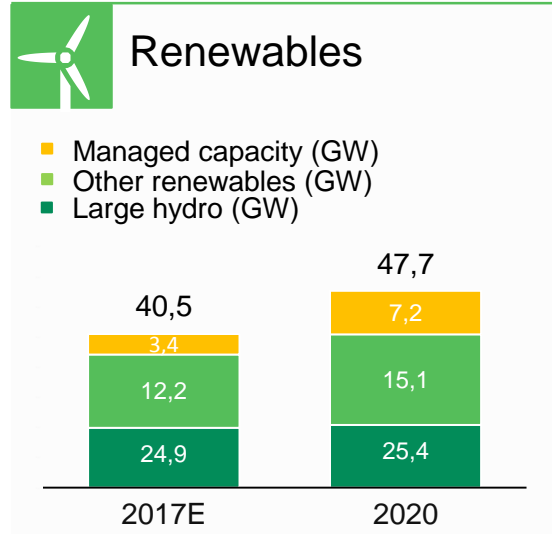
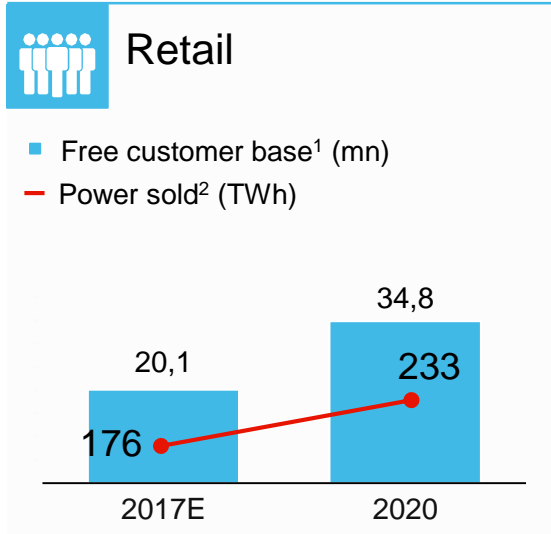
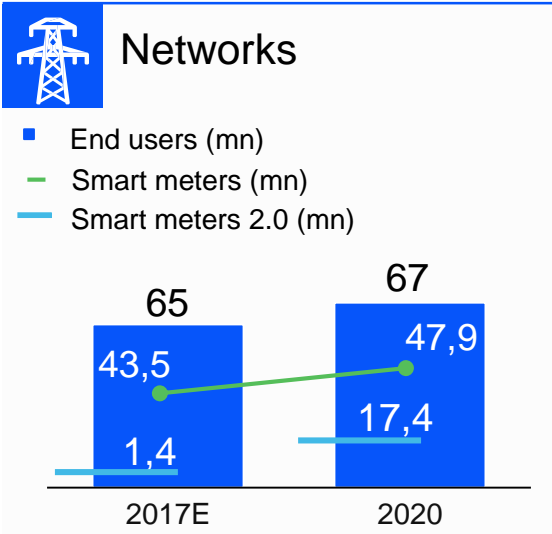
Enel strategic pillars



Sustainable long-term value creation

Investor presentation

Industrial growth: operational targets by business

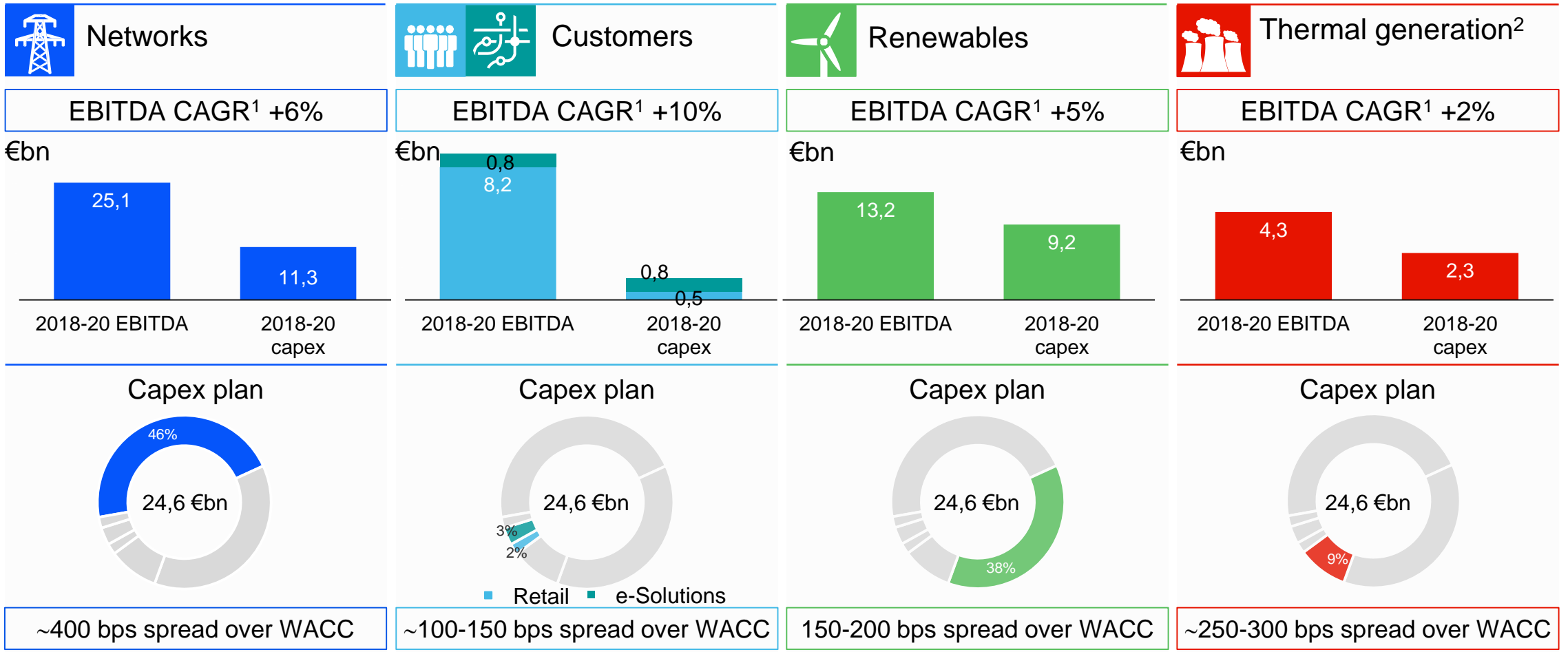


1. Includes only power and gas free customers
 2. In free market

3. Includes nuclear in Iberia
 4. Of which 1,100 public infrastructure

Investor presentation

Industrial growth: financial targets by business








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

Investor presentation

Communities and people



Local communities (mn beneficiaries)

	2017E	2020 ¹	
 <p>High-quality, inclusive and fair education</p>	0,5	0,8	 2x 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	 2x From 1,5



Our people

Talent attraction and retention

	2020
Appraise performance of people we work with ²	100% of people involved 99% of people appraised 95% of people interviewed
Climate corporate survey ²	100% of people involved 86% of people participating

Diversity

Global implementation of the diversity and inclusion policy	Recruiting should ensure equal gender splitting of the candidates (c. 50%)
---	--

Training

Enable digital skills diffusion among people we work with	100% of people involved in digital skills training NEW
---	--

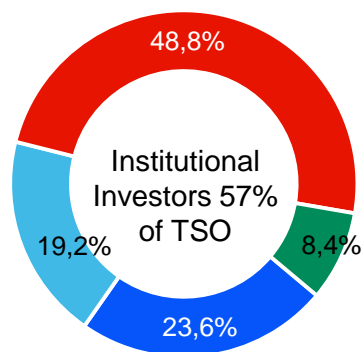
1. 2015-20 cumulated target
2. Eligible and reachable people having worked in the Group for at least 3 months

Investor presentation annexes – Strategic deep-dive

Focus on corporate governance (1/3)

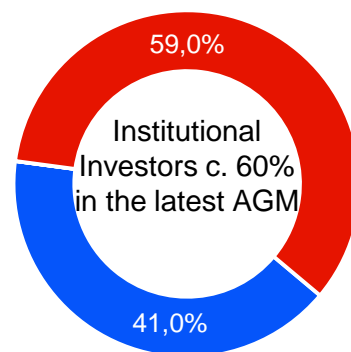


Current shareholders' structure¹



- 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 TSO1 and 60% in the latest Enel's AGM

No special power to Italian Government since 2014

No anti-takeover measures: 3% ownership ceiling on share capital nil if 75% is reached in case of a takeover bid

First slate (in terms of votes) elects 7/10 of BoD members
3/10 of BoD members granted to minorities

Should first slate not have enough candidates to elect 7/10 of BoD members, the remaining directors shall be drawn by the minority slate having obtained the second highest number of votes

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

1. TSO = Total Shares Outstanding

A sense of purpose

BLACKROCK®



Dear CEO,

As BlackRock approaches its 30th anniversary this year, I have had the opportunity to reflect on the most pressing issues facing investors today and how BlackRock must adapt to serve our clients more effectively. It is a great privilege and responsibility to manage the assets clients have entrusted to us, most of which are invested for long-term goals such as retirement. As a fiduciary, BlackRock **engages with companies** to drive the sustainable, long-term growth that our clients need to meet their goals.

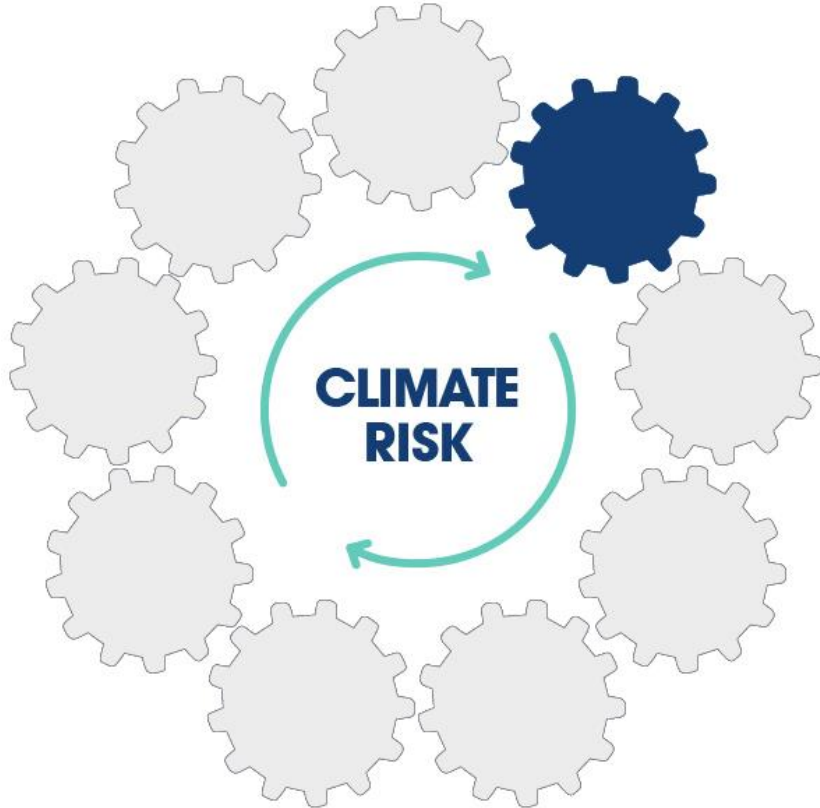
In 2017, equities enjoyed an extraordinary run - with record highs across a wide range of sectors - and yet popular frustration and apprehension about the future

Larry Fink's annual letter to CEOs

*"In order to make engagement with shareholders as productive as possible, **companies must be able to describe their strategy for long-term growth...***

I want to reiterate our request, that you publicly articulate your company's strategic framework for long-term value creation..."

Institutional investors require a greater disclosure on climate change risks and opportunities impact on companies' business models



BLACKROCK

"BlackRock is a member of the TCFD and actively contributed to the development of the reporting recommendations.[...] Many companies exposed to climate change are already reporting to some degree on their policies, adaptation strategies and metrics for managing climate-risk. We see the TCFD's recommended reporting framework as a means to achieve the comparability and consistency of reporting that is important to us as investors." ¹



"Climate change is now widely recognised as a risk no long-term investor can afford to ignore. To support the full implementation of the Paris Agreement, it is vital that major companies move swiftly to address the risks and pursue the opportunities presented by climate change.[...] Investors participating in the Climate Action 100+² wish to work with the companies in which they invest to ensure that companies are minimising and disclosing the risks, and maximising the opportunities presented by climate change [...] requesting the boards and senior management of these companies to provide enhanced corporate disclosure in line with the final recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)" ³

1. BlackRock Asset Management letter to the CEO Francesco Starace (30th November 2017)
2. Initiative supported by: Asia Investor Group on Climate Change, Ceres (USA), the Investor Group on Climate Change (Australia/NZ), the Institutional Investor Group on Climate Change (Europe) and the UN-supported Principles for Responsible Investment
3. Climate Action 100+ Global Investors Driving Business Transition introduction letter to the IR Office (7th December 2017)



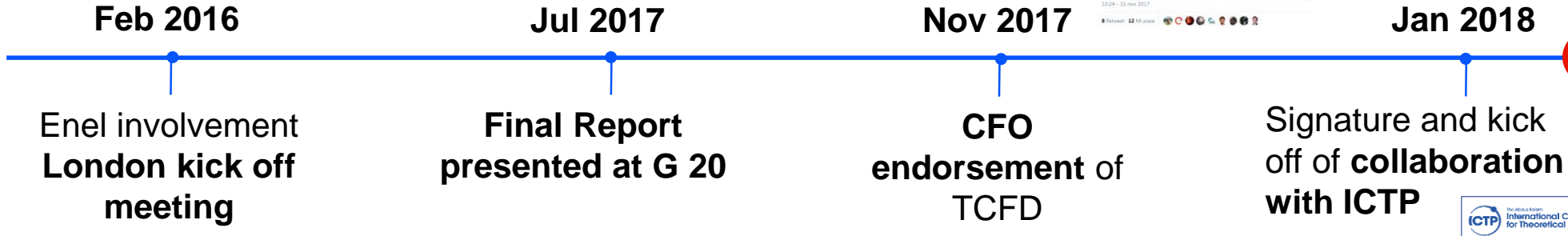
1

Enel current footprint and key perspective highlights

2

Enel and the TCFD

What done so far



Involvement in Guidelines definition

- First review of high level work
- Consultation on Final report
- WEF endorsement letter signed from CEO
- Informal **interaction with Task Force** (meeting@Eni)

Involvement in Guidelines definition

- Meeting with Axa
- Enel presentation at London Bloomberg Conference
- Interaction with Bloomberg TCFD
- WBCSD endorsement letter signed from CEO

Internal activities

- Two years collaboration with Prof. Giorgi, leading Italian climatist
- Start internal working group with relevant Business Units

Climate Change: a project financed by Enel Group



1931



2016

The climate and weather variables impacting our business



Climate Variables

Extreme Events

Impact on Electric Variables



Temperature



Rain



Wind



Solar



Hurricane and typhoons



Sea levels



Storms



Drought



Water fall



Heat waves



Strong cold / heavy snow



Power consumption



Hydro generation



Wind generation



Solar generation



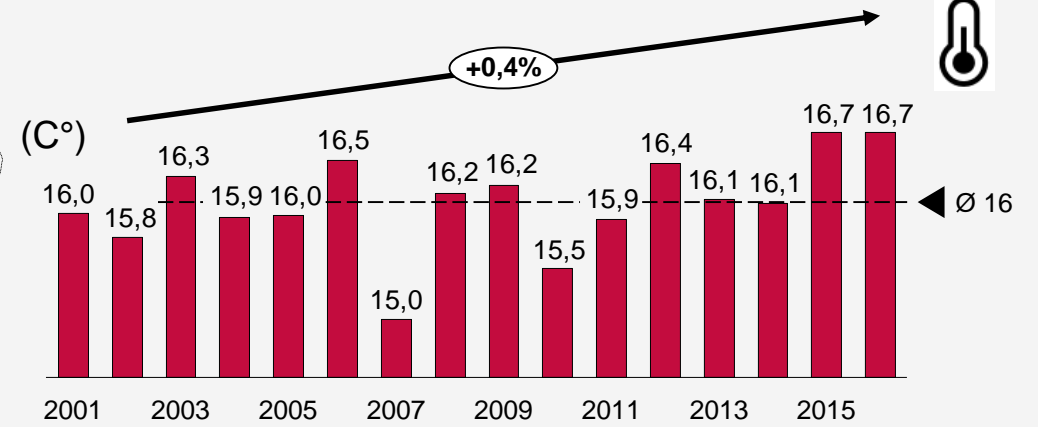
Power Network

Source: Bloomberg

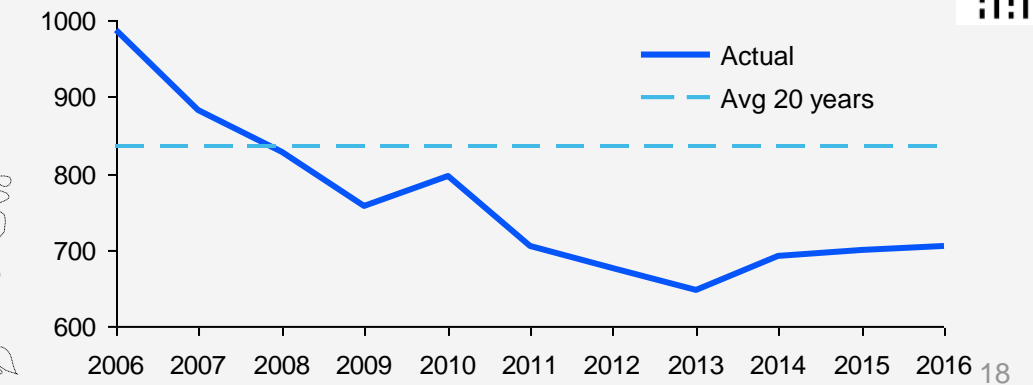


Chile

Temperature

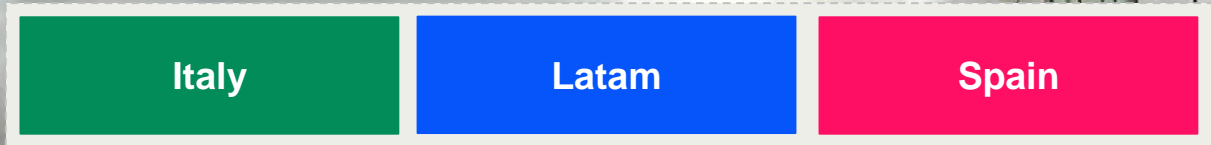


Rainfall



The main keystones of the project: areas and topics to be addressed

Countries



Weather Variables



Research end development activities will set average values in each selected country/areas for the following parameters

- Air temperature
- Sea temperature
- Annual average temperature
- Cumulative winter/summer precipitation
- Annual precipitation
- Precipitation pattern
- Days of intense precipitation
- Frost days
- Snow coverage
- Annual evaporation
- Consecutive dry days
- Ventilation
- Irradiation
- Summer days
- Frequency of droughts and impacts on hydro availability
- Frequency and value of extreme rain and snow events
- Frequency of extreme storm events

This project aims to the develop different climate simulations in order to enable Enel to carry out resilience analysis about its assets and its business.

The main keystones of the project: data, scenarios and duration



Timing, scenarios, data and project duration



- Parameters will be defined as difference related to the average data of the period 1990-2010 according to two chosen scenarios

Scenario IPCC 8.5
Scenario IPCC 2.6



- Time is set from **2020 to 2050** with a **yearly frequency**.

The scenarios will be developed until 2050



- Data results **resolution** will be:

12 x 12 km for Italy and Spain
25 x 25 km for South America



- **Duration**

2 years starting from January 2018

The whole project workflow



- Climate and Energy System models
- Scenarios IPCC 8.5 (BAU) & IPCC 2.6 (2 C, COP21)



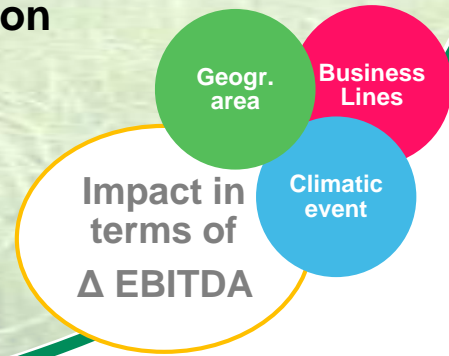
- E-Distribution
- Global Thermal Generation
- Holding AFC
- Global Renewables
- Innovation & Sustainability




1. Assess Physical & Transition Risks

2. Define how these risks impact our areas of operation

3. Quantify the impact of climate change on Enel business segments and assets and identify major risks & opportunities

2020 to 2050



- Generation assets: existing & new  
- Transmission & Distribution 
- Consumers 