World Bank Carbon Capture and Storage Trust Fund

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Washington, DC
November 6, 2013





CCS Trust Fund: Objectives

Main objectives of the CCSTF

- Main objectives guiding work at the international, regional and national levels:
 - To support strengthening capacity and knowledge building to create opportunities for developing countries to explore CCS potential
 - To facilitate inclusion of CCS options into developing country low-carbon growth strategies and policies
- In co-operation with leading international and bilateral initiatives (Global CCS Institute, Carbon Sequestration Leadership Forum, IEA Programs and others)



CCS Trust Fund: Activities



- Integration of CCS into low-carbon growth strategies
- Building technical and management expertise and skills
- Structuring of legal and regulatory frameworks and financing mechanisms at the country level
- Support capacity building through pilot and demonstration activities
- Structuring modalities for CCS inclusion in the UNFCCC framework



CCS Trust Fund: Resources and Work Program

- Total contributions to the Trust Fund are \$52 million:
 - ➤ Norway \$12 million
 - ➤ Global CCS Institute \$2 million
 - ▶ UK \$38 million
- The current work program consists of the following two components:
 - Country-level activities focusing on nine country- or project-specific activities (\$7.7m)
 - Analytical component: regional regulatory, economic and financial instruments analyses, (\$0.61m)
 - Assistance for pilot and demonstration activities is being finalized









Current Country Level Activities

Projects include:

- Assessments of geological storage
- Training and workshops
- Assessments
 of applicability
 of capture
 technologies

Country/region	Amount allocated (US \$m)
Botswana	1.4
Republic of South Africa	1.35
China	1.8
Mexico	1.3
Indonesia	0.85
Kosovo	0.4
Egypt	0.3
Jordan	0.15
Maghreb	0.4
TOTAL	7.9



South Africa work program (Phase 1) (\$1.35 million)

- Objective: Support the Department of Energy and SA CCS Centre to advance work already carried out in the following areas:
 - Regulatory review to enable the implementation of a pilot CO2 storage project
 - Techno-economic assessment for deployment of CCS Technology in South Africa
 - Capacity Building
 - National and Local Public Engagement Plan
 - Preparatory work for Phase 2 pilot capture and storage project



China work program (\$1.8 million)

- Objective: Strengthen capacity of the China Power Investment Corporation to develop and pilot CCS
- Project activities include:
 - Technological and economic assessment of key chains (capture, transport, utilization and storage) for both post-combustion and pre-combustion technologies, specifically for two potential CCS projects
 - Improve carbon capture practice piloted in Chongqing
 - Training workshops and study tours



Botswana work program (\$1.4 million)

- Objective: Integrate CCS into energy resource planning
- Project activities include:
 - Identification of sites suitable for CCS geological storage or enhanced coal bed methane recovery
 - Formation of the Carbon Working Group
 - Creation of a sustainable Carbon Secretariat as part of the ministerial structure
 - Organization of thematic workshops



Mexico work program (Phase 1) (\$1.3 million)

- Objective: Build capacity on capture and storage in the government and national energy companies
- Project activities include:
 - Techno-economic assessment of a capture pilot at a gas-fired power plant
 - Techno-economic assessment of a follow-up demonstration project
 - Assessment of options for creation of carbon assets
 - Capacity building workshops



Analytical Study -- Carbon Capture and Storage: Regional Perspectives in Developing Countries

	Work program element	Location and scale
1	Review of Regulatory and Institutional Frameworks on CCS in the Southern Africa and Balkan regions	Regional, sector scale
2	Techo-economic assessment of CCS deployment in power systems in the Southern Africa and Balkan regions	Regional, sector scale
3	Assessment of climate finance sources to accelerate CCS deployment in developing countries	Global, sector scale
4	Financing model for CCS projects	Project scale



Second Phase of Country Work Programs

- Donors and the Bank decided that the Second Phase of activities would leverage capacity building and momentum from First Phase
- Support several countries on early piloting
- In final stages of project design to support pilot capture and test injection project in South Africa
- In preparation stage to design pilot capture and storage project in Mexico
- Utilize unallocated resources from First Phase and recent contribution from UK DECC
- Target this work in period up to 2018

