



# Issues that Impact CCS

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## The issues .....

- Demonstrating the technology
- Regulatory and Legal Framework
- Economics
- Infrastructure
- Public awareness and perception
- International co-operation



# Demonstrating the technology

- *Topic has been more than adequately covered in the earlier sessions.*
- But it cannot be sufficiently stressed that there is a **very urgent need** for commercial scale demonstrations of the full range of technologies.
- Without these commercial deployment will not occur
- It will be easier to deploy the technology commercial in countries that have undertaken demonstrations



# Regulatory and Legal Framework

- Neither full demonstration nor commercial deployment can take place without an adequate legal framework.
- *This will be addressed in the first paper in this session*
- I would also like to bring to your attention the draft Directive covering CCS adopted last week by the European Commission
- It is *never too early* to start work on this issue



# Economics

- *This topic will have been covered in the first session of the workshop*
- But wish to raise two points here:
  - Launching demonstration projects will require strong financial commitments by the industry which should trigger strong public financial and political support by governments. (See Commission Communication\*)
  - The price of carbon will be critical for deployment. The EU will rely heavily on the success of its Emission Trading Scheme (ETS). (See Commission Directive\*)

\* *Adopted as part of the energy and environment package of 23 January 2008*



# Infrastructure

- Every source will not have its own dedicated pipeline to its own sink.
- A network of pipelines and the associated infrastructure will be necessary.
- This will require major planning and investment – *even before commercial deployment.*
- It needs to be part of the CCS roadmaps.
- The EU map set up an infrastructure project under its Trans-European Networks for Energy activities (TEN-E)



# Public Perception and Awareness

- The perceived risks to health and safety will be an important issue in determining local public support for any CCS project.
- The very long-term safety of storage sites will be particularly relevant.
- Full scale demonstrations should go a long way towards influencing this perception.
- An adequate regulatory framework that addresses perceived risks is also very important.
- Information and education could also play an important role in gaining public support.
- *The topic will be covered in some detail in this session.*



# International co-operation

- In many ways this is the most critical of the issues.
- In the EU, for example, we can address the various issues and are – at least – reasonably confident that commercial deployment of CCS will take place around 2020.
- However, even with very rapid deployment, the impact on global CO<sub>2</sub> emission – and on slowing global warming - will be small.
- All countries that emit significant quantities of CO<sub>2</sub> need to work quickly towards CCS deployment.
- The best way to do this is to work together – to share experience and knowledge - and some of the costs. *Issues and mechanisms to be covered in the next session.....*



# Theme III programme

- Legal and Regulatory Issues
- Risk Assessment
- Societal Issues related to CCS Deployment
- Public Outreach and Education
  
- Discussion among panellists
- Audience Interaction