

Key challenges to climate-friendly energy; a European Union outlook

Mark Johnston, Budapest, 26 October 2007

Outline

- five key challenges
- fulfilling these together in Europe

The five key challenges are to rapidly accelerate our progress on ...

- I. public understanding
- II. efficiency in everything, everywhere
- III. market reform
- IV. polluter pays principle
- V. technology support

“progress” is defined primarily as political and legislative ACTION,

that is, adopting, at various levels, the policies, measures and public messages that lead to changes in personal and corporate attitudes and behaviour, thus enabling many transformations in the way all of us find and use energy.

I. public understanding

- 'climate' is already a crisis
 - responding, at scale, is not optional
 - to avoid “dangerous” climate change, i.e. $< +2^{\circ}\text{C}$, IPCC suggests a need for global net zero emissions by c. 2075
 - this is a HUGE CHALLENGE
-
- political leaders have a duty to communicate
 - via public understanding, preferences change

II. efficiency everywhere

- efficiency in all sectors and in all places
- EU legal framework now mostly in place:
 - Directive 2002/92 Energy performance of buildings
 - Directive 2004/98 Promotion of co-generation
 - Directive 2005/32 Eco-design of energy-using products
 - Directive 2006/32 Energy efficiency & energy services
 - & new vehicle efficiency law in preparation
- all authorities (e.g. IEA) say that efficiency measures have most potential at least cost

III. market reform

- liberalisation is a process (and not a fixed date)
- 3rd legislative package:
 - 'unbundling' of networks from producers
 - fair third-party access to networks
 - phase-out of market foreclosure
 - more cross-border integration
 - new EU agency
 - more transparency
 -
- a 4th package in the future?

IV. polluter-pays principle

- already in EU primary and secondary law, and is basis for Kyoto, ETS & carbon market, etc.
- ETS: essentially, rationing CO² disposal in sky
- ETS law revision; key issues:
 - nature of the cap(s) & cap setting
 - method(s) of allocation
- auctioning will create revenue for re-investment in efficiency and in new technologies
- ETS and Kyoto carbon markets are linked

V. technology support

- carbon markets are not enough
- new technologies, including efficiency, needs specific deployment support
- for renewables, e.g., feed-in tariffs have in terms of growth been most effective
- poor implementation of 2001 EU law
- therefore a need for stronger measures, including stronger coordination (EU SET Plan)

EU headline targets, by 2020 ...

- 20% reduction GHG (30%* with 'RoW')
- 20% increase in efficiency
- 20% share of renewables
- 'up to' 12 CCS demo plants

- * 30% is needed to limit CC to <2°C global average

'check-list' of new EU law-making...

- '19-Sept package'
 - common rules
 - network access
 - X-border integration
 - regulation agency
 - more transparency
- 'January-08 package'
 - GHG target decision
 - RES framework
 - ETS framework
 - CCS framework
 - vehicle efficiency

EU nuclear policy?

- overall, neutral (but big research budget)
- policy focus is on “fixing” safety & waste issues
- three new fora ('talking shops')
- “low-carbon” is in new IM package
- still big challenges...
 - new construction, e.g. Olkiluoto-3
 - finance of decommissioning & waste
 - fuel cycle security strategy e.g. Iran

some common themes...

- stay at top of political agenda
- continued integration
- majority voting on legislation
- internal & external agenda proceed in parallel
- rest of world will adopt EU model

thanks for your attention

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