

Carbon Capture and Storage – Early Opportunities

G8/IEA/CSLG Workshop International Workshop
San Francisco 22nd & 23rd August 2006

Brian Morris

Department of Trade and Industry, UK

Key Messages

- Carbon Dioxide capture and storage (CCS) potentially could be a major element of a low carbon energy economy.
- On a trajectory to a 60% reduction by 2050 CCS is a medium term (2020-2030) technology.
- CCS is important for the deployment of hydrogen technologies as well as power generation.
- Coal options include capture ready plant.

Early Deployment Opportunities

- Utilisation for Enhanced Oil Recovery
- Injection into depleted offshore natural gas fields
- Retrofitting CO₂ capture to existing power plant
- Building new plant “Capture Ready”
- Construction of new power plant integrating CO₂ capture

Bridging the Economic Gap

- Electricity price support for EOR \$3-16/MWh
- Electricity price support for gas reservoir storage \$16-37/MWh
- European Union Emission Trading Scheme?

But economics is only part of the story!

Other issues to be resolved

- Business risk and contracting uncertainties
- Authorisation and regulatory standards
- Compliance with Legal Frameworks
- Monitoring and verification standards
- Inventory/accounting framework
- Long term ownership/transfer
- Public acceptance