



CSLF-P/T-2006-03

**Joint Meetings of the CSLF Policy and Technical Groups
Delhi, India**

Monday, April 3 and Tuesday, April 4, 2006

LIST OF ATTENDEES

Policy Group Delegates

Australia:	John Ryan (Vice Chair), Tania Constable
Canada:	Mike Howarth
China:	Zhao Jun
Denmark:	Søren Frederiksen
European Commission:	Angel Perez-Sainz, Jürgen Lefevere
France:	Bernard Frois
Germany:	Hubert Höwener
Greece:	Nikolaos Koukouzas
India:	R.V. Shahi, S.K. Joshi
Italy:	Sergio Garribba (Vice Chair), Marcello Capra
Japan:	Toshihiko Miyagawa
Korea:	Shin Sung-Chul
Netherlands:	Hans Bolscher
Norway:	Odd Sverre Haraldsen, Tone Skogen
Russia:	Sergey Mazurenko, Boris Reutov
Saudi Arabia:	Khalid Abuleif
South Africa:	AD Surridge
United Kingdom:	James Penman, Claire Ball
United States:	Jeffrey D. Jarrett (Chair), Daniel Reifsnyder

Technical Group Delegates

Australia:	John Bradshaw, Andy Rigg
Brazil:	Paulo Cunha, Paulo Rocha
Canada:	Bill Reynen (Vice Chair), Stefan Bachu
China:	Chen Wenying
Denmark:	Flemming Ole Rasmussen
European Commission:	Denis O'Brien, Derek Taylor
France:	Christian Fouillac, Pierre Le Thiez
Germany:	Volker Breme
India:	R.R. Sonde, Malti Goel
Italy:	Giuseppe Girardi
Japan:	Tsukasa Kumagai
Korea:	Chang-keun Yi, Chong-kul Ryu
Netherlands:	Daniel Jansen
Norway:	Trude Sundset (Vice Chair), Jostein Dahl Karlsen
Russia:	Gurgen Olkhovsky, Dmitry Volokhov
Saudi Arabia:	Mohammed Alzayer
South Africa:	Jeff Kgobane
United Kingdom:	Nicholas Otter, Stephen Cornelius
United States:	Victor Der (Chair), Howard Herzog

CSLF Secretariat

Barbara McKee
Robert Donovan
Robert Gentile
Richard Lynch
Scott Miles
John Panek
Kathy Paulsgrove
Jeffrey Price

Invited Speakers

Sushil Kumar Shinde (Minister of Power, India)
Antonio Pflüger (International Energy Agency)
Elena Nekhaev (World Energy Council, representing CSLF Stakeholders)

Other Attendees

Mahmut Sengul, Abu Dhabi	Geir Vollsæter, Norway
Damian Dwyer, Australia	Anatoly Ruban, Russia
Bill Koppe, Australia	Christine Copley, United Kingdom
Cassandra McCarthy, Australia	Deborah Petterson, United Kingdom
Craig Renner, Australia	Jenny Pearce, United Kingdom
Dale Seymour, Australia	Sally Benson, United States
Ashish Agalgaonkar, India	Barbara DeRosa-Joynt, United States
Ajay Kumar Jain, India	Joseph Giove, United States
Puneet Kumar Goel, India	John Grasser, United States
Alok Kumar, India	Arthur Lee, United States
Swapnil Patil, India	Raj Luhar, United States
K.P. Singh, India	Kenneth Nemeth, United States
V.S. Verma, India	William Purvis, United States
Giovanni Ciceri, Italy	C. Michael Smith, United States
Giuseppi Deriu, Italy	Lee Spangler, United States
Fabrizio Pisanu, Italy	Justin Swift, United States
Svend Søyland, Norway	

Plenary Session of 3 April 2006

An opening plenary session including both Policy and Technical Groups was held prior to separate Policy and Technical Group meetings to welcome all attendees and to hear an address from India's Union Minister of Power.

1. Welcoming Ceremony

The Chair of the Policy Group, Jeffrey D. Jarrett of the United States, welcomed India's Minister of Power, Sushil Kumar Shinde, and Secretary of Power R.V. Shahi, and thanked India's National Organizing Committee for hosting this CSLF meeting. A traditional Indian lamp-lighting ceremony followed.

2. Welcoming Address

Secretary of Power R.V. Shahi, representing India's National Organizing Committee, welcomed the delegates to Delhi. His welcoming speech stressed the continued importance of coal to India's energy future, the importance of clean coal technologies and carbon sequestration, and the growth of the CSLF.

3. Ministerial Address

Union Minister of Power Sushil Kumar Shinde described the importance of energy to India's future development and how projected energy demands will be met by a diverse set of energy sources and an emphasis on energy efficiency. He addressed the needs for new technologies and the prospects for carbon sequestration in India. He further noted that the challenge before the CSLF is both to develop mature carbon sequestration technologies and to bring down their cost significantly.

4. Policy Group Chairman's Address

Jeffrey D. Jarrett, of the United States, introduced himself to the delegates as the new Chair of the Policy Group. He emphasized the importance of solving energy and environmental problems together, that energy and environment cannot be separated from economic strength and growth, and that technology can deliver answers when none seems to exist. He further stated that the mission of the CSLF is to catalyze the transformation of the way the world produces and uses energy with the hope of putting the world on a path towards environmental balance and on the road toward a shared and widening prosperity.

Joint Meeting of 4 April 2006

1. Opening Remarks

Jeffrey D. Jarrett, Chair of the Policy Group, welcomed the delegates to the Joint Meeting of the Policy and Technical Groups and introduced the Vice Chairs of the Policy Group, John Ryan of Australia and Sergio Garribba of Italy; the Chair of the Technical Group, Victor K. Der of the United States; and Vice Chairs of the Technical Group, Bill Reynen of Canada and Trude Sundset of Norway.

2. Review and Approval of Minutes of Berlin Meeting

The Draft Minutes of the previous Joint meeting of the Policy and Technical Groups held in Berlin, Germany, in September 2005, had been circulated for comments prior to the meeting and the final draft had been posted on the CSLF website. The Final Draft of the minutes of the Joint Meeting was approved with one change: that it be noted that the CSLF will consider the treatment of carbon capture and storage under the London Convention.

3. Report from the Technical Group

Victor K. Der, Chair of the Technical Group, presented the report of the Technical Group to the Policy Group.

Dr. Der described the reports and updates from the Technical Group Task Forces:

- Task Force to Identify Gaps in Measurement, Monitoring and Verification of Storage. The Technical Group accepted the report from the Task Force and the Task Force will be dissolved after posting of the results on the website. The Technical Group will consider revisiting the issue in the future as necessary with the recognition that gap analysis is evolving.
- Task Force to Identify Gaps in CO₂ Capture and Transport. No report was presented to the Technical Group. The draft report is still being considered to accommodate comments. The Technical Group is encouraging speedy resolution of outstanding issues so that the report can be brought to the Technical Group.
- Task Force to Identify Standards for CO₂ Storage Capacity Measurement. No report was presented.
- Projects Interaction and Review Team (PIRT). The PIRT consists of a core group with representation of delegates from Members (including the Technical Group Chair and Vice Chairs) and a Floating Group to be made up of representatives of CSLF-recognized projects and subject area experts. The Floating Group has yet to be constituted. The PIRT's progress so far has been made through a series of teleconferences during which governance issues were discussed. The PIRT recommended that the Technical Group endorse the formation of the PIRT and agree to its proposed structure and activity plan. The Technical Group agreed to this.

Considerable discussion took place both within the PIRT and in the Technical Group meeting regarding the project recognition guideline that a project must be started before it can be considered for recognition. The meaning of the word “started” was at issue. The Technical Group agreed on a definition of “started” as having:

- Progressed through the early phases of project planning, such as (but not exclusively), documenting the project scope, outputs, and outcomes;
- Identified the magnitude of resource requirements sufficient to achieve the major milestones of the project;
- Identified funding sources; and,
- Pursuant to the financial implications contained within the above, that the two or more CSLF members collaborating on the project and submitting it for CSLF recognition commit that the project in its current form and status is likely to be capable of meeting major milestones prior to the expiration of the CSLF Charter (currently 2013).

Dr. Der noted that considerable confusion arose over what was meant by the term “capacity building.” Both the definition of the word “capacity” and whether there were to be one or two task forces on capacity building were found to be confusing. He stated that the Technical Group was asking for guidance on this matter. Under Agenda Item 6 of this Joint Meeting, see below, this matter was clarified. There is only one Task Force on Capacity Building in Emerging Economies and it is a Policy Group Task Force, but the Technical Group is invited to participate and its participation is considered essential.

Dr. Der also noted that Stakeholders and others made presentations to the Technical Group on various activities. These included Joseph Giove, United States Department of Energy, who spoke on FutureGen; Svend Søyland, Bellona, Norway, who spoke on the perspective of his environmental non-governmental organization; Arthur Lee, Chevron, United States, who discussed priority issues for industry; Geir Vollsæter, Shell/Statoil, Norway, who spoke on the Shell/Statoil CO₂ EOR Project; Nick Otter, Alstom, United Kingdom, who spoke on the Dynamis Project; and Sally Benson, Lawrence Berkeley National Laboratory, United States, who chaired the panel.

The Technical Group also selected its Chair and Vice Chairs for the next 3-year term. These are:

Chair – Norway, Trude Sundset
 Vice Chair – Canada, Bill Reynen
 Vice Chair – India, Malti Goel

Dr. Der introduced a DVD video of the 17 CSLF-recognized projects, which was then shown to the attendees.

4. Approval of Recommended Projects

No projects were recommended by the Technical Group for approval by the Policy Group. Chairman Der, however, stated that four possible projects were introduced at the Technical Group meeting, and may be proposed for CSLF recognition at a future meeting. These were:

- Monash Energy Project (Australia);
- Otway Basin Pilot Project (Australia);
- Joint Canada–U.S. Monitoring Project of the Zama Acid Gas Enhanced Oil Recovery Pilot Project (Canada); and
- First Corporate Project of Greenhouse Gas Emissions Reduction in Russian Coal Industry (Russia).

5. G8 and CSLF Activity

Antonio Pflüger, Head of the Energy Technology, Collaboration Division, International Energy Agency (IEA), presented an overview of IEA activity in the area of Carbon Capture and Storage (CCS) and described the collaboration between the IEA and the CSLF in response to the Gleneagles request of the G8. He stated that the G8 requested ten specific tasks of the IEA on a range of topics relating to the theme of “Climate Change, Energy and Sustainable Development.” The IEA is responding with an extensive effort to respond to each of these requests.

Two of these requests relate to work that is being done jointly with the CSLF. One of these is for a workshop on early opportunities for carbon capture and storage. The IEA and CSLF are responding with a series of workshops on that topic, the first of which will be held in San Francisco in August 2006. Later workshops will be held in Norway and Canada. The second request is for a study on capture-ready plants that will address both engineering and policy related issues. Mr. Pflüger also noted that the IEA and CSLF were working together on a second joint Workshop on Legal Aspects of Storing CO₂ to be held in Paris on 17 October, 2006.

6. Report of the Task Force on Capacity Building in Emerging Economies

Justin Swift of the United States gave a presentation on the planned activities of the Task Force on Capacity Building in Emerging Economies. He noted that this was a Policy Group Task Force that would also include delegates from the Technical Group. The active participation of the Technical Group is considered essential. He stated that the Task Force is implementing the recommendations of the Secretariat’s report on Capacity Building delivered in the Berlin meeting. The objectives are to assist emerging economy Members develop the knowledge, skills, expertise and institutions needed to deploy CCS, develop training and educational resources that all CSLF Members can utilize, build on lessons learned from CSLF-recognized projects, and collaborate with other international CCS initiatives. Two major activities are planned: a consolidated capacity building workshop and country-specific capacity building plans.

7. Report on Proposed Application of Carbon Capture and Storage for the Clean Development Mechanism (CDM)

Delegates from Japan gave presentations and provided several papers regarding the applicability of Carbon Capture and Storage for the Clean Development Mechanism. Toshihiko Miyagawa gave an update on the overall issue of CCS. The treatment of CCS under CDM is currently still being considered with a final decision expected in November 2006. Specific methodologies for evaluating and monitoring CDM projects must be developed. Mr. Miyagawa described a CDM methodology for Oil Reservoirs CCS activity. Tsukasa Kumagai similarly described a CDM Methodology for CCS in Aquifers that was submitted to the CDM Executive Board by the Mitsubishi Research Institute.

8. Member Reports on Carbon Capture and Storage Activities

Delegates from the following Members gave presentations on their activities in the following order:

- United States – Victor Der
- Saudi Arabia – Khalid Abuleif
- Norway – Odd Sverre Haraldsen
- Netherlands – Hans Bolscher
- Korea – Shin Sung-chul
- Japan – Toshihiko Miyagawa
- Italy – Sergio Garribba
- India – Malti Goel
- Germany – Hubert Höwener
- France – Bernard Frois
- European Commission – Angel Perez-Sainz and Nick Otter
- Denmark – Søren Fredericksen
- China – Zhao Jun
- Canada – Mike Howarth
- Brazil – Paulo Rocha
- Australia – Bill Koppe
- United Kingdom – Claire Ball
- South Africa – Tony Surridge

9. Stakeholder Perspectives

Elena Nekhaev, Director of Programmes of World Energy Council gave a presentation summarizing the perspectives of Stakeholders present at the meeting. She stated that Stakeholders participate in CSLF meetings and processes because they care about the purpose and how the widespread deployment of CO₂ capture and storage technology will be achieved. She further said that Stakeholders want the CSLF to be an open and transparent process with full Stakeholder integration, meaning Stakeholder participation in all meetings and activities and that Stakeholders should speak and contribute to the discussion in Policy and Technical Group meetings.

An action plan for Stakeholder involvement was proposed that involved permanent representation of Stakeholders on task forces, a minimum of three seats at the table at both the Policy and Technical Group meetings, that Stakeholders organize themselves and meet regularly with support of the Secretariat.

Considerable discussion ensued. Mr. Jarrett made a commitment that Stakeholders will be resource people at the table. Eventually, consensus was reached that the Stakeholders will formulate a more thorough and formal proposal in the next 60 to 90 days. This proposal will then be circulated to the Policy Group for concurrence. Provisionally, two Stakeholders will be given seats at the table next meeting. They will be able to participate in the meetings, but will have no votes. A final decision on meeting participation will be made after that experience.

10. Closing Remarks

Mr. Jarrett adjourned the meeting and invited delegates to contact him about CSLF matters.

ACTION ITEMS ARISING FROM THE JOINT MEETING OF THE POLICY AND TECHNICAL GROUPS

Item	Lead	Action
1	Secretariat	Amend the minutes of the Berlin joint meeting as agreed
2	Stakeholders	Working with the Secretariat, formulate a more thorough proposal on Stakeholder involvement in the next 60 to 90 days
3	Secretariat	Work with the Stakeholders on the proposal for Stakeholder involvement
4	Secretariat	Circulate the Stakeholder proposal to the Policy Group