

Emissions Trading

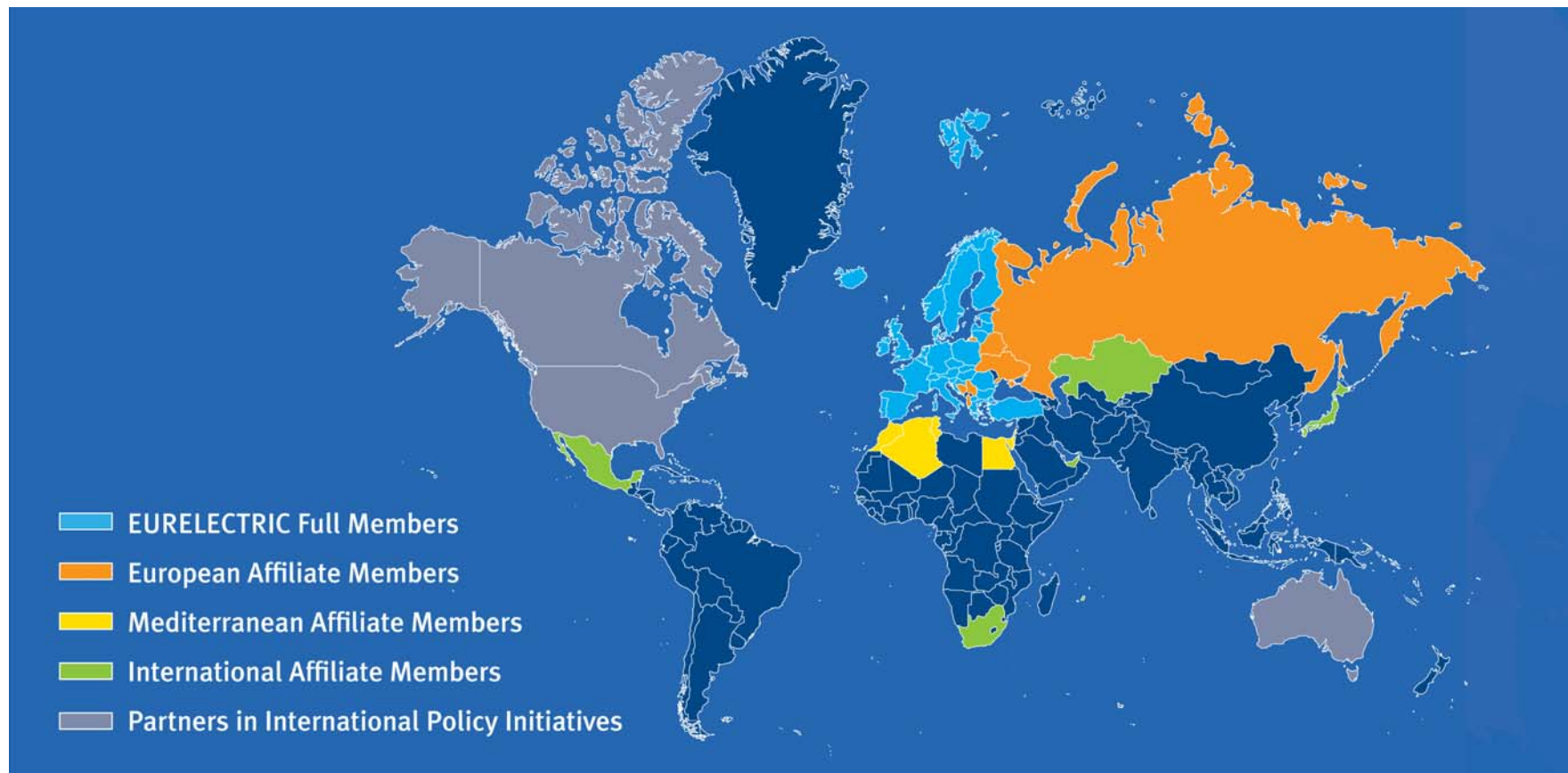
A view from the Electricity Industry

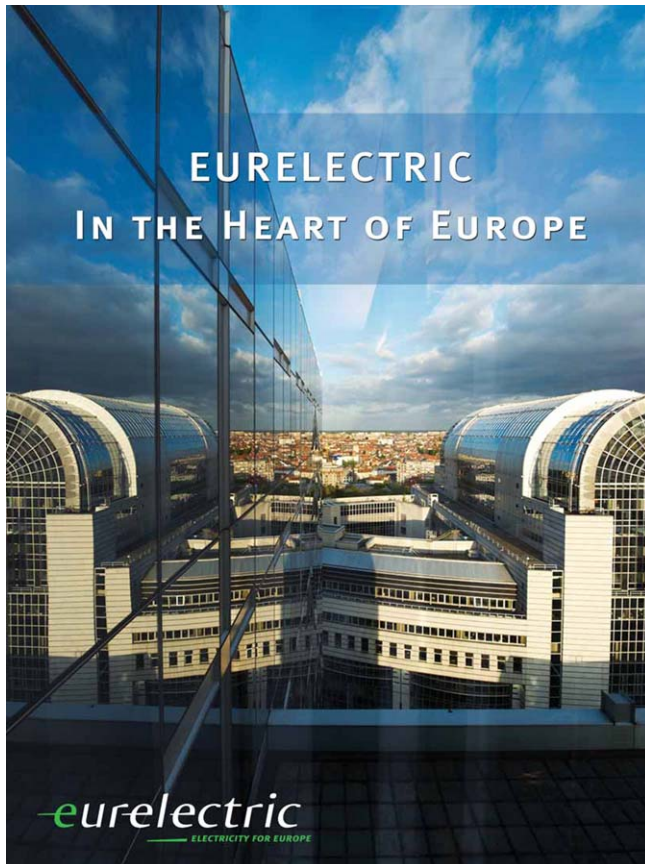
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EURELECTRIC

Tianjin, 8th October 2010

EURELECTRIC – a pan-European and Internationally Oriented Association





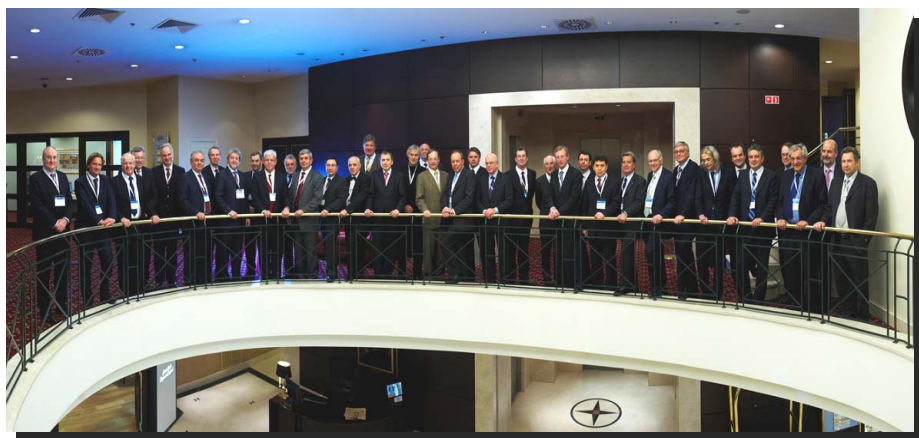
The Voice of the European Electricity Industry:

- Carbon-neutral and secure electricity supply
- Competitive and well-functioning European market
- Electricity as the solution



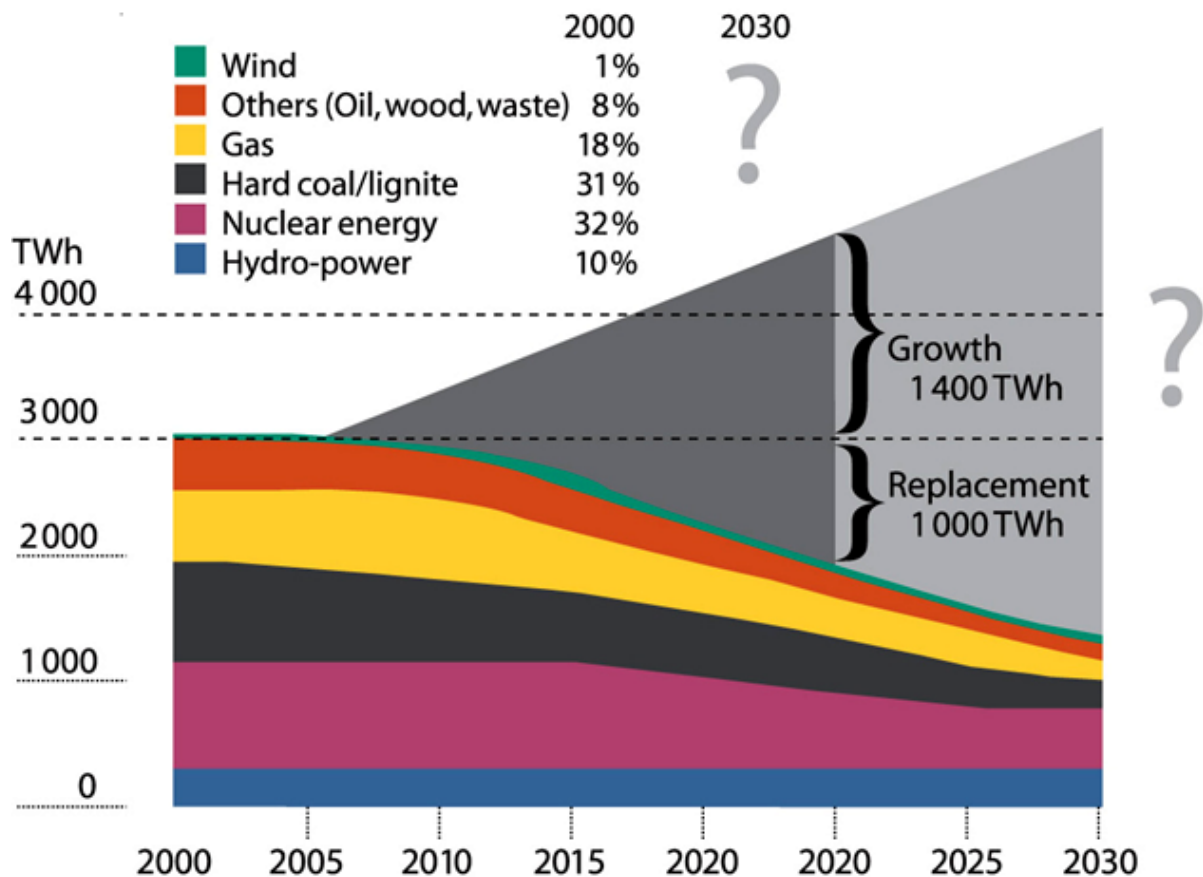
EURELECTRIC CEO Declaration

18 March 2009



- 1. Carbon-neutral power in Europe by 2050**
- 2. Cost-efficient, reliable supply through an integrated market**
- 3. Energy efficiency & electricity use as solutions to mitigate climate change**

Development of electricity generation in the EU 25 between 2000 and 2030



- ✓ Need for huge investments up to 2030 (750 GW)
- ✓ Costly investments (€1 trillion)
- ✓ No technology revolution in sight within 10 years
- ✓ Create an attractive business environment

The need for new capacity

- To replace existing plants and meet increasing demand, about 750 GW new capacity to be built in the EU-25 by 2030 (*according to IEA*)
- 750 GW equals:
 - 5800 CHP plants (130 MWe each)
 - 1250 coal-fired plants (600 MWe each)
 - 470 nuclear units (1,600 MWe each)
 - 190 000 large wind turbines (4 MW each)

Reasons for investment

- **Many European power plants are old and will be retired within 10-15 years**
- **New stricter environmental regulation will force much plant to close**
- **Liberalised electricity markets mean keener competition and some power plants will not be profitable**
- **Electricity companies do not want to keep costly reserve capacity if not paid**

Impact of CO₂ emissions trading

- The **burden of CO₂ reductions** has fallen mainly to **the electricity industry**
- As in most commodity markets, **prices are set by the marginal plant**
- **CO₂** is one of the many factors that **influence short-term marginal operational costs** and hence wholesale prices
- Ultimately, and in the longer term, **electricity prices must cover long-term marginal costs**, including capital costs
- **Signal to invest in low carbon technologies**

Impact on electricity companies

Key elements to be addressed:

- Climate strategy and risk management system
- Financial and accounting arrangements
- Taxation requirements (Corporate, capital gains, VAT)
- Legal, permitting issues
- Investment planning
- Production planning
- Organisation and administration (monitoring, reporting, verification, allowance recording, trading)
- IT systems
- Communication

Company compliance strategies

- **Internal abatement** - Efficiency improvements, fuel switching (if portfolio allows) in short term. Repowering, restructuring plant portfolio, carbon capture and storage in longer term
- **Use of ETS market** - Spot trading of EU allowances (active / passive)
- **Hedge EU allowance forward contracts / derivative products CERs and ERUs** : bilateral, funds
- **Balance for each company based on own circumstances**

EU ETS Issues

- **Unequal implementation – 27 NAPs**
- **Electricity prices**
- **Windfall profits**

Auctioning – key points

- **Price discovery is not a requirement**
 - A functioning market for EUAs exists. Therefore the auction design should be simple.
- **Most important is that auction parameters do not undermine normal price formation in the market**
 - e.g. timing, frequency, participation, transparency arrangements
- **Need early auctions (by mid-2011 at the very latest)**
 - To ensure orderly functioning of carbon AND electricity markets and avoidable (risk induced) electricity price increases
- **Strongly recommend a centralised, common EU-auction platform**
 - Most cost effective and efficient mechanism to release EUAs.
 - At minimum auction rules must be the same in every Member State

Thank you for your attention.

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