



CSLF-P-2006-03
24 March 2006
Draft

POLICY GROUP

**DRAFT REPORT OF THE TASK FORCE ON
CAPACITY BUILDING IN EMERGING ECONOMIES**

Note by the Secretariat

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CAPACITY BUILDING FOR CARBON SEQUESTRATION IN EMERGING ECONOMIES

Note by the Secretariat

Background

At the meeting of the Policy Group in Berlin, Germany, the Secretariat delivered a plan to assist emerging economies CSLF Members in developing the knowledge, skills and expertise they need to implement Carbon Capture and Storage projects and activities. At that time, creation of a Task Force was recommended that would be comprised of CSLF Members from both developed and developing countries and include delegates from the Policy and Technical Groups. It was also recommended that this Task Force coordinate its activities with the Financial Issues Task Force. This Task Force is chaired by the United States, with Australia, Canada, Colombia, Italy and Mexico also participating.

Actions Requested

The Policy Group is requested to discuss and consider the report of the Task Force on Capacity Building in Emerging Economies.

Conclusions

The Policy Group is invited to note in the Minutes of its 3 April 2006 meeting that:

“The Policy Group discussed and considered the report of the Task Force on Capacity Building in Emerging Economies.”

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CAPACITY BUILDING FOR CARBON SEQUESTRATION IN EMERGING ECONOMIES: PROPOSED WORK PLAN

Report by the Task Force on Capacity Building

Carbon capture and storage (CCS) is an emerging technology that must be accepted by the technical and scientific communities and the public at large if the use of fossil fuel based energy is to continue. While CCS is increasingly understood by communities in the industrialized world, that is not necessarily the case in emerging economies.

The CSLF Policy Group, at its meeting in Melbourne, Australia in September 2004, requested that the Secretariat prepare a report on capacity building for emerging economies. This report was presented to the Policy Group at its meeting in Berlin, Germany in September 2005.

The Report proposed a CSLF initiative:

*“to assist emerging economy Members to build capacity for sequestration. The CSLF has six emerging economy Members—**Brazil, China, Colombia, India, Mexico, and South Africa**—that would benefit directly from this proposed initiative. Carbon sequestration is a complex activity with many technical, economic, and public policy implications. Multiple types of capacity in different institutions—both government and private sector—are required for its implementation. The proposed initiative consists of ongoing collaborative activities by both industrialized and emerging economy Members to build that capacity.*

The objectives of the proposed CSLF Capacity Building Initiative are to:

- *Assist emerging economy Members to develop the knowledge, skills, expertise and institutions they need to understand and implement carbon sequestration;*
- *Develop a set of informational, training and educational resources that all CSLF Members can utilize; and*
- *Identify, document and transfer lessons learned from the prior experience of CSLF-recognized projects and sequestration-related institution building.*

This initiative will accelerate the deployment of carbon sequestration throughout the world through the broader dissemination of knowledge, the building of expertise and institutions in emerging economies, and the intellectual cross-fertilization that occurs through collaboration.”

During the September 2005 CSLF Meeting in Berlin, Germany the Policy Group accepted the report of the CSLF Secretariat on Capacity Building for Carbon Sequestration in Emerging Economies, and approved the creation of a Task Force on Capacity Building (TFCB). Said Task Force is chaired by the United States with the participation of Australia, Canada, Colombia, Italy and Mexico. The Task Force was encouraged to coordinate its activities with the Financial Issues Task Force, and to consider the related work done under APEC, ensuring that all relevant information is gleaned appropriately, and that duplication of effort is avoided.

Organization

The TFCB would consist of six members: Australia, Canada, Colombia, Italy, Mexico and the United States. The Task Force would be chaired by the United States. Both Policy Group and Technical Group delegates of these member countries would be considered de facto members of the Task Force

As specified in the report of the Secretariat, the purpose of the Task Force will be to:

- Ensure that planned activities meet the needs of each emerging economy Member,
- Create a schedule for implementation of the initiative,
- Oversee the development of collaborative capacity building activities,
- Consider policy issues that may arise such as intellectual property rights,
- Guide development of training and academic materials and programs, and
- Create a budget and assemble the necessary resources and funding.”

Approach

The approach to be used by the TFCB is the same as those referenced in the Report by the Secretariat. Per this approach, since the needs of emerging economies vary, activities for each country will be tailored to each country’s specific requirements, building on its initiatives while avoiding unnecessary duplication. In this light, four guiding principles will be considered:

1. Evaluation of the potential for carbon storage,
2. Facilitation of the creation of policy, and legal and regulatory frameworks for carbon storage,
3. Assistance in the evaluation of specific projects, and
4. Assistance in the implementation of capture and storage projects.

In order to execute the above activities, each developing economy needs to develop capacity in minimally three areas:

1. Information and tools

2. Skills and expertise
3. Institutions

The plan for capacity building to be used by the Task Force is the same as that referenced in the Report by the Secretariat. There are five components to the plan:

1. Inventory available resources
2. Evaluate sequestration opportunities
3. Provide training
4. Develop expertise
5. Build institutions

The implementation approach for capacity building to be used by the TFCB is the same as that referenced in the Report by the Secretariat. As noted:

“Implementing this plan will require both an ongoing commitment to capacity building and resources to achieve it.

The proposed work plan which follows is designed to provide both that ongoing commitment and the necessary resources.

Proposed Work Plan

The TFCB envisions an aggressive and comprehensive work plan that incorporates all of the elements mentioned above. The sequence of events is envisioned as follows:

1. A Consolidated Capacity Building (CCB) workshop for emerging economy CSLF Members
2. Formation of country project groups
3. Country assessments
4. Country specific capacity building plan
5. Country specific capacity building workshops
6. Facilitation of project teams
7. Evaluation of potential projects
8. Implementation of carbon and capture storage projects

While this is delineated sequentially, some of these elements may occur concurrently or in some cases in a different sequence, depending on the needs of each individual country.

Consolidated Capacity Building (CCB) Workshop for Emerging Economy CSLF Members

The Energy Working Group of the Asia Pacific Economic Cooperation (APEC) is conducting an assessment of the potential for CCS projects in the APEC region, and

developing training modules to enhance awareness and build capacity for executing those projects within the region. In March of 2005 they published “*A Training Manual for Policy Makers and Practitioners*” for capacity building in the APEC region. The manual was prepared by The Delphi Group and the Alberta Research Council, both of Canada. This manual contains thirteen training modules and two case studies on topics relevant to CCS. APEC is planning two training workshops on how to develop CCS projects. There is considerable overlap between CSLF and APEC members. Two of the CSLF emerging economy Members – China and Mexico - are APEC members. Four are not – Brazil, Colombia, India and South Africa.

At the 2005 CSLF Meeting in Berlin, the Policy Group created the TFCB and encouraged the task force to consider the related work done under APEC, ensuring that all relevant information is gleaned appropriately and that duplication of effort is avoided. With this in mind the TFCB proposes to closely review the APEC “*Training Manual for Policy Makers and Practitioners*,” and work with APEC to incorporate its materials into the CSLF training materials where appropriate.

If the CSLF is to seriously engage in capacity building, it is important that the initial foray be significant and the outcome deemed a success. To inaugurate this initiative, the TFCB recommends a Consolidated Capacity Building (CCB) Workshop. The CCB Workshop should be orchestrated as soon as possible. The workshop would include ten individuals from each of the emerging economy CSLF Member countries – a combination of policy and technical people – for a total of sixty participants plus the trainers.

To prepare for the workshop, the TFCB would:

- Establish a panel of experts to:
 - Review the work of APEC and their “*Training Manual for Policy Makers and Practitioners*”
 - Perform a quick “needs and gaps analysis” for a CSLF capacity building training program and requisite materials
 - Develop an appropriate syllabus for the CSLF training program, incorporating APEC training modules and case studies where relevant
 - Identify experts to develop needed training modules and case studies
 - If needed, publish a training manual similar to APEC’s
(*Special attention should be given to the section in the APEC manual entitled “Note to Trainers” and “Principles for Effectively Using the Training Materials”*)
- Oversee the development of training modules, case studies and materials
- Select and certify trainers
- Schedule and hold the workshop

All training materials -- modules, case studies and other materials -- should be incorporated into a training manual and developed in such a way that the author of the material is not the only trainer capable of presenting it. There should be training objectives established for the overall course and each training module. Evaluative criteria should be established to make certain the training course is accomplishing its

stated objectives. All materials would be prepared in English. A database of trained individuals and certified trainers should be maintained by the CSLF Secretariat and published on the website.

The cost for this workshop, and the travel expenses related to the workshop, should be borne by the industrialized CSLF Member countries, perhaps through their foreign aid institutions.

Formation of Project Groups

Immediately after, or concurrent with, the General Capacity Building Workshop, the TFCB will encourage and facilitate the development of Project Groups. Each Project Group would focus on one emerging economy CSLF Member, and be sponsored by one or more industrialized CSLF Members. In unique cases it may be possible to form a Project Group with more than one emerging economy CSLF Member as its focus; this may particularly be the case where emerging economy CSLF Members have regional or geologic similarities. Once these Project Groups are formed, the Member Sponsors and Member Recipients would be integral to subsequent capacity building elements for that Project Group.

The function of the Project Groups would be to carry out a country-specific CCS assessment, and develop a plan for capacity building as discussed below. This will require the efforts of people with adequate expertise to oversee or carry out these functions.

Country Assessments

Once a Project Group is formed it will immediately begin a Country Assessment using the approach established in the Report by the Secretariat cited above. Their assessment will consider the following:

1. The potential for CCS within the targeted country
2. The status of policy, legal and regulatory frameworks
3. The existence and quality of requisite information and diagnostic tools
4. The skills and expertise of relevant policy makers and technical people
5. The skills and expertise of relevant institutions

Country Specific Plan for Capacity Building

Once the Project Group completes its assessment, a country specific Plan for Capacity Building should be developed using the guidance provided in the Report by the Secretariat, and should include:

1. An inventory of available resources
2. An evaluation of sequestration opportunities
3. A description of, and plan for, short-term personnel training needs
4. A description of, and plan for, long-term personnel expertise development
5. A description of, and plan for, institutional building needs

It should be noted that India is currently leading a CSLF Policy Group task force on examining financing of CCS projects in emerging economies. The plan for institution building in the financing area should follow the recommendations of this task force.

This composite plan becomes the guiding document of all subsequent work.

Country Specific Capacity Building Workshops

The result of Country Assessments should be individual, country specific Capacity Building Workshops. Using training modules and materials developed by the Task Force as part of its General Capacity Building Workshop as a starting point, training modules, training materials and case studies would be tailored by the trainers to the specific needs of each country. Invitees to these Workshops should meet the objectives of the short- and long-term objectives of personnel development, expertise development and institutional development.

Facilitation of Project Teams

A result of the Country Assessments and the Country Specific Workshops should be a cadre of available, trained personnel and institutions. The Project Group would facilitate the formation of a Project Team from the Member Sponsor country, and the available local resources from the Member Recipient country.

Evaluation of Potential Projects

Once Project Teams are formed evaluation of potential projects can commence. Per the Report by the Secretariat cited above:

“These evaluations may include pre-feasibility, feasibility and regulatory studies of various types. The objective of these analyses, which may be performed by different types of institutions to carry out their roles, is to support decisions about the proposed sequestration projects. In the beginning, many of these projects are likely to involve government participation and thus may require more analysis by governmental bodies; eventually they will become increasingly commercial and the parties that conduct some of the evaluations may change. Depending upon the situation, public institutions may need to provide general or specific terms of reference, evaluate their results or carry out the analyses themselves. In any event,

each institution must have the capacity to carry out its evaluations credibly and competently.”

Implementation of Carbon Capture and Storage Projects

The goal of the entire Capacity Building Initiative is to have CCS projects in all emerging economy CSLF Member countries. It is further a goal that these countries develop the capability to evaluate and execute projects on their own. It is hoped that the Work Plan developed by the TFCB will achieve those goals.

It is understood that to execute a CCS project outside funding will likely be needed. As stated above, India is currently leading a CSLF Policy Group task force on examining financing of CCS projects in emerging economies. It is hoped that the results of the work of this task force will facilitate the financing of CCS projects in emerging economies.