

U.S. Perspectives on Financing CCS in Emerging Economy Countries



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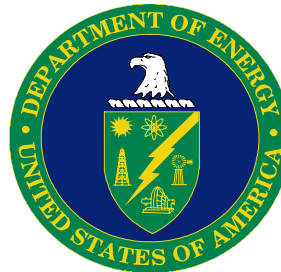
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Carbon Sequestration Leadership Forum

Financial Issues Task Force Meeting

New Delhi, India

2-3 December, 2008





Barriers to CCS

- **CSLF Finance Task Force is developing a strategy to address major barriers to CCS deployment, including**
 - **Cost**
 - **Long-term storage integrity – leakage**
 - **Liability**
 - **Legal & regulatory framework – international and domestic**
 - **Site selection**
 - **Environmental impacts**
 - **Public confidence**



Supporting CCS in Developing Countries

Potential Actions to Encourage Funding

- **Assess current and potential funding options available from**
 - Targeted Clean Energy Technology Funds
 - Australia, Japan, OPEC, UK, USA
 - World Bank Clean Technology Fund (CTF) through their Climate Investment Fund (CIF) includes funding for best available coal technologies and implementation of CCS
 - World Bank ‘Green Bonds’ to finance technologies that reduce GHGs
 - First bonds sold by Swedish bank SEB to Scandinavian institutional investors
 - General financing from Bilateral and Multinational Development Banks (MDBs)
 - Global Environment Facility, International Finance Corporation, World Bank, Inter-American Development Bank, Asia Development Bank, Japan Bank for International Cooperation, and African Development Bank
 - UN Environment Programme Finance Initiative
 - European Investment Bank and Overseas Private Investment Cooperation (OPIC)
 - Partnerships
 - Private-Private
 - MDB-Private
 - Government-MDB



Supporting CCS in Developing Countries

Potential Actions to Encourage Funding

- **Improve understanding of financial instruments for CCS**
 - Survey current MDBs, bilateral programs and public/private technology funds and their respective investment criteria
 - Analyze potential financial instruments to facilitate CCS, in particular, for developing countries
 - Evaluate whether current lending/grant practices by international institutions are likely to support, interfere, or have no effect on CCS deployment
 - Case studies of prior MDB support for clean energy (i.e., renewables)
 - Analyze cost-sharing limits established by different MDBs



Supporting CCS in Developing Countries

Potential Actions to Encourage Funding

➤ Identify policies that could support or promote CCS uptake

- Fiscal incentives

- Tax breaks, including tariff concessions, on imported CCS technology
- Production tax credits
- Soft loans
- Supported price policy on electricity generated from coal-fired plants with CCS
- Percentage of carbon allowance auction revenue allocated to CCS development

- Technology or performance standards

- New coal plants must be capture ready
- New plants must capture X% of emissions or not emit > XY CO₂/kWh produced

- Clean Development Mechanism

- Bali Roadmap: CCS could be included as possible CDM project activity
- Will be considered at COP14 in Poznan, Poland (December 2008)

- Other incentives

- Allow facilities to take credit for stored CO₂ in emerging emissions trading schemes