

# CEER

Council of European  
Energy Regulators



**The EU energy targets leading to 2050,  
the transition to a low-carbon economy  
and the role of energy regulation**

Fostering energy markets,  
empowering **consumers**.

Fernando Hernández, CNMC  
V ARIAE-CEER meeting. Madrid, 11 March 2013

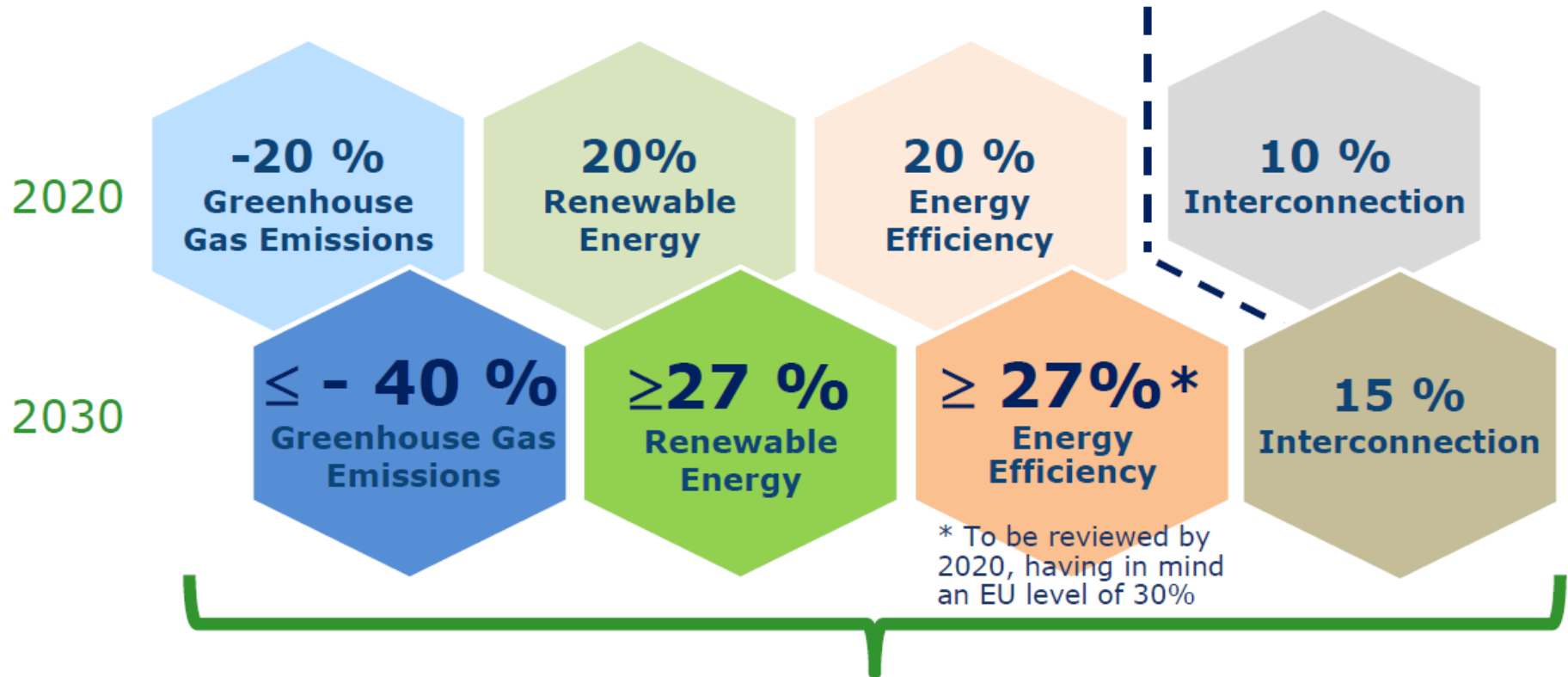
## What the EU is doing already: 2020 targets

- Reduce GHG emissions by 20% (compared to 1990)
  - ▶ EU Emissions Trading System (EU ETS)
- Increase share of renewables in EU's energy mix to 20%
  - ▶ Mandatory National targets
- Improve energy efficiency by 20% compared to business as usual projections



## 2020 vs 2030 targets (I)

- Agreed headline targets. 2030 Framework for Climate and Energy:



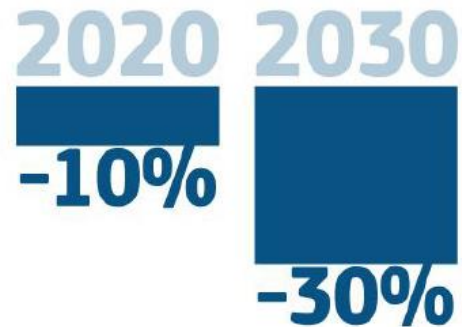
### New governance system + indicators

Source: European Commission

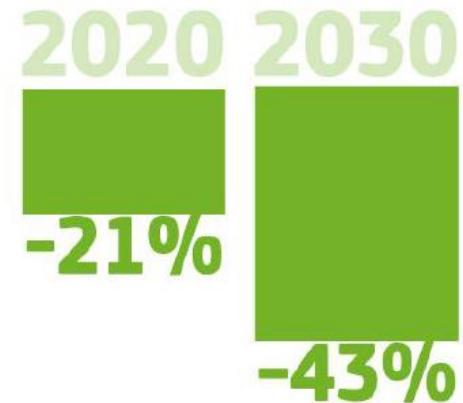
## 2020 vs 2030 targets (II)

- Emission reductions in ETS and non-ETS

**EMISSION  
REDUCTIONS  
IN ETS AND  
NON-ETS**  
COMPARED TO 2005



**NON  
ETS**  
INCLUDING  
ROAD TRANSPORT,  
HOUSING,  
AGRICULTURE  
etc.



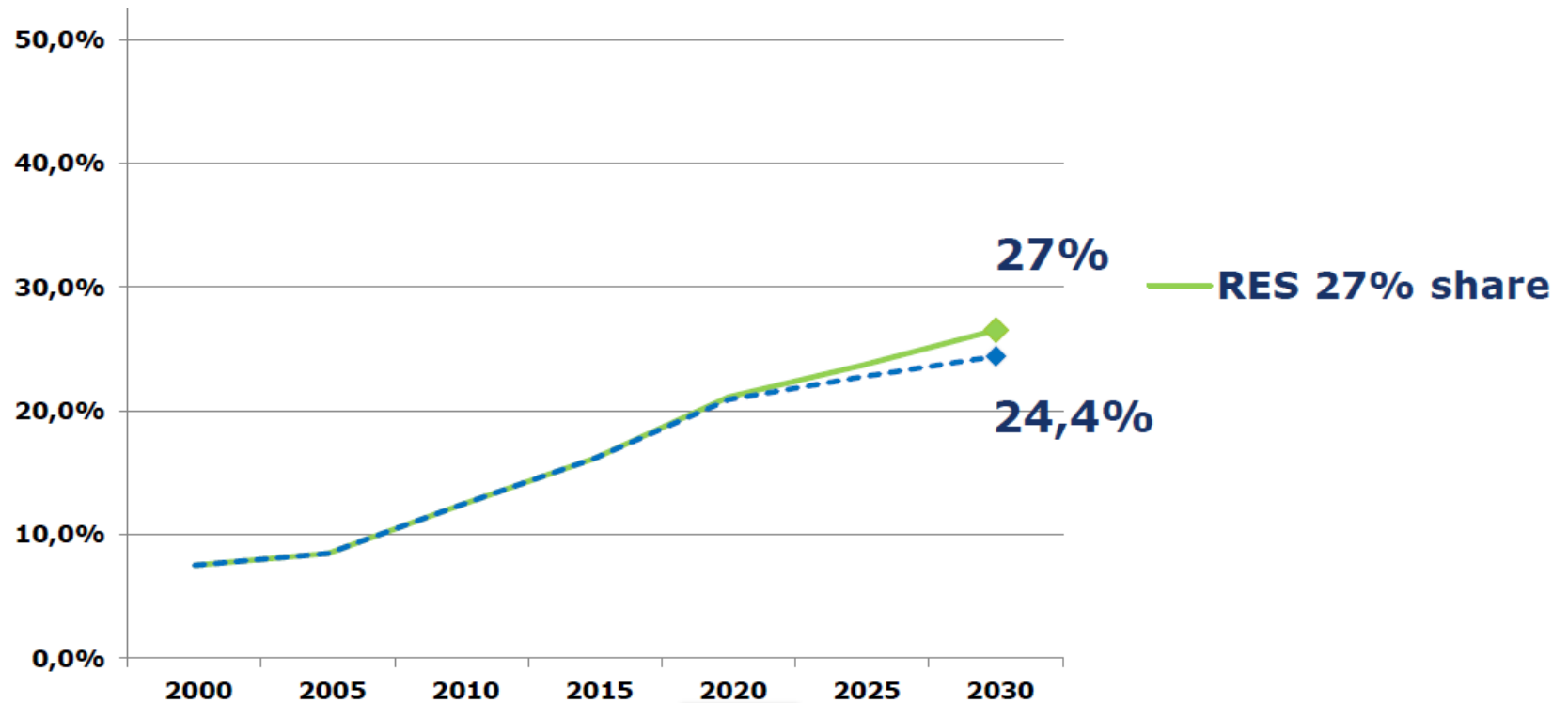
**ETS**  
INCLUDING  
POWER/ENERGY  
SECTOR & INDUSTRY

Source: European Commission



## 2020 vs 2030 targets (III)

- Share of RES in gross final energy consumption



Source: European Commission



## Roadmap to 2050: European Council Conclusions\*

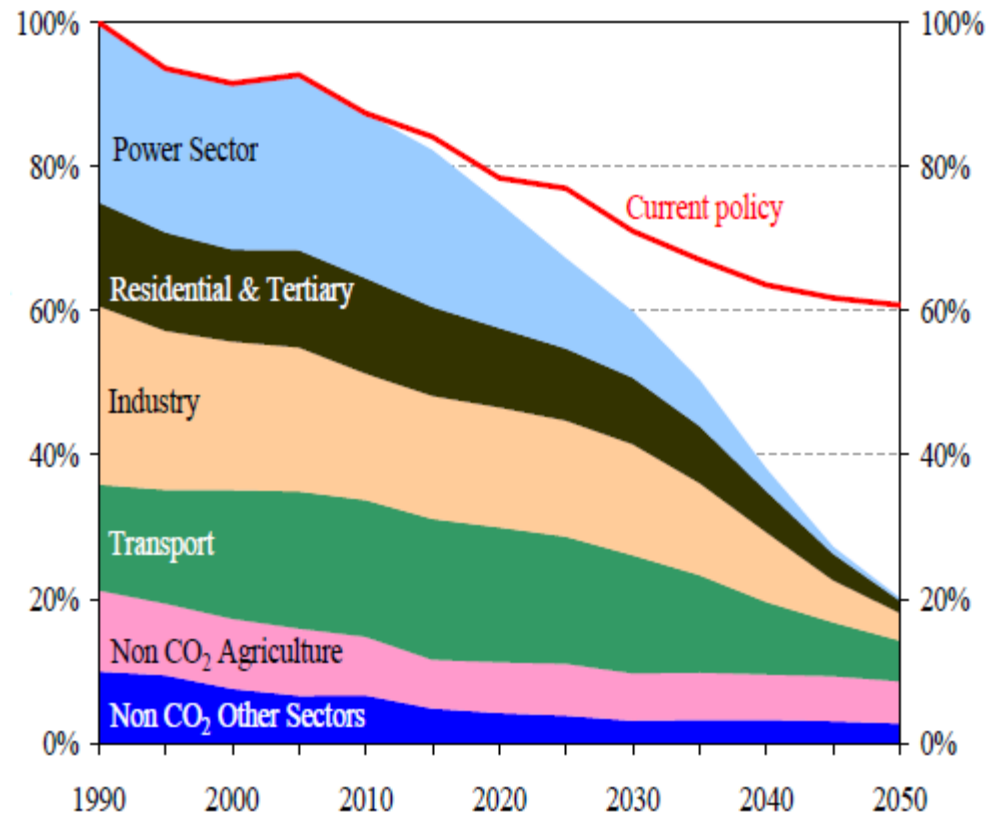
- Science consensus **global emissions should be cut by -50% by 2050** compared to 1990
- **EU objective** of reducing greenhouse gas emissions by **80-95% by 2050** compared to 1990
- Need for a low carbon 2050 strategy providing the framework for the longer term action
- Need to fix intermediary stages towards reaching the 2050 objective
- Need to keep developments under review on a regular basis

\* 4 February 2011



## 80% GHG reduction in the EU by 2050 is feasible

- With currently available technologies,
- With behavioral change only induced through prices
- If all economic sectors contribute to a varying degree & pace.



Source: European Commission

# The role of RES (I): CEER Status Review of RES in Europe 2012/13

- Proportion of gross electricity receiving RES support around 15% at EE average, though with wide differences

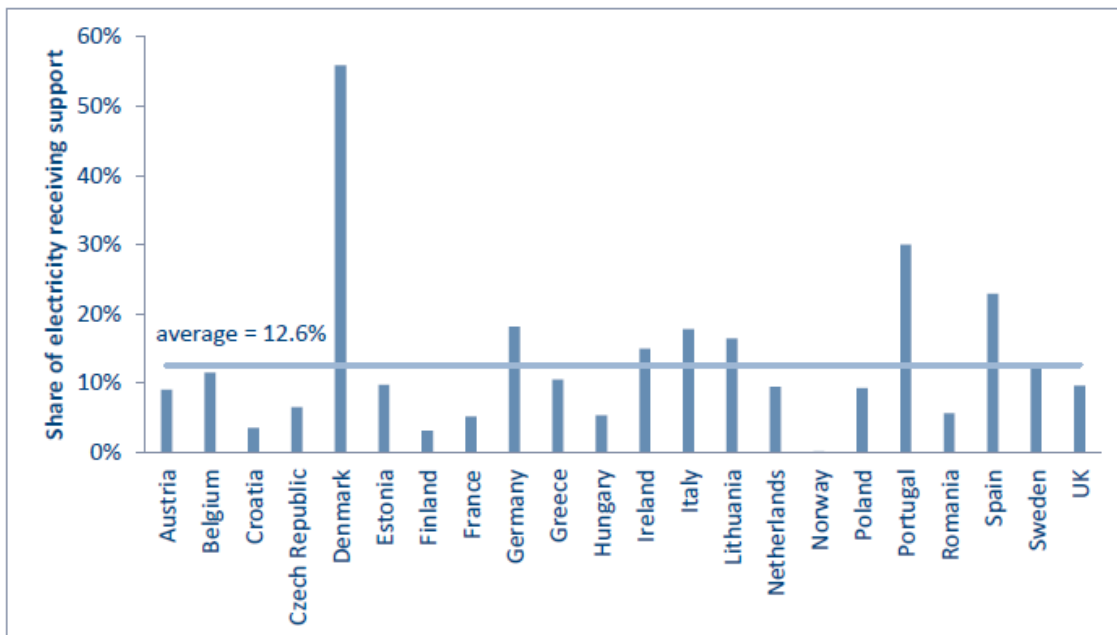


Chart 3: Share of total electricity produced receiving RES support (2012)<sup>19</sup>





## **The role of RES (II): CEER Status Review of RES in Europe 2012/13**

- Wide range of instruments used to promote RES: investment grants, feed.in.tariffs, feed.in.premium, green certificates, calls for tenders or system similar to network remuneration.
- Wide differences across technologies and across countries.
- Weighted average support across EU 110,65 €/MWh



## **The role of RES (III): CEER Status Review of RES in Europe 2012/13**

In terms of market integration:

- RES electricity generally sold through the same channels as conventional electricity
- RES same financial responsibility as conventional plants for electricity balance
- RES plants generally given priority in terms of network access and dispatching
- RES support generally financed by non-tax levies or passed down to consumers



## Delivering the internal energy market and making the most of public intervention

- Development of demand-side response
- Need for generation adequacy
- Further integrating national markets
- Well-designed, targeted and proportional interventions
- Keeping costs low and considering impact to consumers
- Monitoring, evaluation and phasing out of support



## **Guidelines on State aid for environmental protection and energy 2014-2020 (I)**

### **Implications for RES:**

- Sets forth general conditions for investment and operating aid to energy from RES.
- Market instruments, such as auctioning or competitive bidding process open to all generators producing electricity from RES. Green certificates schemes also allowed.
- Ensure that subsidies are reduced to a minimum in view of their complete phasing out.
- Technology specific tenders, to be carried out by Member States, allowed.
- Support schemes that are open to other EEA or Energy Community countries are encouraged.

## Guidelines on State aid for environmental protection and energy 2014-2020 (II)

- Incentivise the market integration of electricity from RES. Sell this electricity directly in the market and subject to market obligations:
  - ▶ Premium in addition to the market price (instead of feed-in tariffs).
  - ▶ Subject to standard balancing responsibilities.
  - ▶ Avoid incentives to generate electricity under negative prices.



# Energy Union

- Communication on Energy Union Strategy Framework adopted by the EC on 25 February, alongside:
  - ▶ Communication **The Paris Protocol** – A blueprint for tackling global climate change beyond 2020
  - ▶ Communication on Progress towards the 10% electricity interconnectivity target

## What exactly will change? The EC proposes:

- ▶ doing more to ensure that Member States implement and enforce existing legislation
- ▶ passing legislation to increase gas and electricity supply security and other measures to reduce Europe's reliance on dominant suppliers
- ▶ setting up an Energy Infrastructure Forum to make sure major infrastructure projects are delivered where and when needed
- ▶ passing legislation to modernise the European energy market and reinforce the regulatory framework at regional and European level
- ▶ passing legislation to ensure the 2030 climate and energy targets are reached
- ▶ making energy costs and prices more transparent
- ▶ making buildings more energy-efficient and decarbonising the transport sector
- ▶ putting an initiative on global energy and climate technology and innovation leadership in place



# Energy Union

- **Specific sustainability measures announced:**
  - ▶ Revision of Renewable Energy Directive (Nr 1 in RES)
  - ▶ Communication on best practice in self-consumption schemes
  - ▶ Co-legislators to adopt the Market Stability Reserve
  - ▶ Commission proposal (later in 2015) for legislation to achieve agreed 2030 emission reduction targets in the ETS and non-ETS sectors
  - ▶ Revision of the Directives on Eco-Design and Labelling (in 2015), and on Buildings and Energy Efficiency
  - ▶ Review of the State Aid Guidelines
  - ▶ Commission to propose an upgraded Strategic Energy Technology Plan
  - ▶ Commission and Member states to establish integrated Governance scheme for the Energy Union, including on 2030 targets

# The role of European energy regulators

## High level objectives\*:

- Establishing liquid, competitive and integrated wholesale energy market
- Enhancing Europe's security of supply and channeling the external element of IEM
- Moving to a low carbon society with increased renewables and smart, flexible responsive energy supply
- Developing a functioning retail market that benefits consumers
- Building stakeholder dialogue, cooperation and new governance arrangements

\* High level objectives expressed in the paper "Energy Regulation: A Bridge to 2025". Recommendation of the Agency for the Cooperation of Energy Regulators No 05/2014 of 19 September 2014 on the regulatory response to the future challenges emerging from developments in the internal energy market



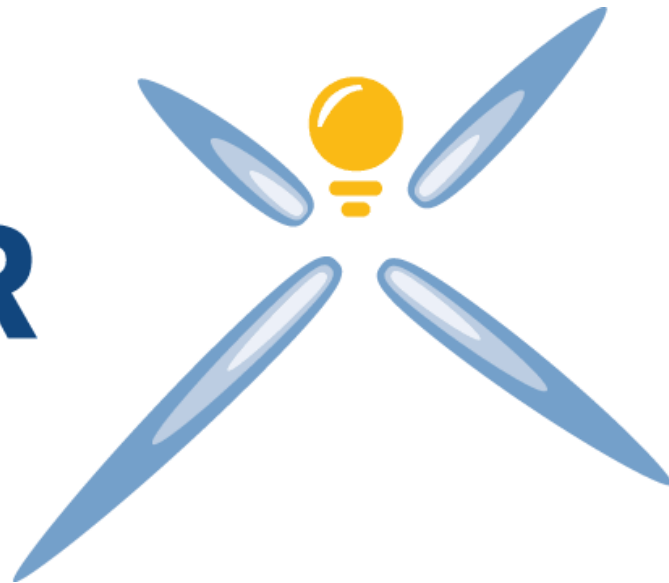
## The role of European energy regulators (II)

- Revision of **Renewable Energy Directive** (in 2016-2017), to ensure that the 2030 EU RES target is met cost-effectively
- Communication on **best practice** in self-consumption and renewable support schemes (in 2016-2017)
- Commission to facilitate **cooperation and convergence** of national RES support schemes leading to more cross border opening (see *Market Design initiative above*)
- Legislation to achieve agreed **2030 emission reduction targets** in the **ETS** and **non-ETS sectors** (proposals in 2015-2016)
- Revision of the **Directives on Eco-Design and Labelling** (in 2015), and on **Buildings** and on **Energy Efficiency** (in 2016)
- Commission to propose an upgraded **Strategic Energy Technology Plan** (in 2016)
- Commission and Member states to establish integrated **Governance scheme for the Energy Union**, including on 2030 targets (2015 onward)

# Thank you for your attention!

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