



# **Low-Carbon Technologies & Climate Innovation: Developments in the EU**

**Gaps and strategic opportunities in international  
collaboration on low-carbon energy technologies**

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# Presentation outline

- EU policy context on climate & energy
- The role of low-carbon technologies & climate innovation
- EU instruments to support low carbon technologies
- Engagement in international activities
- Outlook and conclusions

# Climate and Energy: a new framework for 2030

**Reducing** Greenhouse Gas Emissions (GHG) **cost-effectively**  
**2050** objective: -80% to -95% GHG

EU contribution to 2015  
**international climate agreement**

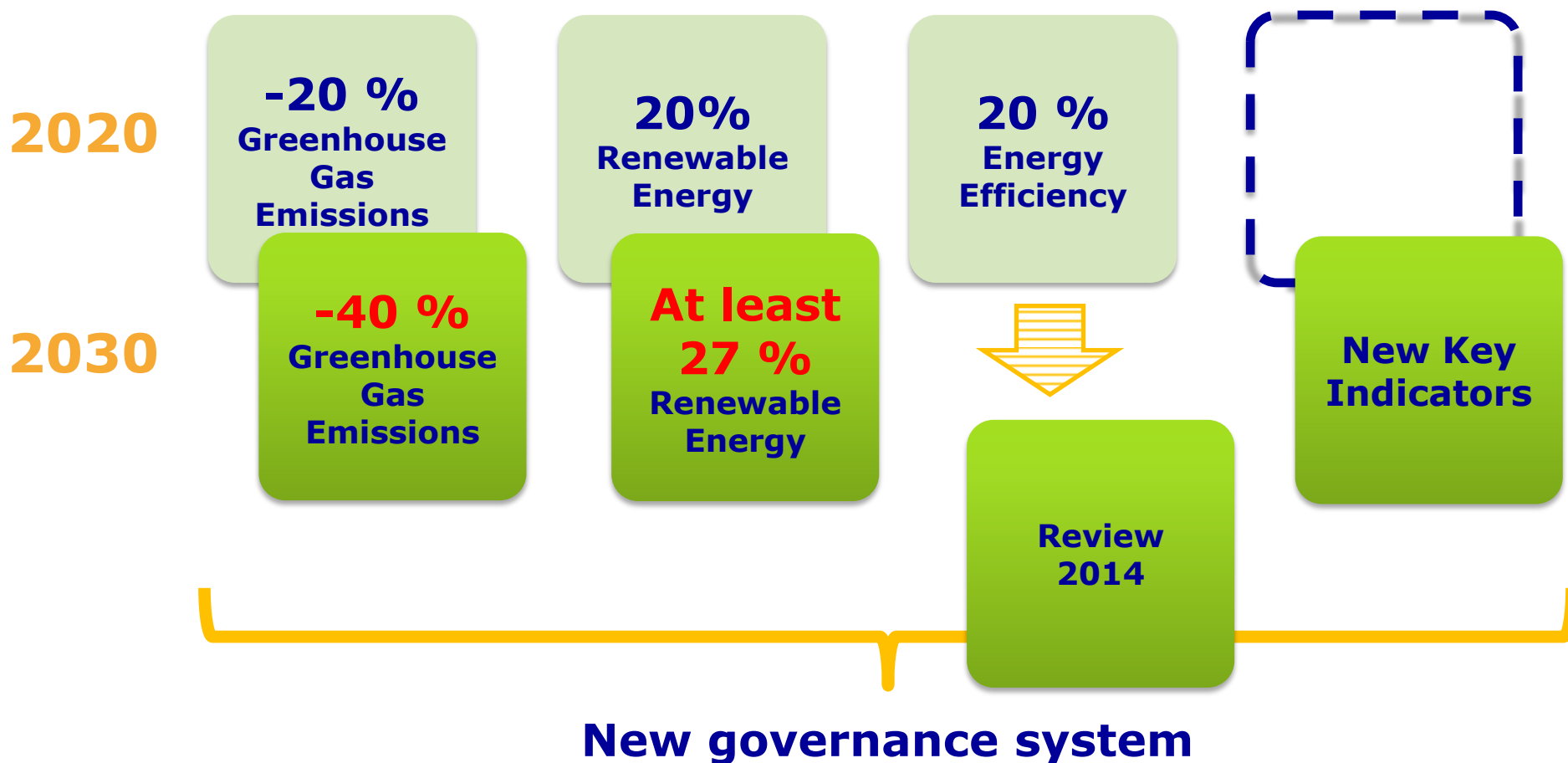
**Security of EU energy supplies**

EU oil and gas imports:  
€ 400 billion per year

Competitive energy and new  
**growth and jobs**

**Eco-industry already employs 4.2 million**

# Climate and Energy framework 2030: How it works



# Low Carbon Technologies and Climate Innovation

- A shift to low carbon technologies in our energy system is needed to achieve the 2050 GHG emission reduction targets over cost effective pathways.
- Impact Assessment for Climate & Energy package estimated the price tag @ 48 billion € p.a.
- **Innovation** plays a role to provide solutions and to turn the risks of climate change into opportunities for business and the citizens.
- To innovate, we need alliances, instruments and partnership to make the transition happen.
- Optimising the public policy response is key

# Support instruments at EU level (1)

- **Mainstream of EU budget : at least 20% of the EU budget on climate related actions- a total of around 200 billion € to be available from the EU budget between 2014 and 2020 for climate-related spending**
- **Directing revenues from EU ETS: NER300 programme**
- 300 million allowances of EU ETS for the financing of commercial-scale CCS and innovative RES demonstration projects, distributed through two rounds of Call for proposals (200 + 100 million allowances)
- The concept of an expanded NER300 will be explored as a way to direct ETS revenues towards innovative low carbon technology
- Continued and strengthened use of auctioning revenues

## Support instruments at EU level (2)

- **LIFE programme:**
- A sub-programme for Climate Action, including as priorities areas adaptation, mitigation and governance and information (864 m€ up to 2020)
- **Horizon2020, the new framework programme for research and innovation:**
  - 70 bn € (2014-2020): at least 35% will contribute to climate policy objectives
  - Close to 6 bn€ in particular for energy efficiency; low carbon technologies and smart cities; top up of financial instruments, PPP and SMEs projects
- **SET Plan**
  - Increased R&D efforts and commercial demonstration across the EU from 3.2 b€ to 5.4 b€ per year

# Engagement in International Collaboration & Mechanisms

Promotion of international technology cooperation, dissemination and networking are important elements in the context of the global long term UNFCCC agreement

The EU supports the UNFCCC's Technology Mechanism, in particular the Climate Technology Centre's pivotal role to initiate knowledge transfer and public private partnerships.

In addition, the EU is active in international organisations promoting low carbon technologies (REEEP, REN21, and others, as well as CEM, CLSF, etc)





# Outlook on opportunities for collaboration

Promotion of R&D&D for low carbon technologies to support action on mitigation and adaptation is a key to advance low carbon technologies.

Promotion of international technology cooperation (on the basis of a country-driven approach), technological innovation and the dissemination of climate technologies in the context of the long-term agreement to be adopted in 2015

Transnational cooperation and networking as important elements for the innovation strategy and for climate change policy. CTCN could benefit from EU experiences with a view to a global engagement in technology transfer mechanism.