

2019 PORTUGAL RENEWABLE SUMMIT

Da transição ao compromisso energético
From transition to energy commitment





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Challenges and opportunities in the new market context



Challenges and opportunities in the new market context

enel at a glance: Who are we?



-  Leadership in all segments of the value chain
-  Diversified by technology & geographically
-  Focused on sustainability & growth



2,2 million kms of distribution network



44 GW renewable capacity installed



46.5 GW thermal & nuclear capacity



5.7 GW demand response



~ 73 mn final customers

World's largest global utility with the resources and products that are changing the way the world uses energy



2019
RENEWABLE
SUMMIT

enel at a glance: A simple and effective organization

Manage renewable generation fleet, maximizing global footprint of the Group in the renewable space



Renewables

Manage the conventional generation fleet, reduce emissions and improve performance through digitalization and flexible assets

Thermal generation

Manage the Group energy distribution assets, improving customers' reach, enhanced by digital platform infrastructures

Infrastructure and Networks

Energy commodities sales to end-user, maximize customer reach and improve customer journey

Retail

Downstream positioning of the Group as leader in the energy transition; customer side innovation and digital proposition

enel x

ENERNOC
An Enel Group Company

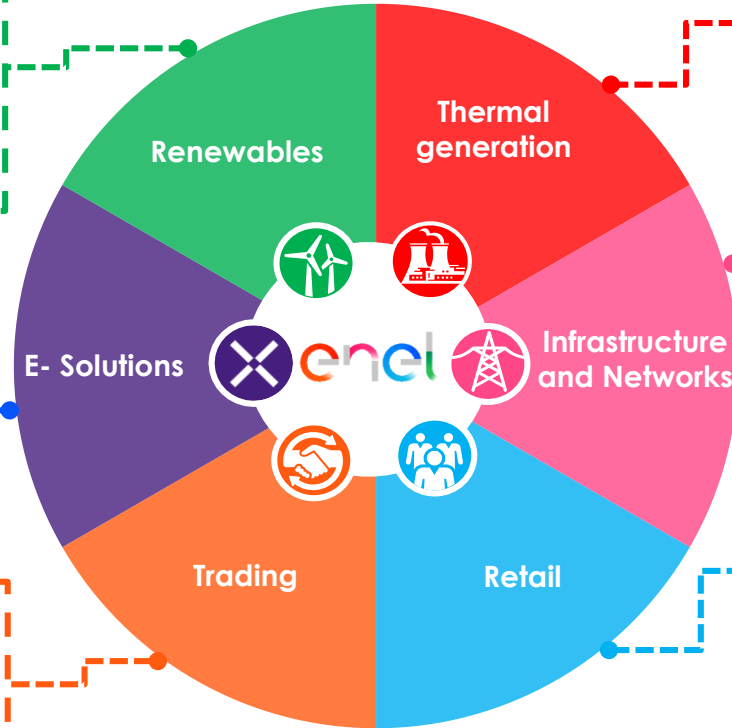
DEMAND
Energy
An Enel Group Company

eMotorWerks
An Enel Group Company

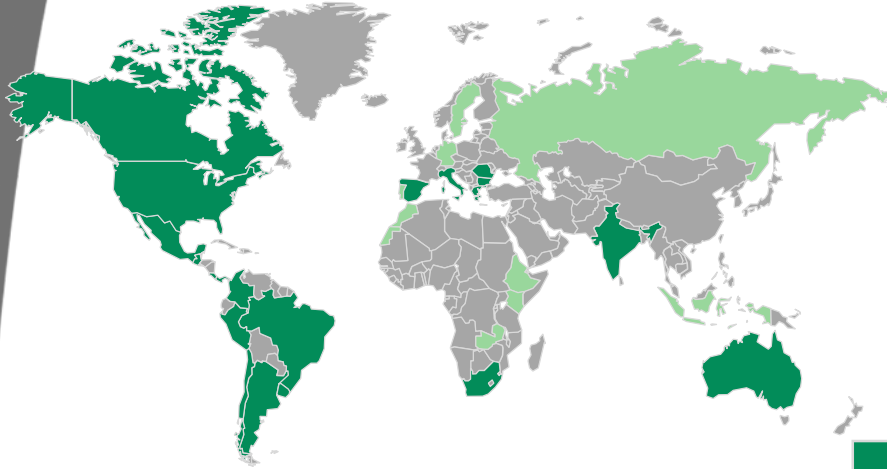
E- Solutions

Trading

Overall Group portfolio optimization, integrated margin management, capacity strategy supervision



Enel Green Power in the world



29
countries



1275
plants



more than
7,600
employees



2019 Key Figures

44 GW
managed



10.9 GW



28 GW

WIND

HYDRO

40 GW
consolidated



3.9 GW



0.9 GW

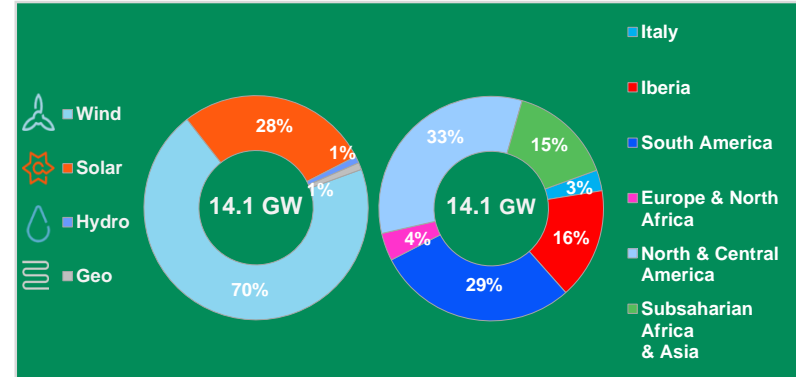
SOLAR

GEO

100+ TWh
managed

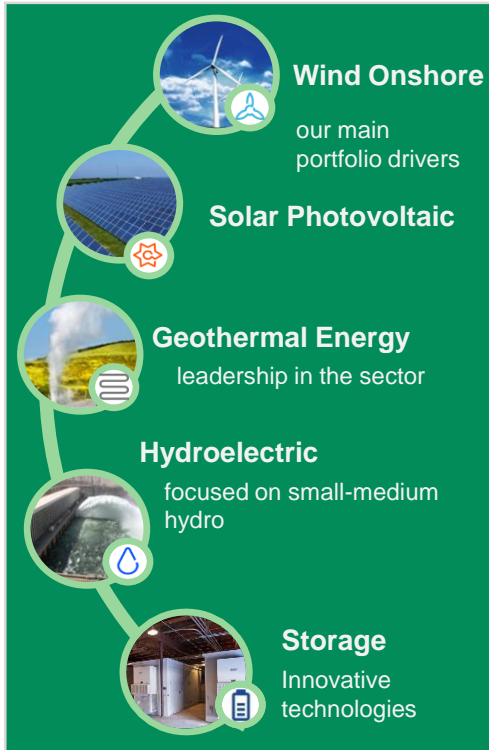
89 TWh
consolidated

2020-2022 Industrial Growth Plan



Enel Green Power: Key Levers of our Business Model

5 technologies across the Globe



How We Originate



PROJECT DEVELOPMENT

- Strategic partnerships and co-development agreements
- High quality pipeline of projects



COMMERCIAL STRUCTURING

- Tailor made solutions to meet a variety of customer needs
- Flexible structures squeezing risk-value tradeoffs

How We Execute



FINANCE SOURCING

- Access to competitive cost of financing
- Attractive alternatives to industry financial players



ENGINEERING & CONSTRUCTION

- Economies of scale, global procurement
- Design-to-value to increase reliability and minimize costs

How We Deliver



OPERATION & MAINTENANCE

- Big data and predictive maintenance
- Performance excellence at lower costs



ENERGY MANAGEMENT

- Integrated portfolio (generation/retail/trading)
- Risk mitigation synergies at Group level

Enel Green Power in the Iberian market

Key Strategic pillars:

- **Decarbonization.**



Endesa anuncia el cierre de sus centrales de carbón

• La compañía cuantifica la operación en 1.300 millones



- **Fair energy transition:** Ensuring the decarbonization process “leaves no one behind”:
 - Innovative green solutions to preexisting sites that maximize economic value and minimize social impact.
 - Revitalization of sparsely populated areas as new investments create high-quality direct and indirect job opportunities.
 - Circular economy: Focus on sustainability and relationship with local communities.

Sustainability is Value

The New Market Context

Opportunities: Why is the world going green?

- **Climate action**, SDGs and energy independence goals.
- **Consumers' choice**: Increased focus on sustainability by corporates and retail customers.



United Nations
Framework Convention on
Climate Change



RE 100



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION



685

COMPANIES
TAKING ACTION



- Cost competitiveness: **Wind onshore and PV Solar are the cheapest sources of new capacity** in most of the world.
- **Electrification** as a driver for demand growth opening up space for new cheap electricity.

Have made renewable energy a no-brainer for new capacity and substitution of preexisting one

The New Market Context

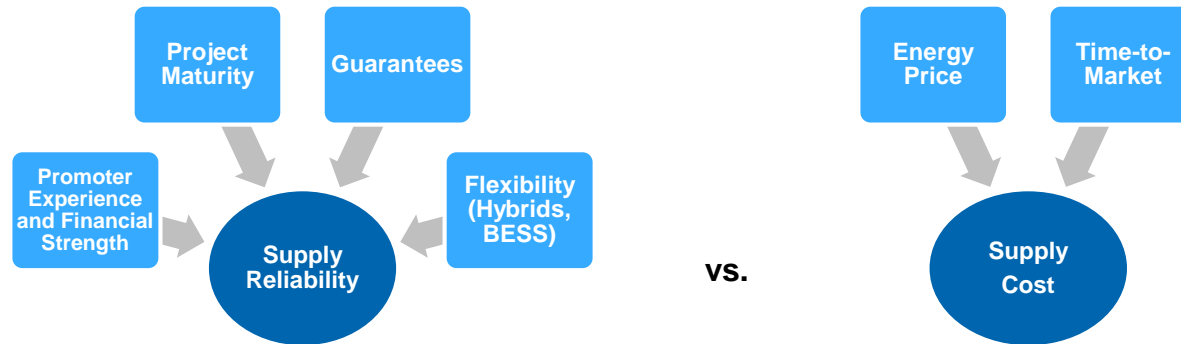
Challenges for Developers and Investors:

- **“Green boom”**: Growing interest in renewables from non traditional actors puts downward pressure on returns and increases risk of speculation.
- **Technology commoditization**: Technology evolution and standardization make it harder for companies to differentiate themselves.
- **Living in a non-regulated world**:
 - Access to final consumers requires the ability to develop tailor-made offtake structures to meet consumers’ needs and risk profile.
 - Increased role of merchant component requires more sophisticated energy management capabilities.

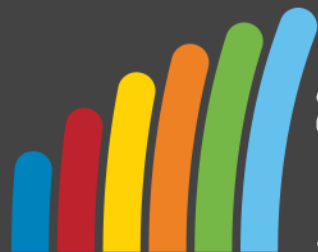
The New Market Context

Challenges for Regulators:

- **Managing Grid Access:** Finding the right sustainable balance between reliability and cost to maximize consumer's value and minimize rent-capturing across the value chain.



- **Permitting and environmental licensing:** Can current processes be simplified reducing timing and improving visibility of the process for promoters?



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