



Energy efficiency – European perspectives

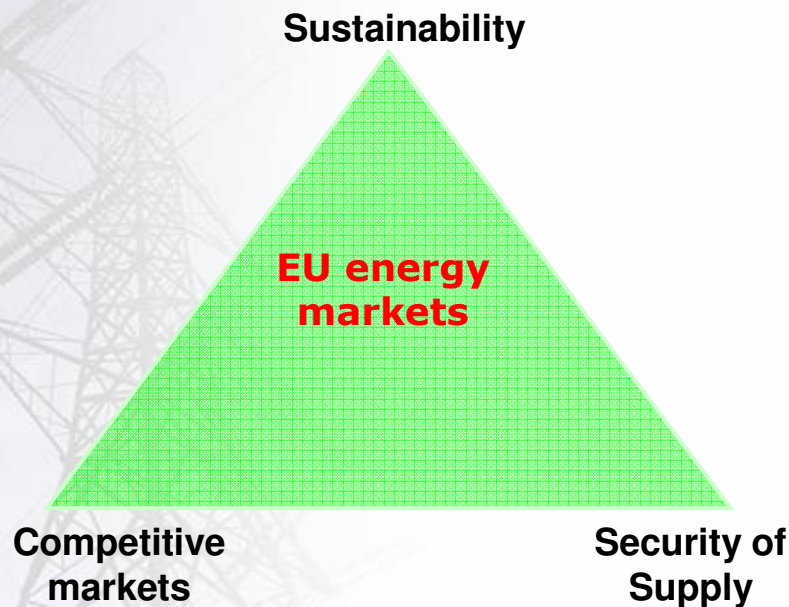
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Structure of presentation

- EU climate policy goals
 - The role of energy efficiency
- European energy regulators & EE
 - CEER overview
 - Smart grids enabling climate targets
- ICER report on energy efficiency
- Concluding remarks

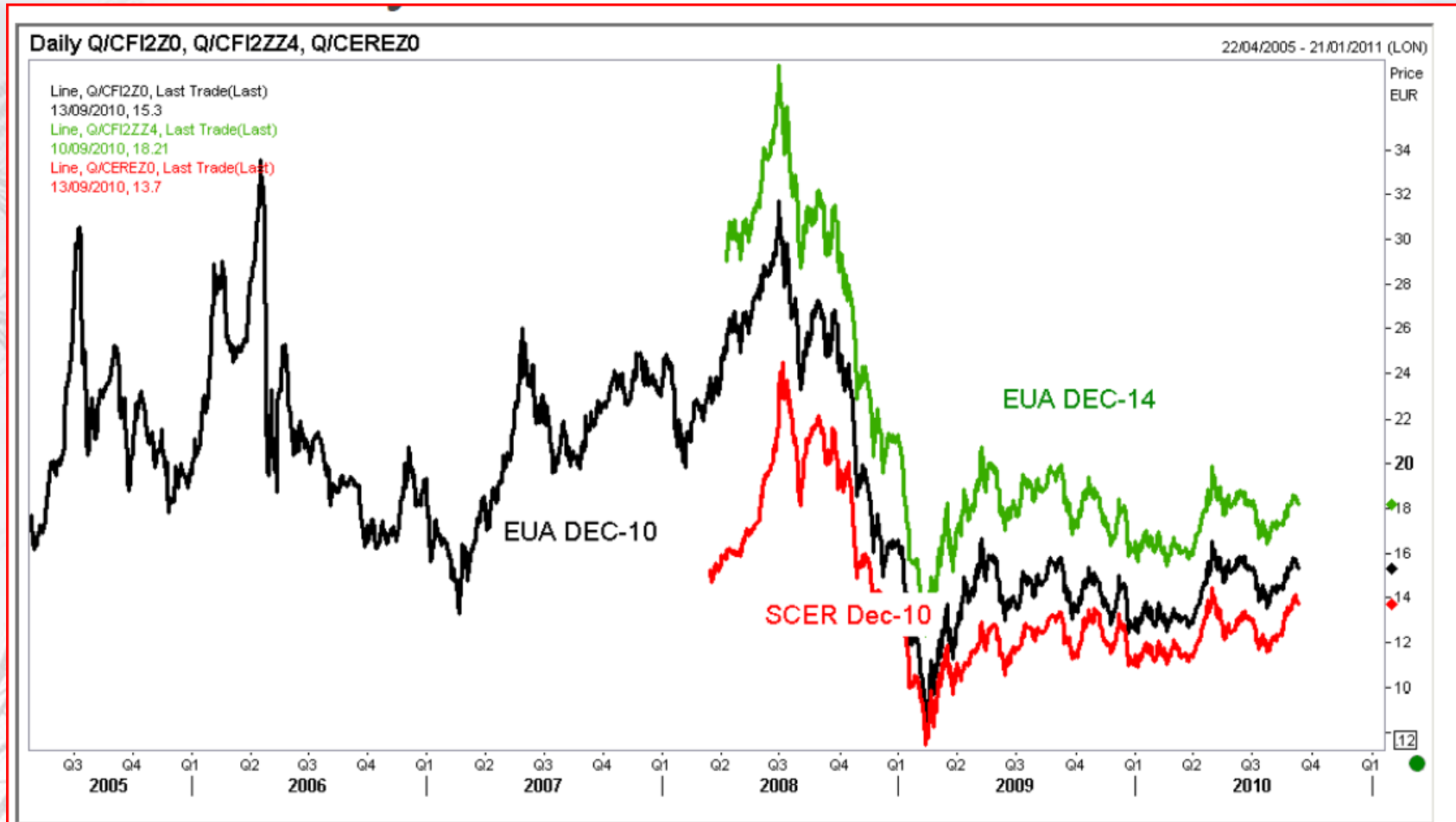


- Demand has fallen due to global economic conditions
- Carbon price and fossil fuel prices have fallen; political focus on renewables
- Incentives for energy efficiency have diminished

Environmental legislation will increasingly govern the design, development and functioning of EU energy markets.



The development of carbon prices



Energy efficiency - its limitations and role

- Unlike emissions and renewables, the 2020 energy efficiency target is not binding
- But energy efficiency helps sustainability, security and affordability
- Commission to propose Energy Efficiency Action Plan in 2011
 - considered binding targets but too difficult?
 - unclear whether will mandate role for utilities
 - key proposals around engagement with civic authorities; building standards

- Support schemes in place:
 - Financial measures: *Austria, Belgium, France, Greece, Italy, Norway, Romania, Slovenia, Spain, UK*
 - Legal or regulatory instruments: *Belgium, France, Portugal, UK*
 - Voluntary agreements: *Finland, Romania*
 - Tradable white certificates: *Italy, France*
 - Behavioural change schemes (e.g. smart meter trials, more informative and standardised billing, energy savings campaigns/programmes): *Belgium, Finland, France, Greece, Ireland, Italy, Norway, UK*
- Regulator's role in EE can vary from none to administrative or advisory, for example:
 - *British, Italian and Portuguese* regulators administer EE schemes;
 - *Austrian, Irish and Romanian* regulators set tariff structures which influence EE;
 - *Estonian, Spanish, German, Greek and Finnish* regulators (among others) had no role.

Smart Grids as enablers

Smart Grid is an electricity network that can cost efficiently integrate the behaviour and actions of all users connected to it – generators, consumers and those that do both – in order to ensure economically efficient, sustainable power system with low losses and high levels of quality and security of supply and safety.

- A growing consensus that ‘smarter’ networks will be required to meet the 2020 EU targets and it is vital that regulatory mechanisms stimulate such developments directly (e.g. by market rules and minimum requirements) and by efficient regulatory incentives.
- Regulators act as key facilitators in this process, by identifying and removing possible barriers and by finding solutions that provide an appropriate balance between all the stakeholders’ positions.

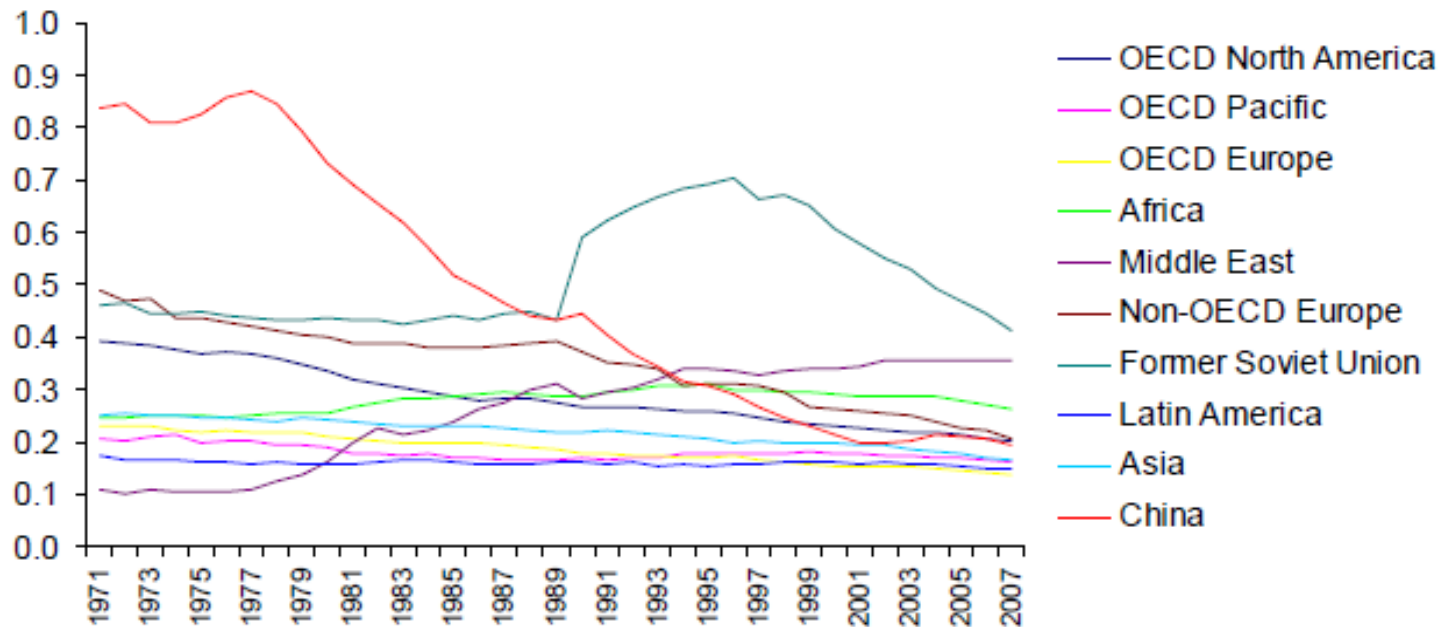


ICER Report on Energy Efficiency

- Covers Africa, Middle East, North America, South America, Asia, Australia, Europe
- Presents information gathered from the world's energy markets on regulatory practices aimed at fostering energy efficiency.
- Competencies of Energy Regulators vary but many regulators have at least some competencies
 - end-use measures, roll out of smart meters
 - setting demand-side management
 - administration of energy efficiency programmes
- VWG2 continues to identify case-studies that have proved particularly effective in order to facilitate the spread of good practice in a practical way

Development of energy efficiency

Total primary energy supply / GDP using purchasing power parities (Mtoe/billion 2000 US dollars)



Source: ICER elaboration on the basis of data tables published in the report: CO₂ emissions from fuel-combustion (2009 Edition, IEA, Paris)



Concluding remarks

- Energy efficiency will have an increasing role in enhancing sustainability and climate targets
- The Energy Efficiency Action Plan due in 2011 will be decisive – are there binding or non-binding targets
- Regulators' role and mandates vary
- There is a need for regulators' cooperation on EE
 - A relatively under-researched field in comparison with its importance as an area of great policy interest in tackling climate change;
 - There is very limited systematic gathering of information on energy efficiency beyond national or regional boundaries;
 - Comparative analysis of the different approaches used to promote energy efficiency worldwide is also very limited.



**Thank you for your
attention**

**ICER report available at
www.icer-regulators.net**

**ERGEG reports on smart grids and
energy efficiency available at
www.energy-regulators.eu**