Challenges for CCS in Europe

European Commission, DG Energy
Heinz Hilbrecht
Director
Directorate B, Security of Supply, Energy Markets & Networks

10/11/2010 – Clean Coal For Europe, Making CCS work
Why CCS?

According to IEA, 19% of the achievable CO2 reductions by 2050 can be achieved by CCS.
EU Policy Goals

- Short Term
- Mid Term
- Long Term
EU Policy Goals

Short Term Goal

» Transposition of CCS Directive into national legislation

» Demonstration of CCS by 2015
Short Term: Demonstrate CCS by 2015

€1bn funding for 6 projects committed
instrument NER 300 to provide additional financing

- Hatfield, UK: 900 MW, pre-combustion
- Compostilla, ES: 323 MW, oxyfuel
- Porto Tolle, IT: 250 MW, post-combustion
- Jänschwalde, DE: 300 MW, post-combustion & oxyfuel, lignite
- Belchatów, PL: 250 MW, post-combustion, lignite
EU Policy Goals

Mid Term Goal

- Commercially viable CCS by 2020
- CCS demonstration also for gas fired power plants and energy intensive industry
- Development of CCS Infrastructure
Mid Term: CO$_2$ Infrastructure possible developments 2020/2030

CCS infrastructure included in EC’s infrastructure communication

YEAR 2020 - 2005km network - 2.5 billion EUR cumulative investment

YEAR 2030 - 8803km network - 9.1 billion EUR cumulative investment
EU Policy Goals

Long Term Goal

» Majority of Fossil Fuel Power Plants and energy intensive industry equipped with CCS after 2030
Conclusions

Actions to realise all goals need to start now

- Immediate joint effort of EC, MS and industry are needed to realise CCS demonstration:
  - CCS directive has to be transposed quickly
  - Sufficient funding has to be provided to support CCS demonstration
  - Joint efforts needed to work towards higher public acceptance

- Development of CCS infrastructure for the deployment phase after 2020 has to start now

- Realisation of market opportunities: approx. 3400 CCS power plants are needed by 2050 worldwide to realise the potential of CCS for mitigating climate change.
Thank you for your attention