Better integration of emissions trading and complementary policies and measures

A power industry perspective

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The Enel Group today

2002

Presence
3 countries

Installed capacity
46.500 MW

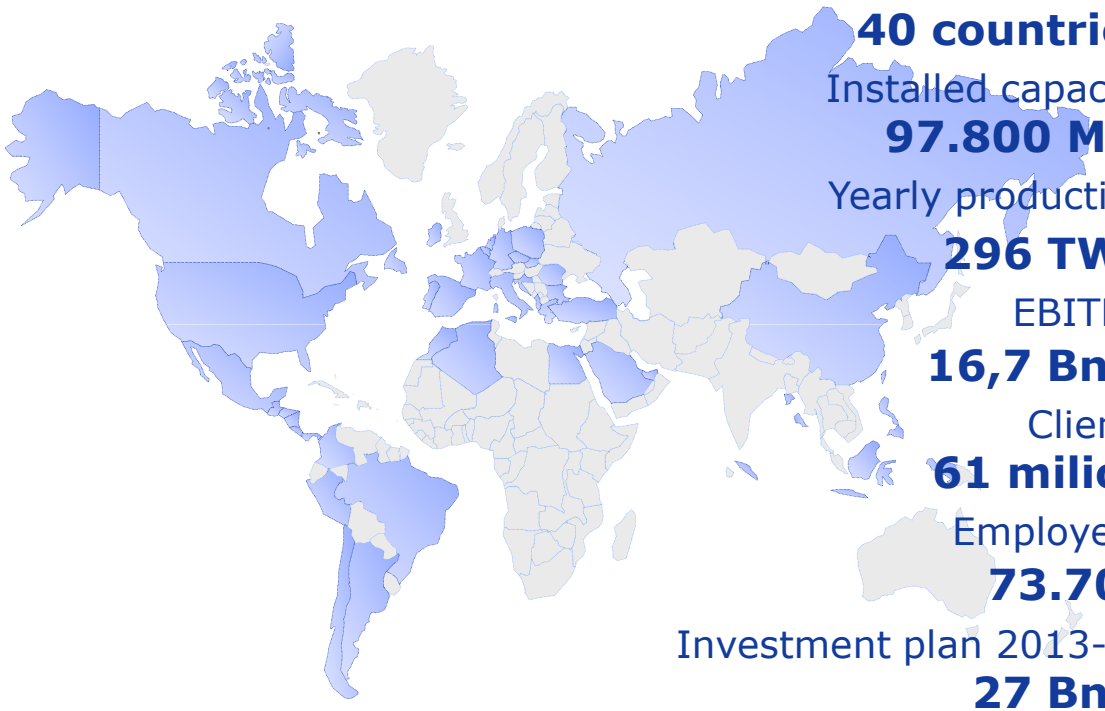
Yearly production
154 TWh

EBITDA
7,9 Bn €

Clients
31 milion

Employees
71.200

Investment plan 2003-07
21 Bn €



2012

Presence
40 countries

Installed capacity
97.800 MW

Yearly production
296 TWh

EBITDA
16,7 Bn €

Clients
61 milion

Employees
73.700

Investment plan 2013-17
27 Bn €

Global operator with activities spanning across technologies and the entire power value chain

Source: Bilanci consolidati Enel

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The Enel Group tackling climate change

Zero-emission sources

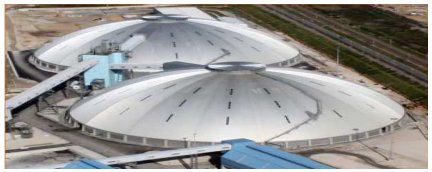
Further develop of zero-emission power generation's share (now above 42%), in line with the Group's objectives and policies for the de-carbonization of the EU economy

Research & Innovation

Provide a competitive advantage for the Group, through the development of advanced technology solutions for the management of distributed generation, RES intermittency and the shift towards a more flexible electricity consumption

Energy Efficiency

Develop a leadership in offering new services to business and residential customers, encouraging the electrification, the shifting towards efficient energy uses and promoting the penetration of smart grids



Best available technologies for thermal generation

Continuous improvement of environmental performance of thermo-power plants, with particular regards to the development of energy efficiency solutions and CO2 emissions reductions

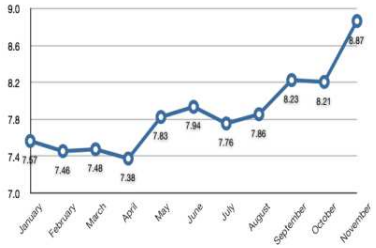
Leadership in Global Carbon Market

Take an active role in the development of the global carbon market and promote market-based instruments, (cap and trade and offsets), considered to be more compatible with the current structure of electricity markets

How the ETS affects decision making

Operational decisions

- Market operations
- Industrial efficiency
- Stakeholder engagement

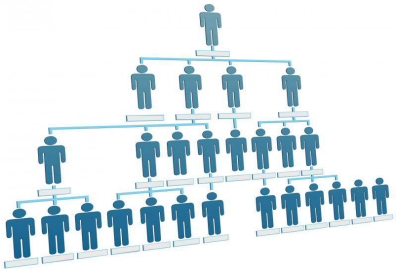


Investment decisions

- Business development
- Return on investments
- Regulatory context

Organizational decisions

- Organizational engagement level
- Internal resources
- Internal reporting processes



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Policies interacting directly with the ETS

Technologically driven

Technical considerations regarding specific technologies including:

- CCS
- HFC and N2O
- Carbon sinks

Geographically driven

Political considerations regarding specific geographies including:

- Kyoto Protocol 1 vs Kyoto Protocol 2 scopes
- LDC scope for ETS compliance credit generation
- Linking with other regional ETS

Driven by lack of confidence/other

Interventions driven by skepticism or other considerations:

- Market-based instruments (e. g. carbon taxes, incentives for local energy sources)
- Command and Control instruments (e.g. CO2 emission standards, energy efficiency standards)

Policies interacting indirectly with ETS

Affecting market balance

Policy considerations may affect demand and supply in terms of both volumes and timing:
- RES
- Energy efficiency targets
- Competitiveness (e.g carbon leakage)

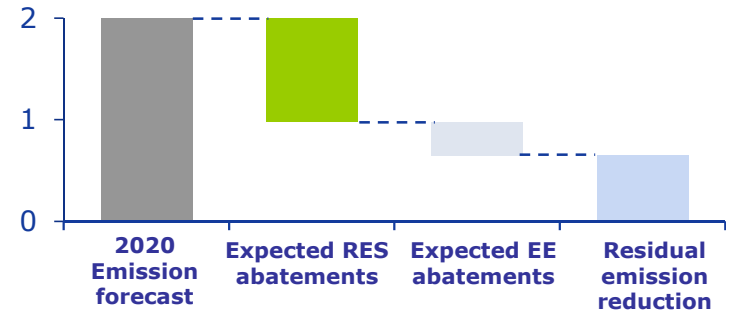
Affecting opportunity cost of capital

Strong support schemes in other policy areas can increase competition for scarce capital:
- RES
- Energy efficiency
- Energy security

Affecting economic sustainability of abatement

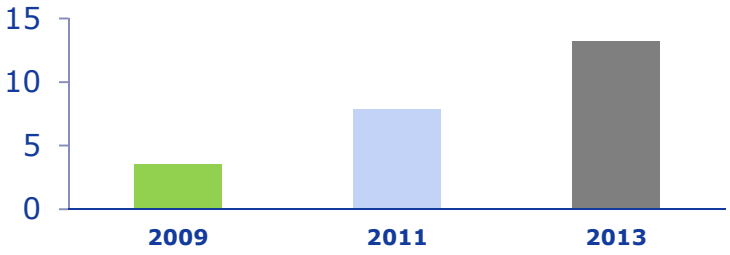
Energy bill sustainability may be undermined by cumulative costs across energy policy objectives including:
- RES
- Energy efficiency
- Emission standards

Expected EU emission reduction ($GtCO_2$)



CO_2 abatement cost (Italy 2012) (€/tCO2)

Total RES incentive costs (Italy) (Bn €)



Source: for CO2 Enel elaboration; for RES incentive costs Italian energy regulator (AEEG)

Conclusions

- ETS credibility among industrial players and the wider policy making community is crucial
- Direct negative interactions with the ETS should be minimized by using *"market friendly"* instruments (i.e. instruments able to overcome non-economic barriers) and avoiding *Command & Control* approaches
- Indirect negative interactions with the ETS can be minimized by maximizing the coordination with others policy areas in terms of objectives and timing