

CSLF-P-2005-10 12 January 2006 Final Draft



#### DRAFT

## MINUTES OF THE CSLF POLICY GROUP MEETING AND JOINT MEETING OF POLICY AND TECHNICAL GROUPS

BERLIN, GERMANY 27-28 SEPTEMBER 2005

Note by the Secretariat

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#### MINUTES OF THE CSLF POLICY GROUP MEETING AND JOINT MEETING OF POLICY & TECHNICAL GROUPS 27-28 SEPTEMBER 2005 BERLIN, GERMANY

Note by the Secretariat

#### Background

A meeting of the Policy Group of the Carbon Sequestration Leadership Forum was held on 27 September 2005 and a Joint Meeting of the Policy & Technical Groups was held on 28 September 2005 in Berlin, Germany. Initial draft minutes of these meetings were compiled by the Secretariat and were circulated to the Policy Group delegates for comments. Comments received were then incorporated into this final draft.

#### **Action Requested**

Policy Group delegates are requested to review and approve these draft minutes.

#### Conclusions

The Policy Group is invited to note in the Minutes of its next meeting that:

"The Policy Group approved as final the minutes of its September 2005 meetings."

#### Carbon Sequestration Leadership Forum Draft Minutes of the Policy Group Meeting Berlin, Germany 27-28 September, 2005

#### LIST OF ATTENDEES

#### **Policy Group Delegates**

Australia: John Ryan (Vice Chair), Tania Constable

Brazil: Paulo Rocha Cypriano

Canada: Mondher BenHassine, Mike Howarth

China: Kong Xiangwen, Tian Baoguo Colombia: Carolina Villafane Garcia

Denmark: Søren Frederiksen

European Commission: Angel Perez Sainz, Peter Horrocks

France: Bernard Frois, Philippe Geiger

Germany: Helmut Geipel, Hans Neef, Thomas Rueggeberg

India: R.V. Shahi

Italy: Sergio Garribba (Vice Chair), Marcello Capra

Japan: Hiroshi Yamagata

Korea: Lee Jae-Hong

Mexico: Maria Elena Sierra Galindo Netherlands: Hans Bolscher, Pieter Boot

Norway: Odd Sverre Haraldsen, Froydis Eldevik

Russia: Sergey Mazurenko Saudi Arabia: Khalid Abuleif

South Africa: AD Surridge, Jeffery Kgobane

United Kingdom: Brian Morris, Jeff Chapman, Tim Dixon

United States: Mark Maddox (Chair), Judd Swift, Daniel Reifsnyder

#### CSLF Secretariat

Barbara McKee Richard Lynch

#### **Invited Speakers**

Harmut Schneider (representing Germany's National Organizing Committee) Fiona Nicholls (representing CSLF Stakeholders)

#### **Other Attendees** (after meeting was opened to Observers)

There were also approximately ten Observers present at the meeting.

#### Policy Group Meeting, Session of 27 September 2005

The meeting of the Policy Group opened in Executive Session closed to Observers.

#### 1. Adoption of Agenda

The Policy Group Chair, Mark Maddox of the United States, called the meeting to order and began the session by requesting that the item on Permanent Observer Status be removed from the Agenda, and that the presentation on "G8 and the CSLF" be moved from its scheduled spot to later in the day. There were no objections and the Policy Group Agenda was then adopted without further change.

#### 2. Introductions

Policy Group delegates present for the session introduced themselves. All twenty-one CSLF Members were represented at this meeting, including the four new Members: Denmark, Korea, Netherlands, and Saudi Arabia.

#### 3. Welcome Address of Host Representative

Mr. Maddox introduced Harmut Schneider, the Assistant Director General for Energy of Germany's Federal Ministry of Economics and Labour, who welcomed the delegates to Berlin. Mr. Schneider stated that Germany was proud to host the meeting and that it would soon join International Energy Agency (IEA) implementation agreements related to climate change.

#### 4. Review and Approval of Minutes from Melbourne Meeting

The Policy Group minutes from the September 2004 CSLF meeting in Melbourne, Australia, were approved with no changes. Barbara McKee of the CSLF Secretariat reported that the Secretariat had accomplished all actions resulting from the Melbourne meeting. Mr. Maddox stated that many items on this meeting's Agenda are in follow-up to the Melbourne meeting.

#### 5. CSLF Membership Criteria

Mr. Maddox provided a short synopsis of the activities of the Policy Group's Membership Criteria Task Force that had been formed earlier in 2005. The purpose of this Task Force was to "explore the idea of membership limitations as a possible solution to the challenges of an expanding CSLF membership base." The Task Force, chaired by Mr. Maddox, also consisted of Policy Group delegates from Australia, China, the European Commission, Japan, South Africa, and the United Kingdom. The report from this Task Force suggested changes to both the CSLF Charter and the CSLF Terms of Reference and Procedures (ToR). The proposed amendment to the Charter would prevent new CSLF Members from appointing delegates to the Policy

Group without the consent of the Policy Group, while the proposed amendment to the ToR mandates that a country applying for CSLF Membership meet several criteria.

Ensuing discussion led to the consensus that the CSLF membership should be as open and as inclusive as possible. The proposal to amend the CSLF Charter was not accepted.

Upon motion, concurrence to suspend the existing Section 2.1 of the ToR was reached. Also upon motion, concurrence was obtained to accept the proposed amendment to Sections 2.1 of the ToR in the CSLF Membership Criteria Task Force Proposal, except that the word "demonstrate" in point 3 should be changed to "describe". The revised ToR is incorporated in these minutes as Annex A.

Further, concurrence was reached to amend Section 2.2 of the CSLF ToR suggested amendment in the CSLF Membership Criteria Task Force Proposal that the Policy Group will make decisions on membership applications at its meetings.

It was agreed that no new membership applications will be acted on by the Policy Group until its next meeting, except that the pending application of Greece was approved. Greece will become the CSLF's 22nd Member as soon as the CSLF Secretariat receives a copy of the CSLF Charter signed by Greece at the Ministerial level.

#### 6. Future of CSLF Management and Structure

Mr. Angel Perez Sainz of the European Commission proposed that, in light of the rapid growth and changes being experienced by the CSLF, there might be a need to revise the way the CSLF operates, including, if necessary, a revision of the Charter and ToR. Ensuing discussion did not lead to consensus. At the suggestion of Mr. Maddox, the European Commission agreed to create a working group with other Members and the help of the Secretariat to pursue proposed concepts and present a paper on this topic at the next meeting. This working group would also address application of membership criteria and related issues. However, following consideration of the Discussion of Work Plan item (described in Item 18, below), it was agreed that this working group would be merged with the Task Force for Development of the CSLF Strategic Plan, with the combined Task Force to be cochaired by Australia and the European Commission.

#### 7. Future CSLF Meetings

Mr. Maddox proposed that the next Policy Group meeting take place in less than a year and prior to the next Ministerial meeting. Agreement was reached for this meeting, and India volunteered to host the meeting. Consensus was reached, and the next CSLF meeting will take place in India during April 2006.

Mr. Maddox stated that he wanted participants from the Policy Group for a Task Force that would review and define the work of the next the Ministerial as well as its timing. There were no immediate volunteers, so an announcement concerning this Task Force and its make-up will come later. The next Ministerial meeting will be an Agenda item for the next Policy Group meeting with the goals of establishing a clear plan for going forward and developing a "products and outcomes" document for the Ministerial.

Following this agenda item, the Executive Session ended and the Policy Group meeting was opened to observers.

#### 8. Use of the CSLF Logo

Ms. Barbara McKee of the CSLF Secretariat delivered a presentation on possible issues surrounding the use of the CSLF logo. The CSLF logo is an important symbol that carries the credibility of the CSLF and it is important to make sure it is used properly. She stated that the Secretariat had received requests from other organizations to use the CSLF logo and that the Secretariat needed clear guidance from the Policy Group.

Ensuing discussion led to the following consensus:

- Use of the CSLF logo will be restricted to CSLF projects, events, and activities. Permissible uses include individual CSLF Member outreach to stakeholders. Other parties will not be allowed use of the logo without the permission of the CSLF.
- The Secretariat will initiate legal registration of the logo on behalf of the CSLF.
- The Secretariat should avoid cumbersome procedures for use of the logo.
- The Secretariat will manage the use of the CSLF logo. The Secretariat will inform the Policy Group Chair of any issue concerning misuse of the logo, and the Chair will decide if the issue should be put in front of the Policy Group?

#### 9. G8 and the CSLF

Mr. Brian Morris of the United Kingdom delivered a short presentation on the recent G8 Summit at Gleneagles, in the United Kingdom, where the CSLF was recognized as "a leading international activity on capture and storage (CCS) that involves both developed and developing countries." At the Gleneagles Summit, the G8 endorsed the objectives and activities of the CSLF; invited the IEA to work with the CSLF to hold a workshop on short-term opportunities for CCS in the fossil fuel sector; and invited the IEA to work with the CSLF to study definitions, costs, and scope for a "capture ready" plant and consider economic incentives.

Discussion by the Policy Group led to the consensus that the G8's recognition of the CSLF and its requests were welcome, but details were lacking on how to proceed. It was further agreed that, as soon as possible, the Chair of the Policy Group should send a letter addressing G8 collaboration to the Executive Director of the IEA.

Mr. Maddox proposed that a Task Force be formed to develop a document outlining possible responses to G8's requests so that the Policy Group could develop a consensus on how to proceed. Consensus was reached for creation of this Task Force, to be led by the Policy Group Chair. CSLF Members expressing an interest in participating on this Task Force included Australia, Canada, China, Italy, India, Norway, South Africa, the United Kingdom, and the United States. An immediate objective of the Task Force was to produce a draft of the letter to the Executive Director of the IEA described above. This draft was to be discussed and finalized at the 28 September Joint Meeting of the CSLF Policy and Technical Groups.

#### 10. Report from Public Outreach Task Force

Mr. Mondher BenHassine of Canada delivered a presentation that outlined previous and ongoing efforts by the CSLF and its Members on public outreach and what might be done by the Policy Group to increase public awareness and interest in CCS. Canada's report incorporated the input on ongoing public outreach activities from four CSLF Members (Australia, Canada, France, and the United States); the report's conclusions were that there is limited activity in this area by most CSLF Members and that the public is not well-informed on CCS as an option for greenhouse gas mitigation.

Ensuing discussion led to the consensus that public acceptance is the key to CCS (and CSLF) success and that public outreach should therefore be a CSLF priority. The report of the Task Force on Public Outreach and its recommendations were accepted by the Policy Group and the Secretariat was requested to investigate on how to implement these recommendations.

It was also decided that the Secretariat should investigate and report back to the Policy Group on the mechanics and feasibility of creating a "blog" (i.e., a "web log" or online journal) for use by stakeholders in expressing their views.

#### 11. Report from Financial Issues Task Force

Mr. R.V. Shahi of India delivered a presentation on financing CCS projects in developing countries. He stated that developing countries have yet to be very involved in CCS R&D projects because such projects are often costly and developing countries usually have more pressing needs for their limited resources. Mr. Shahi proposed creation of a US\$100 million fund for CSLF projects with contributions based on per-capita CO<sub>2</sub> emissions.

After discussion, the Policy Group did not come to a consensus concerning this proposal. Issues brought forth by the Financial Issues Task Force will be revisited at the next CSLF meeting, and the Financial Issues Task Force will coordinate its activities with the Capacity Building Task Force.

#### 12. Report on Capacity Building for Carbon Sequestration in Emerging Economies

Ms. Barbara McKee of the CSLF Secretariat delivered a presentation that outlined a possible plan for assisting emerging economy CSLF Members to develop the knowledge, skills, and expertise they need to understand and implement CCS projects and activities. As a first step, creation of a new Task Force was recommended that would be equally comprised of CSLF Members from developed and developing countries, including delegates from both the CSLF's Policy Group and Technical Group. This Task Force would then assess specific capacity needs, develop country action plans for each CSLF emerging economy member, and discuss ways to secure funding as necessary for any ensuing CCS projects and activities called for in the country action plans.

The Policy Group accepted the Secretariat report and concurred on the creation of the proposed Task Force, with the provision that it should coordinate its activities with the Financial Issues Task Force. This Task Force will be chaired by the United States, with Australia, Canada, Colombia, Italy, and Mexico also participating. Canada noted related work done under APEC and recommended that the Task Force ensure that all relevant information is gleaned appropriately, and that any duplication of effort is avoided.

#### 13. Stakeholder Registry

Ms. Barbara McKee of the CSLF Secretariat delivered a presentation on the planned CSLF Stakeholders Registry with guidelines for its implementation. The Policy Group had requested at the Melbourne meeting that the Secretariat implement a Registry for CSLF Stakeholders. The purpose of the Registry is to give stakeholders access to timely information and to help gauge the breadth of stakeholder interest in CSLF-related activities. CSLF Members could also use the Registry to obtain stakeholder input. Stakeholder registration would be handled by use of a form on the CSLF website.

Ensuing discussion led to the following consensus:

- A simple, streamlined application process and form for stakeholder registration is desirable. Applicants should not be burdened with excessive bureaucracy and paperwork to become CSLF Stakeholders. The Registry should also be able to accommodate all categories of stakeholders.
- The Secretariat should begin implementation of the CSLF Stakeholder Registry via the CSLF website.
- The proposed registration process that requires approval by a Stakeholder Registry Certification Panel was not agreed to and will not be part of the process.
- There should also be no linkage to any national stakeholder registries.

The Secretariat was instructed to prepare a revised draft of Stakeholders Registry and Guidelines document for review at the 28 September Joint Meeting of the CSLF

Policy and Technical Groups. A final draft of the "Proposed CSLF Registry and Guidelines for Implementation" document is incorporated as Annex B. This document incorporates all of the decisions made by the Policy Group at its meeting.

#### 14. Update from Stakeholders Meeting

Ms. Fiona Nicholls of Rio Tinto plc delivered a presentation on the outcomes from the CSLF Stakeholders Meeting of 26 September. Speaking on behalf of the stakeholders who attended that meeting, Ms. Nicholls stated that CSLF stakeholders are fundamentally supportive of the work and role of the CSLF but believe that the stakeholder engagement process is not working. She also stated that the CSLF needs a Strategic Plan, which would articulate CSLF strategies and intentions in the areas of technology, policy frameworks, capacity building, financial/infrastructure hurdles, outreach, and collaboration. Ms. Nicholls further recommended that each of these areas needs its own roadmap, gap analysis, and evolving set of actions. She stated that stakeholders believe that their involvement would expedite rather than impede the CSLF process. She further stated that stakeholders need to be involved at different levels, that the stakeholder understood the place of privacy for governments, that stakeholder involvement and public outreach are different, and that the stakeholder role was one of partnership.

Ensuing Policy Group discussion led to the following consensus:

- Stakeholders add benefit to the CSLF, and the CSLF and its Members have a responsibility to do more to involve stakeholders. To that end, stakeholders will be included on Task Forces as needed and the Chair will exercise the option available to it under the CSLF Charter to recognize "technical experts" present in the audience at CSLF meetings.
- There should be a Stakeholders session as part of the next CSLF meeting in India, and the Policy Group meeting should include a report from the stakeholders session as an agenda item. Stakeholders affirmed that they would prefer to make that report early in the meeting.
- The CSLF agrees to the need for more openness, and the CSLF should limit closed meetings only to discussions of sensitive issues.

#### 15. Discussion of Openness and Transparency

Mr. Maddox proposed, as a step toward increasing the openness and transparency of the CSLF, that the "Members Only" section of the CSLF website be eliminated. This would allow all documents on the website to be viewable by any visitor to the website. The ensuing discussion led to the following consensus:

• The CSLF Secretariat should remove the password protection of the Members area, but give notice before documents are posted in order for the CSLF delegates to be aware that they are about to be posted and give them a final chance to make appropriate edits.

 Any draft documents being circulated for approval or any documents deemed to be of a sensitive nature should now be provided to CSLF delegates by e-mail instead of via the website.

#### Resumption of Policy Group Meeting on 28 September 2005

The meeting of the Policy Group resumed on the morning of 28 September to address agenda items not covered on 27 September. Both Policy and Technical Group delegates were present and the meeting was open to observers.

#### 16. Remarks by the Chair

The Policy Group Chair, Mark Maddox of the United States, called the session to order and began by thanking Germany's National Organizing Committee for its kind hospitality in arranging a private viewing of the Francisco Goya exhibit for CSLF meeting attendees.

#### 17. Stakeholder Registry

In follow-up to the Item 13 (above), copies of the revision to the Stakeholders Registry Policy were distributed to the delegates for review. No objections were raised to the revisions and the revised document was approved. The revised Stakeholders Registry document is incorporated in these minutes as Annex B.

#### 18. Discussion of Work Plan

Vice Chair John Ryan of Australia provided a short summary of the CSLF Draft Strategic Plan that had been prepared by Australia in consultation with Australian industry stakeholders. The five main strategies of the Plan are to:

- 1) Identify gaps in CCS technology.
- 2) Work to put a policy framework in place for study of definitions, cost and scope of a "capture ready" plant while working to address institutional barriers, identify infrastructure issues, and identify potential investment barriers.
- 3) Collaborate with developing countries on research options and work toward capacity building to develop the range of skills needed for eventual widespread deployment of CCS technologies.
- 4) Work, with stakeholder involvement, to address barriers to the public acceptability and acceptance of CCS.
- 5) Collaborate with other international or multinational agencies involved in CCS and identify potential areas of multilateral collaborations. Work with industry and national/international research programs to explore the potential of CCS technologies, including with developing countries.

Ensuing discussion led to the following consensus:

- A Task Force should be formed to continue the development of the CSLF Strategic Plan, taking into consideration the draft proposed by Australia.
- Stakeholders are essential to this process and their input should be incorporated.

Mr. Maddox asked for volunteers for this Task Force, which is to be co-chaired by Australia and the European Commission. Canada, Italy, India, Norway, Saudi Arabia, the United Kingdom, and the United States volunteered to be on the Task Force, with other representation to be decided later. It was subsequently agreed that the working group formed during discussion of "Future of CSLF Management and Structure" earlier in the agenda (described in Item 6, above) would be merged with this Task Force, with the combined Task Force to be co-chaired by Australia and the European Commission.

# Carbon Sequestration Leadership Forum Draft Minutes of the Joint Meeting of Policy & Technical Groups Berlin, Germany 28 September, 2005

#### LIST OF ATTENDEES

#### **Policy and Technical Group Delegates**

Australia: John Ryan (Policy Group Vice Chair), Tania Constable,

Peter Cook (Technical Group Vice Chair), John Bradshaw

Brazil: Paulo Rocha Cypriano, Paulo Cunha, Paulo Rocha

Canada: Mondher BenHassine, Mike Howarth, Stefan Bachu, Bill

Reynen (Technical Group Vice Chair)

China: Kong Xiangwen, Tian Baoguo

Colombia: Carolina Villafane Garcia

Denmark: Flemming Ole Rasmussen, Niels Peter Christensen,

Søren Fredericksen

European Commission: Angel Perez Sainz, Peter Horrocks, Denis O'Brien, Lars

Strömberg

France: Bernard Frois, Philippe Geiger, Pierre LeThiez, Christian

Fouillac

Germany: Helmut Geipel, Hans Neef, Thomas Rueggeberg, Hubert

Hoewener, Juergen Hake

India: R.V. Shahi, R.R. Sonde

Italy: Sergio Garribba (Policy Group Vice Chair), Marcello

Capra, Giuseppe Girardi, Claudio Zeppi

Japan: Hiroshi Yamagata, Makoto Akai Korea: Lee Jae-Hong, Yi Chang-Kuen

Mexico: Maria Elena Sierra Galindo

Netherlands: Hans Bolscher, Pieter Boot, Daniel Jansen, Erik Lysen

Norway: Odd Sverre Haraldsen, Froydis Eldevik, Jostein Dahl

Karlsen, Trude Sundset (Technical Group Vice Chair),

Hans Roar Sorheim

Russia: Sergey Mazurenko, Boris Reutov, Gurgen Olkhovsky

Saudi Arabia: Khalid Abuleif

South Africa: AD Surridge, Jeffery Kgobane, Roger Wicks, Fred Goede

United Kingdom: Brian Morris, Jeff Chapman, Philip Sharman, Nicholas

Otter, Tim Dixon

United States: Mark Maddox (Policy Group Chair), Judd Swift, Daniel

Reifsnyder, Peter Rozelle (Technical Group Chair),

Howard Herzog

#### **CSLF Secretariat**

Barbara McKee Richard Lynch John Panek Kathryn Paulsgrove Samuel Porter Robert Donovan

#### **Invited Speakers**

Deputy Minister Georg Adamowitsch (representing Germany's Federal Ministry of Economics and Labour)

Heleen de Coninck (representing the Intergovernmental Panel on Climate Change) Neil Hirst (representing the International Energy Agency)

#### **Other Attendees**

There were also approximately 50 other observers at the meeting.

#### Joint Policy and Technical Group Meeting of 28 September 2005

#### 1. Welcoming Remarks by Deputy Minister Georg Adamowitsch

The Policy Group Chair, Mark Maddox of the United States, introduced Georg Wilhelm Adamowitsch, Deputy Minister of Germany's Federal Ministry of Economics and Labour, who welcomed the delegates to Berlin. Deputy Minister Adamowitsch praised the CSLF as one of the most promising initiatives on greenhouse gas mitigation and stated that Germany is a strong supporter of the CSLF and was very pleased to host this meeting.

#### 2. Report from Technical Group

The Technical Group Chair, Peter Rozelle of the United States, delivered a presentation that summarized the outcomes of the CSLF Technical Group meeting of 27 September:

- 1) Gap Analyses: Gap analyses were conducted by three Task Forces:
  - Identifying Gaps in CO2 Capture and Transport,
  - Reviewing and Identifying Standards with Regards to CO<sub>2</sub> Storage Capacity Measurement, and
  - Identifying Gaps in CO<sub>2</sub> Monitoring and Verification of Storage.

Discussion papers on the gap analyses from all three Task Forces were accepted by the Technical Group, and will be submitted for consideration to the 8th International Conference on Greenhouse Gas Technologies (19-22 June 2006 in Trondheim, Norway). All three Task Forces will be continued and each has a forward action plan.

- 2) Project Interaction and Review Panel: The Technical Group has made modifications to the original proposal for a Project Interaction and Review Panel (PIRP), now renamed the Project Interaction and Review Team (PIRT). Proposed terms of reference for the PIRT were presented and were discussed. Issues raised during the discussion were the inclusion of representatives of CSLF recognized projects on the PIRT and potential for conflicts of interest by having commercial entities evaluate projects of potential competitors. The Policy Group decided to assess potential conflicts of interest before asking organizations to serve on the PIRT and to accept the terms of reference of the PIRT with an amendment as to the composition of the PIRT. The revised PIRT document is incorporated in these minutes as Annex C.
- 3) <u>Projects</u>: Seven new projects were recommended to the Policy Group for recognition:
  - CO<sub>2</sub> GeoNet (European Commission and United Kingdom)

- Demonstration of Capture, Injection and Geologic Sequestration of CO<sub>2</sub> in Basalt Formations of India (India and the United States)
- ENCAP (European Commission, Germany, France)
- Development of China's Coalbed Methane Technology / Carbon Dioxide Sequestration Project (Canada, Norway, and the United States)
- Geologic CO<sub>2</sub> Storage Assurance at In Salah, Algeria (United Kingdom and Norway)
- Regional Carbon Sequestration Partnerships (United States and Canada)
- Regional Opportunities for CO<sub>2</sub> Capture and Storage in China (United States and China)

There was consensus by the Policy Group members that the seven projects sent forward by the Technical Group receive CSLF recognition.

An eighth project, "Anoxic Microbial Sequestration of Carbon Dioxide Present in Flue Gases to Methane / Methanol / Other Biomass", was recommended for further development by India, which proposed the project. Additionally, Italy has proposed two new projects that will be considered at the next meeting.

4) A new Developing Countries Task Force was created that will coordinate with the Policy Group and its Task Forces in this area. This task force will address CO2 capture opportunities and technologies in developing countries.

#### 3. Overview of Intergovernmental Panel on Climate Change (IPCC) Report

Ms. Heleen de Coninck of the Technical Support Unit for IPCC's Working Group III delivered a presentation on the IPCC and its Special Report on Carbon Capture and Storage (SRCCS), which was approved on 27 September 2005 at the IPCC meeting in Montreal, Canada. Ms. de Coninck stated that the SRCCS was prepared based on scientifically and technically sound information contained in peer-reviewed literature; the SRCCS authors are the best experts available worldwide, and include academic, industrial, and NGO experience. The SRCCS addresses several key areas concerning CCS, including the current status of CCS technology, the costs and technical/economic potential for CO2 storage, health/safety/environment risks, and how CCS can play a role in mitigating climate change. Some of the conclusions of the report are that no single technology will provide all of the emissions reductions needed to achieve stabilization, that CCS has the potential to reduce overall mitigation costs and increase flexibility in achieving greenhouse gas emission reductions, and that widespread application of CCS would depend on technology transfer to developing countries as well as the capacity to apply the technology in those countries.

#### 4. International Energy Agency (IEA) Presentation on CO<sub>2</sub> Activities

Mr. Neil Hirst, IEA's Directory of Energy Technology Research and Development, delivered a presentation on the IEA and its CO<sub>2</sub> activities. Mr. Hirst explained that

the IEA has a number of activities that address CCS. These include the IEA Working Party on Fossil Fuels, the IEA Greenhouse Gas R&D Programme, the IEA Clean Coal Centre, the IEA Coal Industry Advisory Board and the Secretariat. He also described a recent IEA publication "Prospects for CO<sub>2</sub> Capture and Storage" that concluded that CCS can play a key role in addressing global warming, but that incentives and technology development are needed. Mr. Hirst noted the requests of the G8 at the 2005 Gleneagles conference for the IEA to work with the CSLF to hold a joint workshop on short-term opportunities in CCS and perform a study on the definitions, costs and scope for a "capture ready" plant. He stated that the IEA had already worked with the CSLF in a number of areas, including a 2004 workshop on legal issues related to CO<sub>2</sub> storage and was ready to collaborate further with the CSLF.

#### 5. IEA and the CSLF

The presentation by Mr. Hirst was followed by a working session to finalize the draft of the letter to the Executive Director or Chairman of the Governing Board of the IEA, as previously described in Item 9 of the Policy Group minutes, above. Tim Dixon of the United Kingdom presented a draft of the letter composed by a Task Force consisting of Australia, Canada, China, Norway, South Africa, the United Kingdom, and the United States. Consensus was reached on revisions and the document was approved. The final version of the letter is incorporated in these minutes as Annex D and was subsequently sent to Mr. Claude Mandil, Executive Director of the IEA.

#### 6. Member Reports on CCS Activities

Mr. Maddox called on each CSLF Member to give a short report on its CCS activities. Short presentations were delivered by the following delegates:

- Australia Mr. John Ryan
- Canada Mr. Mondher BenHassine
- China Mr. Kong Xiangwen
- European Commission Mr. Angel Perez Sainz
- France Dr. Bernard Frois
- Germany Mr. Helmut Geipel
- India R.V. Shahi
- Italy Dr. Marcello Capra
- Japan Dr. Hiroshi Yamagata
- Korea Dr. Lee Jae-Hong
- Netherlands Dr. Pieter Boot
- Norway Mr. Odd Sverre Haraldsen
- Russia Dr. Gurgen Olkhovsky
- South Africa Dr. AD Surridge
- United Kingdom Mr. Brian Morris
- United States Dr. Howard Herzog

Ms. Barbara McKee of the CSLF Secretariat stated that Colombia's report is in progress, and when it is received it will also be posted to the CSLF website.

#### 7. Applicability of CCS to the Clean Deployment Mechanism (CDM)

Dr. AD Surridge of South Africa stated that it is not clear whether CCS would be an acceptable mitigation method under the Kyoto Protocol, but CCS technologies would clearly be of assistance to Kyoto Annex I Parties in meeting their targets either separately or jointly. He also stated that access to carbon credits could significantly improve the economics of CCS, and as a result could induce developing countries to implement CCS projects. Dr. Surridge proposed that the CSLF request the CDM Executive Board to issue a definitive ruling as to the applicability of CCS to CDM. Further, Dr. Surridge proposed that if CCS is determined not to be applicable, then the CSLF should promote, through appropriate channels, for CCS to become eligible for carbon credits.

The ensuing discussion considered these proposals, but reached no consensus to accept them. During the discussion, it was pointed out that Japan currently has a proposal before the CDM Executive Board for a project involving CCS. Upon motion of the Chair, it was decided that the Policy Group will wait for Japan to finish its application to the CDM Executive Board and ask Japan to share the results of its application process.

#### 8. Suspension of Remaining Agenda Items

Two agenda items remained to be addressed at the end of the session, the Policy Group Future Work Plan and the Discussion of Work Plans and Coordination. Upon motion by the Chair, these two items were suspended and remanded to be included in report of the Task Force on the CSLF Strategic Plan.

#### ACTION ITEMS ARISING FROM THE POLICY GROUP

Item	Lead	Action
1	Australia and European Commission (Co-chairs)	Establish a combined Task Force to continue development of CSLF Strategic Plan (building on preliminary draft by Australia) and to examine CSLF management & structure, including membership criteria. Other members of Task Force are Canada, Italy, India, Norway, Saudi Arabia, the United Kingdom, the United States, and the CSLF Secretariat.
2	Policy Group Chair	Form a Task Force to focus on upcoming CSLF Ministerial meeting.
3	Secretariat	Initiate activity to legally register the CSLF Logo.
4	Secretariat	Inform Policy Group Chair of any issues regarding misuse of the CSLF Logo.
5	Policy Group Chair	Send letter to Executive Director of IEA addressing collaboration with CSLF on G8 matters.
6	Secretariat	Look into mechanics and report back to Policy Group on feasibility of creating a "blog" for use by stakeholders in expressing their views.
7	Secretariat	Compile a listing of outreach experts from CSLF Members and include them in Stakeholders Registry.
8	Secretariat	Review the report of the Task Force on Public Outreach to ascertain the implementation steps that might result from the report.
9	All CSLF Members	Develop public outreach approaches and activities and provide this information to Secretariat for dissemination.
10	All CSLF Members	Provide updates on public outreach activities at CSLF meetings.
11	All CSLF Members	Provide ongoing updates to any existing public outreach approaches and activities to the Secretariat.
12	Secretariat	Provide updated report on status of public outreach and related activities at next Policy Group meeting.
13	Secretariat	Expand CSLF website with additional links to Members and other information responsive to the Public Outreach Task Force report.
14	Financing Task Force (led by India)	Coordinate with Capacity Building Task Force.
15	Capacity Building in Emerging Economies Task Force (to be led by U.S.)	Assess specific capacity needs; develop action plans for each country; attempt to secure funding as needed for any ensuing CCS projects and activities called for in these action plans. Other task force members include Australia, Canada, Colombia, Mexico and Saudi Arabia.
16	Capacity Building Task Force	Coordinate with Financing Task Force.
17	Secretariat	Implement Stakeholders Registry at CSLF website in accordance with the decisions taken at the Policy Group meeting.
18	Secretariat	Open the CSLF website by removing password protection.
19	Secretariat	Upload Colombia CCS Report to website when available.
20	Japan	Report on results of Japanese application to CDM Executive Board.

#### ANNEX A

### CARBON SEQUESTRATION LEADERSHIP FORUM TERMS OF REFERENCE AND PROCEDURES

These Terms of Reference and Procedures provide the overall framework to implement the Charter of the Carbon Sequestration Leadership Forum (CSLF). They define the organisation of the CSLF and provide the rules under which the CSLF will operate.

#### 1. Organizational Responsibilities

- 1.1. <u>Policy Group</u>. The Policy Group will govern the overall framework and policies of the CSLF in line with Article 3.2 of the CSLF Charter. The Policy Group is responsible for carrying out the following functions of the CSLF as delineated in Article 2 of the CSLF Charter:
  - Identify key legal, regulatory, financial, public perception, institutional-related or other issues associated with the achievement of improved technological capacity.
  - Identify potential issues relating to the treatment of intellectual property.
  - Establish guidelines for the collaborations and reporting of results.
  - Assess regularly the progress of collaborative projects and following reports from the Technical Group make recommendations on the direction of such projects.
  - Ensure that CSLF activities complement ongoing international cooperation in this area
  - Consider approaches to address issues associated with the above functions.

In order to implement Article 3.2 of the CSLF Charter, the Policy Group will:

- Review all projects for consistency with the CSLF Charter.
- Consider recommendations of the Technical Group for appropriate action.
- Annually review the overall program of the Policy and Technical Groups and each of their activities.
- Periodically review the Terms of Reference and Procedures.

The Chair of the Policy Group will provide information and guidance to the Technical Group on required tasks and initiatives to be undertaken based upon decisions of the Policy Group. The Chair of the Policy Group will also arrange for appropriate exchange of information between both the Policy Group and the Technical Group.

1.2. <u>Technical Group</u>. The Technical Group will report to the Policy Group and make recommendations to the Policy Group on needed actions in line with Article 3.3 of the

CSLF Charter. The Technical Group is responsible for carrying out the following functions of the CSLF as delineated in Article 2 of the CSLF Charter:

- Identify key technical, economic, environmental and other issues related to the achievement of improved technological capacity.
- Identify potential areas of multilateral collaboration on carbon capture, transport and storage technologies.
- Foster collaborative research, development, and demonstration (RD&D) projects reflecting Members' priorities.
- Assess regularly the progress of collaborative projects and make recommendations to the Policy Group on the direction of such projects.
- Establish and regularly assess an inventory of the potential areas of needed research.
- Facilitate technical collaboration with all sectors of the international research community, academia, industry, government and non-governmental organisations.
- Consider approaches to address issues associated with the above functions.

In order to implement Article 3.2 of the CSLF Charter, the Technical Group will:

- Recommend collaborative projects to the Policy Group.
- Set up and keep procedures to review the progress of collaborative projects.
- Follow the instructions and guidance of the Policy Group on required tasks and initiatives to be undertaken.
- 1.3. <u>Secretariat</u>. The Secretariat will carry out those activities enumerated in Section 3.5 of the CSLF Charter. The role of the Secretariat is administrative and the Secretariat acts on matters of substance as specifically instructed by the Policy Group. The Secretariat will review all Members material submitted for the CSLF web site and suggest modification where warranted. The Secretariat will also clearly identify the status and ownership of the materials.

#### 2. Additions to Membership

#### 2.1 Application.

(Paragraph Suspended) Pursuant to Article 4 of the CSLF Charter, national governmental entities may apply for membership to the CSLF by writing to the Secretariat. The application will be circulated to the Members of the Policy Group for consideration. If no objection is received within 60 days from Members then the application will be deemed successful. Otherwise the application will go forward for a decision at the next scheduled meeting of the Policy Group in accordance with Article 3.2 of the CSLF Charter. Contested applications must be identified to the Policy Group

Members by the Secretariat at least 30 days prior to the meeting during which membership will be discussed.

Pursuant to Article 4 of the CSLF Charter, national governmental entities may apply for membership to the CSLF by writing to the Secretariat. A letter of application should be signed by the responsible Minister from the applicant country. In their application letter, prospective Members should:

- 1) demonstrate they are a significant producer or user of fossil fuels that have the potential for carbon capture;
- 2) describe their existing national vision and/or plan regarding carbon capture and storage (CCS) technologies;
- 3) describe an existing national commitment to invest resources on research, development and demonstration activities in CCS technologies;
- 4) describe their commitment to engage the private sector in the development and deployment of CCS technologies; and
- 5) describe specific projects or activities proposed for being undertaken within the frame of the CSLF.

The Policy Group will address new member applications at the Policy Group Meetings.

- 2.2. <u>Offer</u>. Membership will then be offered to the national governmental entity that submitted the successful application.
- 2.3. <u>Acceptance</u>. The applicant national governmental entity may accept the offer of membership by signing the Charter in Counterpart and delivering such signature to the embassy of the Secretariat. A notarized "true copy" of the signed document is acceptable in lieu of the original. The nominated national governmental entity to which an offer has been extended becomes a Member upon receipt by the Secretariat of the signed Charter.

#### 3. CSLF Governance

3.1 <u>Appointment of Members' Representatives</u>. Members may make appointments and/or replacements to the Policy Group and Technical Group at any time pursuant to Article 3.1 of the CSLF Charter by notifying the Secretariat. The Secretariat will acknowledge such appointment to the Member and keep an up-to-date list of all Policy Group and Technical Group representatives on the CSLF web site.

#### 3.2 Meetings.

- (a) The Policy Group should meet at least once each year at a venue and date selected by a decision of the Members.
- (b) Ministerial meetings will normally be held approximately every other year.

Ministerial meetings will review the overall progress of CSLF collaboration, findings, and accomplishments on major carbon capture and storage issues and provide overall direction on priorities for future work.

- (c) The Technical Group will meet as often as necessary and at least once each year at a considered time interval prior to the meeting of the Policy Group.
- (d) Meetings of the Policy Group or Technical Group may be called by the respective Chairs of those Groups after consultation with the members.
- (e) The Policy and Technical Groups may designate observers and resource persons to attend their respective meetings. CSLF Members may bring other individuals, as indicated in Article 3.1 of the CSLF Charter, to the Policy and Technical Group meetings with prior notice to the Secretariat. The Chair of the Technical Group and whomever else the Technical Group designates may be observers at the Policy Group meeting.
- (f) The Secretariat will produce minutes for each of the meetings of the Policy Group and the Technical Group and provide such minutes to all the Members' representatives to the appropriate Group within thirty (30) days of the meeting. Any materials to be considered by Members of the Policy or Technical Groups will be made available to the Secretariat for distribution thirty (30) days prior to meetings.

#### 3.3. Organization of the Policy and Technical Groups

- (a) The Policy Group and the Technical Group will each have a Chair and up to two Vice Chairs. The Chairs of the Policy and Technical Groups will be elected every three years.
- (b) Task Forces of the Policy Group and Technical Group consisting of Members' representatives and/or other individuals may be organized to perform specific tasks as agreed by a decision of the representatives at a meeting of that Group. Meetings of Task Forces of the Policy or Technical Group will be set by those Task Forces.
- (c) The Chairs of the Policy Group and the Technical Group will have the option of presiding over the Groups' meetings. Task force leaders will be appointed by a consensus of the Policy and Technical Groups on the basis of recommendations by individual Members. Overall direction of the Secretariat is the responsibility of the Chair of the Policy Group. The Chair of the Technical Group may give such direction to the Secretariat as is relevant to the operations of the Technical Group.
- 3.4 <u>Decision Making.</u> As specified by Article 3.2 of the CSLF Charter, all decisions will be made by consensus of the Members.

#### 4. CSLF Projects

- 4.1. <u>Types of Collaborative Projects</u>. Collaborative projects of any type consistent with Article 1 of the CSLF Charter may be recognized by the CSLF as described below. This specifically includes projects that are indicative of the following:
  - Information exchange and networking,
  - Planning and road-mapping,
  - Facilitation of collaboration,
  - Research and development,
  - Demonstrations, or
  - Other issues as indicated in Article 1 of the CSLF Charter.
- 4.2. <u>Project Recognition</u>. All collaborative projects will be recognized following a decision by the Policy Group. The Technical Group shall recommend technical projects to the Policy Group.
- 4.3. <u>Project Agreements</u>. Upon recognition, the parties to the recognized project should sign a Project Agreement based on minimum requirements to be set by the Policy Group.

The Secretariat shall have the responsibility of maintaining information on recognized collaborative projects and a synopsis including information on key contacts in the projects. The projects will be listed on the CSLF web site.

4.4. <u>The Project Recognition Process</u>. Proposals may be submitted by the representative of any Member to the Technical Group for projects in its area of responsibility as designated by Article 1.2 of these Terms of Reference. The proposals will contain the information required by the agreed Project Recommendation Guidelines and templates.

#### 5. Interaction with Stakeholders

It is recognized that stakeholders, those organisations that are affected by and can affect the goals of the CSLF, form an essential component of CSLF activities. Accordingly, the CSLF will engage stakeholders paying due attention to equitable access, effectiveness and efficiency and will be open, visible, flexible and transparent. In addition, CSLF members will continue to build and communicate with their respective stakeholder networks.

#### ANNEX B

#### **CSLF Stakeholder Registry and Guidelines for Implementation**

The Stakeholder Registry (the Registry) will be an official database of stakeholders including general descriptions of the stakeholders and contact information. The Registry will be maintained by the Secretariat for use by official CSLF bodies and will be posted on the CSLF website.

The purpose of the Registry is to give registered stakeholders access to timely information. It will also help the CSLF gauge the breadth of international stakeholder interest in CSLF-related activities. CSLF Members may also use the Registry to address issues for which they want input from the stakeholders. Inclusion in the Registry imposes no obligations on those entities that are included.

#### **Identifying Stakeholders**

#### Stakeholders are:

- Entities directly affected by CSLF Activities including business and industry, labor groups, academic and research institutions, and representatives of civil society.
- Government organisations (other than those that participate directly in the CSLF), including regional or local governments and government agencies responsible for devising and implementing public policies and programs with a direct or indirect impact on CSLF projects and policies.
- Entities indirectly involved or affected by carbon capture and storage projects and/or research and development such as NGOs or private sector organisations with an interest in the outcomes.

#### **Procedures for Admission to the Registry**

The procedure for admission to the Registry will be as follows:

- 1. Application forms (see attached) will be made available to prospective stakeholders on the CSLF website or may be provided by a Member's CSLF delegation.
- 2. Prospective stakeholders will submit these applications to the Secretariat.
- 3. The Secretariat will notify the applicant of determination of status.
- 4. The Registry will be updated on an ongoing basis as new applications are approved. The information contained in the application form will be included in the Registry.



#### Application for Inclusion in Stakeholder Registry

1. Official name of the orga		-				
Name of the Organisation				•		
Abbreviation: (if any)						
Type of organisation (Chec	k one):					
Government orga     Non-governmenta     Multilateral organ  Official address:	l organisation isation					
City:		Zip Code:				
	Head of the organi	sation:				
(Mr., Mrs., Ms., Dr.) Telephone:		Middle name Fax:v code - city code) +numbe	No.		Position	
E-mail:						
3. Name and position of the	e contact person if d	lifferent from the Head o	f the organis	sation:		
The contact person will serve			ormation with	the CSLF.		
(Mr., Mrs., Ms., Dr.)	First name	Middle name		t name	 Position	
Telephone:		code - city code) +numbe				
E-mail:						
4. Please indicate the intere	sts of the org <mark>ani</mark> sati	on relevant to the CSLF:				
CO <sub>2</sub> Capture	$CO_2$	Transport		CO <sub>2</sub> Storage		
Environmental Policy	Ener	gy Policy		Economics		
Legal/Regulatory Issues Other:	□ Сара	acity Building		Financing		

Please notify the CSLF Secretariat of any changes as soon as possible. This applies particularly to the contact person in order to ensure proper communications.

#### **Instructions**

Organizations interested in being admitted to the CSLF as a stakeholder will submit a completed application form to the CSLF Secretariat. Contact information for submission of an application is contained on the CSLF website at:

http://www.csl forum.org/stakeholder/application.html

Secretariat Fax: 1-301-903-1591

#### ANNEX C

#### Terms of Reference for the "CSLF Projects Interaction and Review Team" (PIRT)

#### **Background**

One of the main instruments to help the CSLF achieve its goals will be through the recognition of CSLF projects.

By responding to the gaps and priorities identified in the CSLF Technology Roadmap, the CSLF projects will be a key element in generating and exploiting the knowledge that may lead to improved CCS technologies.

It is therefore of major importance to have appropriate mechanisms within the CSLF for the recognition, assessment and dissemination of projects and their results for the benefit of the CSLF and its Members.

To meet this need it is proposed to create a CSLF advisory body which will report to and be under the supervision of the CSLF Technical Group.

#### The CSLF Projects Interaction and Review Team

The Team will have the following functions:

- Assess projects proposed for recognition by the CSLF in accordance with the
  project selection criteria approved by the Policy Group. Based on this assessment
  make recommendations to the Technical Group on whether a project should be
  accepted for recognition by the CSLF.
- Review the CSLF project portfolio and identify synergies, complementarities and gaps, providing feedback to the Technical Group and input for further revisions of the CSLF roadmap.
- Identify technology gaps where further RD&D are required.
- Foster enhanced international collaboration for CSLF projects, both within individual projects (e.g. expanding partnership to entities from other CSLF members) and between different projects addressing similar issues.
- Promote awareness within the CSLF of new developments in CO<sub>2</sub> Capture and Storage by establishing and implementing a framework for periodically reporting to the Technical Group on the progress within CSLF projects and beyond.
- Organize periodic activities to facilitate the fulfillment of the above functions and
  to give an opportunity to individuals involved in CSLF recognized projects and
  other relevant individuals invited by the CSLF, to exchange experience and views
  on issues of common interest and provide feedback to the CSLF.
- Perform other such tasks which may be assigned to it by the CSLF Technical Group.

#### **Members of the Projects Interaction and Review Team**

The Team would consist of (Per Section 3.2 (e) of the CSLF Terms of Reference and Procedures the Technical Group may designate resource persons):

- A Core Group consisting of the Chair and Vice Chairs of the Technical Group, and other delegates as designated by the Technical Group.
- A Floating Group comprising relevant subject area experts and, as appropriate, representatives of CSLF recognized projects with overall management responsibility in the project (e.g. Project Manager). Members of this Floating Group would be invited to participate in the Team activities on an issues and topic related basis (e.g. Pre-combustion, Post-combustion, Storage).

The Team Chair should rotate annually and be approved by the Technical Group.

#### **Operation of the PIRT**

- The Team will establish operational procedures to be endorsed by the Technical Group.
- The Team will coordinate with the Technical Group on the agenda and timing of meetings.
- The Team should meet periodically possibly before Technical Group meetings, to which they should report at least once a year.
- Recommendations of the Team should be reached by consensus of the Core Group members.
- Most of the activities of the Team should be conducted electronically.

#### ANNEX D

#### **Draft Letter to Executive Director of IEA**

Mr. Claude Mandil Executive Director International Energy Agency 9, rue de la Federation 75739 Paris Cedex 15

Dear Mr. Mandil:

The Carbon Sequestration Leadership Forum (CSLF) considered in its meeting in Berlin on September 27-28, 2005, the G8 initiatives on carbon capture and storage (CCS) and asked me to write to you in my capacity as Chairman of the CSLF Policy Group with our response. The CSLF notes the initiatives by G8 during their meeting in July 2005, at Gleneagles and welcomes the opportunity to work more closely with the International Energy Agency (IEA). Details will need to be worked out within the overall framework of the CSLF Charter.

The CSLF would like to take this opportunity to invite the IEA to discuss future collaboration with the CSLF in areas of common interest in CCS, particularly with respect to the two specific areas addressed by the G8:

- 1) The CSLF looks forward to working with the IEA in the organization of a workshop on short-term opportunities for CCS, including from enhanced oil recovery (EOR) and CO<sub>2</sub> removal from natural gas production. Specifically, the CSLF would like the outcome of the workshop to provide answers on opportunities (including with respect to specific geographic areas), costs, constraints, and status of technologies for EOR, including the engagement of developing countries, and options to overcome hurdles. The CSLF would like to suggest that convenient timing for the workshop would be in conjunction with relevant CSLF or IEA meetings in 2006.
- 2) The CSLF also looks forward to working with the IEA to study definitions, costs and scope for capture ready plant and consider economic incentives. The CSLF anticipates collaboration between the two groups (i.e. the CSLF Technical Group and an organization to be appointed by the IEA) in the definition of the terms of reference for the study, sharing existing information between the groups, and peer reviewing the outputs. The CSLF would like to see the study include capacity building and identification of obstacles for developing countries.

In addition, the CSLF would like to propose, given the shared interest between G8 and CSLF in involving developing countries, that the IEA consider the funding of developing country participation in the workshop and study.

The CSLF and IEA have already established their success in working together on CCS issues. Given the synergies between the expertise and roles of the CSLF and the IEA, the CSLF anticipates a successful and closer liaison with the IEA in the area of CCS.

Sincerely,

Mark R. Maddox Chairman, CSLF Policy Group and Principal Deputy Assistant Secretary Office of Fossil Energy