East Asian Energy Efficiency Co-operation (EAEEC)

Comment

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General comments

Important and timely initiative as part of post-2012 discussion
→ important bottom-up complement to "top-down" approaches

- practical & pragmatic
- limited (but expanding?)
- action-oriented

Very much in same direction as EU initiatives

EU initiatives with China and India (built on Five element EU post-2012 strategy)

1. Build on Kyoto Protocol – using its successful elements, including flexible mechanisms
2. Broaden participation
3. Include more sectors and all gases
4. Deploy and develop technologies
5. Adapt to the effects of residual climate change

The India-EU Strategic Partnership Joint Action Plan

Environment

- Including dialogue on global environmental issues such as climate change

Energy

- Energy Panel with working groups on
  1) Energy efficiency and renewable energies
  2) Coal and clean coal conversion technologies
  3) Fusion energy including India's membership in ITER.

Specific co-operation on:

- Promoting energy efficiency and energy conservation;
- Development of affordable clean energy technologies;
- Identification of new technologies in the field of new, renewable, conventional and non-conventional energy sources;
- Oil and gas, with a view to promoting security of supplies and stability in prices;
- Nuclear energy;
- Technology and expertise in exchange of energy between different grid systems and development of energy markets;
- Development of hydrogen and fuel cells;
- Methane recovery and use.

Voluntary practical measures, to be taken forward at successive India-EU Summits

EU Cooperation with China: overview

More than 20 years of cooperation in the energy sector….

- EU-China High Level Working Group on Energy (MOST)(1995)
  - EU-China Action Plan on Clean Coal Technologies (March 2005)
  - EU-China Action Plan on Energy Efficiency and Renewable Energies (March 2005)
- EU-China Energy Conference (MOST)(1996)
- EU-China Energy and Environment Programme (2004)(€42 million – EC contribution €20)
- EU-China High Level Dialogue on Energy and Transport Strategies (NDRC) (March - Sept. 2005)
- Cooperation on concrete projects in the field of energy research through EU research framework programmes
- Resources: Policy dialogue, Energy & Environment Programme, 6th Research Framework Programme (€2.12/3.3 billion 2002-2006 increasing to €11.3 billion from 2007-2013), further resources being identified

EU-China Action Plan on Energy Efficiency and Renewable Energies (March 2005)

Energy efficiency

- Energy audits to identify savings potential
- Improvement of motor and air compressor efficiency
- Replace industry boilers with condensing boilers
- Identify potential for CHP
- Improve lighting efficiency

Renewable energy

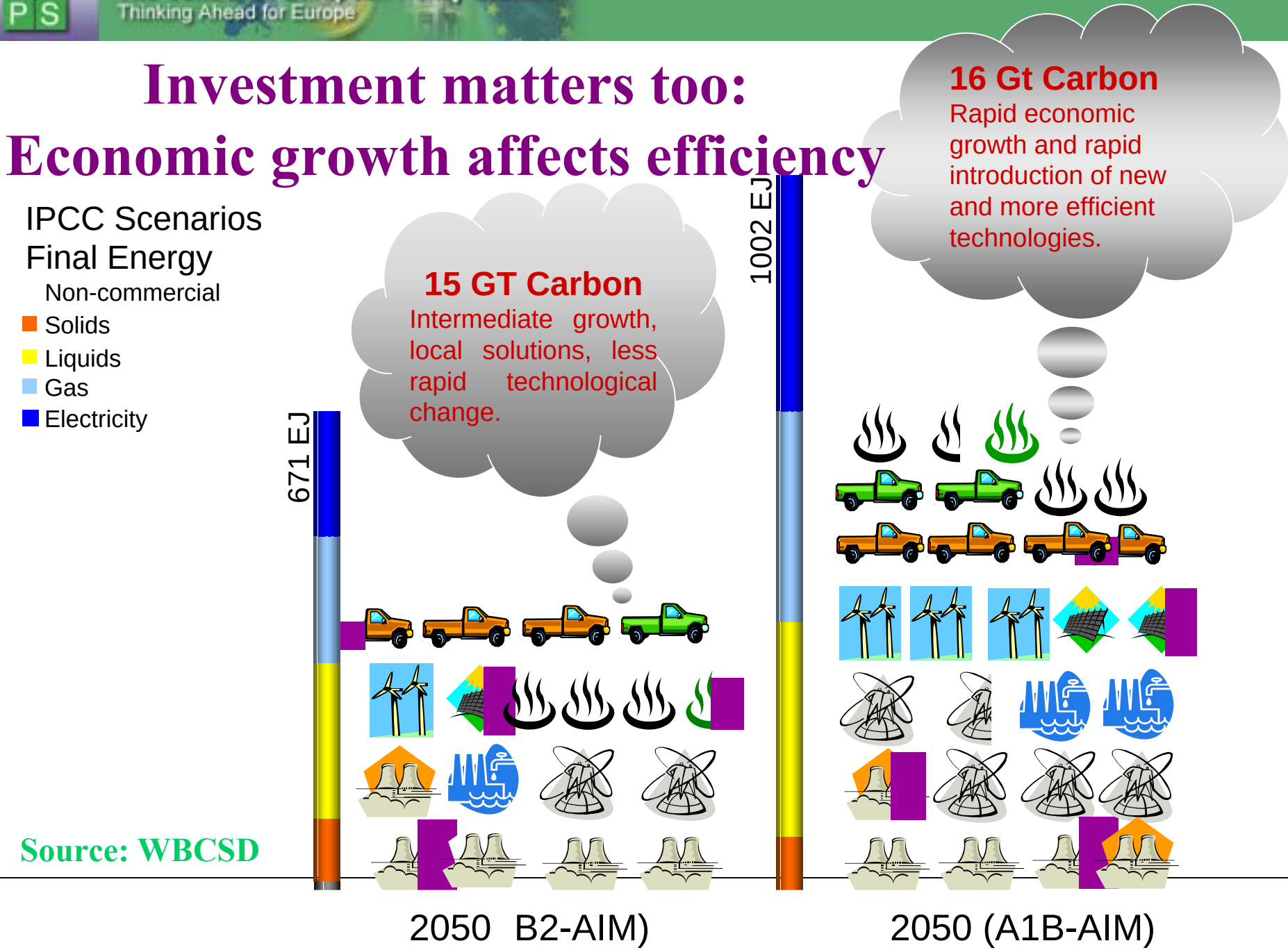
- Cooperation projects on biofuels
- Identify potential for offshore wind power
- Cooperation projects on solar energy

EU experience with energy efficiency

- Many barriers to energy efficiency: lack of information, lack of interest, lack of finance, no management focus, no or split incentives (tenant-landlord relationship) principally in building and household consumption.

- But energy prices matter too; without prices policy energy efficiency policy will fail (EU ETS gives price signal, triggering efficiency improvements).

Investment matters too: Economic growth affects efficiency



Questions/comments

1. Link between energy efficiency and security is not so clear in practice (Why does EU energy security improve if energy import dependence is reduced from 70% to 65%?)

2. Big differences between sectors
   → Tradable goods (appliances, white goods, cars) require global standards
   → Non-tradable goods (buildings, grids) may require national or regional standards

Detailed questions/comments

3. Role of Kyoto Protocol flexible mechanisms?

4. Energy efficiency standards create losers (and winners). EU history is littered with watering down of standards.

5. Quantification is helpful.

6. There are many examples that industrial process are inefficient even in energy-intensive industries. Subsidies for audits can be very efficient.

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