

Carbon Capture and Storage

Carbon Capture & Storage Regulatory Principles

Canadian High Commission

30th October 2008



Carbon Capture and Storage

Five CCS 'Must Wins'

Public Acceptance

Financing & Incentives

Regulatory Terms & Conditions

Legal Framework

Technical Issues



Regulatory Principles

Key principles for CCS regulation

- Workable – A simple, stable and predictable regulatory framework
- Responsive – Evolves as the industry matures
- Proportionate – Regulation only when necessary
- Coherent – Works harmoniously with existing frameworks

Other important issues

- Regulatory scope: environmental vs. economic
- Regulatory competence
- The 'need for speed'



Carbon Capture and Storage

Key Uncertainties & Challenges



- Planning consent
- HSE
- Infrastructure access

Transport



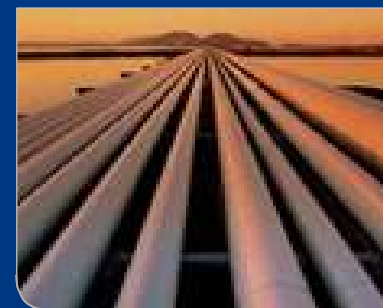
- OSPAR / London Convention
- Enhanced Oil Recovery
- Storage Permits
- Financial Security
- CO₂ Purity
- Post Closure Handover

Storage



CO₂ Transport

- Network versus point-to-point – a case for regulatory intervention?
- Planning & consents – ‘smoothing the way’
- HSE aspects
- Third-party access – balancing priorities



CO₂ Storage

Legal Framework

- OSPAR
- London Convention

EU Commission Permit Review

- A step too far..?

Multiple subsurface users

- Permitting concurrent activities vs. protecting the rights of existing users



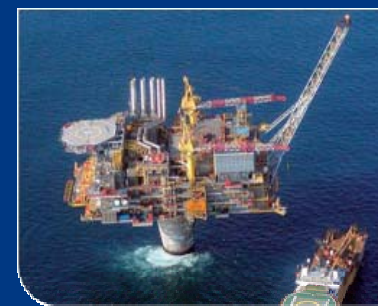
CO₂ Purity

- A legitimate need for technical specifications
- Balancing environmental concerns and technical capabilities
- Balancing costs and benefits
- A waste or not a waste? Removing limits on cross-border transfer



Enhanced Oil Recovery & CO₂ Storage

- Synergies for climate change and security of supply?
- Optional access to CO₂ allowances for EOR operations
- The challenges of parallel licences
- Draft CCS Directive definition of 'Leakage' remains a problem



Financial Security

Key to a workable regime

- No automatic requirement for financial security
- Security provisions must be tailored to project risks and liabilities
- Acceptance of a broad range of security instruments
- Benefits of insurance or pooled funds need to be explored
- Contingent liabilities – a diminishingly small issue



Post Closure Handover

- The need for a clean break
- What are we trying to achieve?
- Defining a handover framework:
 - Time based – the risk of perverse incentives?
 - Criteria-based – managing risks we understand?



Conclusions

- Welcome progress at both EU and UK level but
- There remains much to be done, and time is pressing!
- Key amongst the principles is that regulation should be proportionate
- This is not the beginning of the end ... it's just the end of the beginning



