Approving CCS as CDM

The role of CDM to facilitate CCS as an option for global climate change mitigation

Frede Cappelen, Statoil ASA IEA/IETA/EPRI 6th Annual Workshop on GHG Emission Trading Paris 26.09.2006



IEA Energy Technology Perspective CO₂ Capture and Storage a Key Option for electricity generation



- CCS is crucial for the role coal can play in a CO₂ constrained world – without CCS coal-fired generation in 2050 drops below today's level
- By 2050 more than 5 000 TWh electricity globally can be produced by coal-plants equipped with CCS
- There is an urgent need for more R&D and for full-scale CCS demonstration plants
- Generation from renewables can quadruple by 2050
- Nuclear can gain a much more important role in countries where it is acceptable



The near term option for CCS in NA1 countries

- Oil and gas industry projects with high concentration of CO2
 - CDM gives CO2 storage an economic value compare to the alternative venting
- Capturing CO2 from industrial installation where the CO2 can get a value through enhanced oil recovery
 - CDM will offer financial support to overcome
 - uncertainty on the EOR effect of CO2 injection
 - additional cost and liabilities to make an EOR project a climate change mitigation project





CDM can give incentives to early CCS experience

Development of CCS within the framework of CDM gives valuable opportunities

- Broadening the experience of CO2 storage
- Approval of CCS within a regime with several assurance mechanisms
 - Third party validation conditions for CDM is met
 - Monitoring requirements
 - Verification of emission reduction
 - Transparent approval process opening to public input



Geological storage –from expert knowledge and industry's expertise to regulatory requirements

- Alignment of expertise view integrity requirement of geological CO2 storage
- Industry capability to analyse conditions and manage risk subsurface
- Brought to the public domain by IPCC
 SRCSS, IEA GHG program, EU and others
- IPCC 2006 Guidelines GHG National Inventories established condition to exempt CO2 injected from national GHG inventories
- Best practice on monitoring and permitting for CO2 storage in process
- Public acceptance growing





CO₂ in Statoil Business – Statoil's track record

- Statoil works actively to limit the environmental consequences of our activity by addressing:
 - Energy efficiency
 - Emissions trading
 - CO₂ capture and storage (CCS)
 - Renewable energy"

CCS will be a major climate initiative within the gas- and oil industry





Towards the COP/MOB in Nairobi

Providing possible ways to define conditions for CCS as CDM project

- Facilitate the process among Parties and UNFCCC bodies to prepare for
 - COP/MOP guidance to CDM Executive Board
 - CDM EB CCS CDM methodologies, project approval, issuing of CERs
 - Processes to make rules operational
- Utilizing the "consortium's" expertise on CCS and the Kyoto Mechanisms

• Welcome discussion of options and possible solutions



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