



POLICY GROUP

World Bank Carbon Capture and Storage Activities

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WORLD BANK CARBON CAPTURE AND STORAGE ACTIVITIES

Note by the Secretariat

Background

The World Bank's Carbon Capture and Storage Trust Fund includes nine regional programs designed to promote capacity building for carbon capture and storage (CCS) projects. This paper is a brief overview of World Bank activities in this area.

Action Requested

The Policy Group is requested to review the overview of World Bank CCS activities.

World Bank Carbon Capture and Storage Activities

Country programs:

The work supported by the WB Carbon Capture and Storage Trust Fund (WB CCS TF) includes nine regional programs designed to promote capacity building for CCS projects. The countries undertaking capacity building projects are Botswana, China, Egypt, Jordan, Kosovo, South Africa, and the Maghreb region (Morocco, Algeria, and Tunisia). As of August 2011, program scopes for India and Indonesia are under development. The types of capacity building projects vary from country to country, and include assessments of geological storage, training and workshops on legal and regulatory requirements for CCS, and assessments of applicability of capture technologies, among others.

Analytical studies:

The first study in the series of analytical activities supported by the WB CCS TF was the report on **Carbon Capture and Storage in Developing Countries: A Perspective on Barriers to Deployment**, which will be available in September 2011. The study draws on the following four analyses to evaluate barriers facing CCS deployment:

Review of Regulatory and Institutional Frameworks on CCS in the Southern Africa and Balkan regions

The World Bank Environmental and International Law Practice Group (LEGEN) reviewed the existing multilateral, bi-lateral and national legislations and regulatory bodies in place for preventing negative environmental effects and human health risks arising from the transport and geological storage of carbon dioxide within the Southern Africa region and Balkan region. Gaps were identified in the legal frameworks that might prevent the development of cross-boundary and national CCS projects where appropriate, and approaches suggested for addressing these gaps to remove the regulatory and legal barriers to regional CCS deployment.

Techno-economic assessment of CCS deployment in power systems in the Southern Africa and Balkan regions

The primary objective of this study was to investigate the economic effects of CCS investments on the regional power systems of Southern Africa and the Balkans through the use of a techno-economic model. The model was tested for several penetration levels of CCS under various energy policy scenarios, giving the impact of their introduction to the power system on electricity price, and the level of deployment of CCS in the power sector.

Assessment of climate finance sources to accelerate carbon capture and storage deployment in developing countries

This study provided an assessment of the role that climate finance sources, both within and outside of the UNFCCC, could play in accelerating CCS deployment in developing countries. The requirements and appropriateness for CCS to be covered by different sources of climate finance including performance-based approaches, public funding, and carbon market offset mechanisms, were investigated.

Financing model for power plants with CCS in developing countries

A finance model was developed to investigate different combinations of financing instruments to fund potential specific power plants with CCS in the developing world, and the level of necessary concessional financing to lower the levelized cost of electricity was explored.