



# CSLF PIRT Meeting

Report by the CSLF Secretariat

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**Cape Town, South Africa**

**April 13, 2008**

## Overview of Secretariat Activities



- Stakeholder/Project Sponsor Survey
- SPIR Update
- Proposed Changes to the CSLF Project Submission Form
- CSLF Strategic Plan/Action Plan — Status of Implementation
- Summary of Previous Year's Workshops

# CSLF Project Recognition Survey



## ➤ Questions to stakeholders:

1. Has your organization ever considered submitting a project to the CSLF for recognition?
2. What can the CSLF do to encourage project sponsors to apply for CSLF recognition?
3. What are the reasons for not seeking CSLF recognition?
4. Is your organization presently a sponsor of any of the 19 CSLF-recognized projects?

## ➤ Questions to sponsors:

1. What do you see as the value of CSLF recognition to a project sponsor?
2. What can be done to make CSLF recognition more attractive for project sponsors?

# CSLF Project Recognition Survey – Stakeholders



**1. Has your organization ever considered submitting a project to the CSLF for recognition?**

- Yes (7)
- Intend to, after funding decisions are made (2)
- No (2)

# CSLF Project Recognition Survey – Stakeholders



## 2. What can the CSLF do to encourage project sponsors to apply for CSLF recognition?

- More could be done to promote endorsed projects, to disseminate information on their progress and to facilitate collaboration between project participants
- Clarify and communicate the benefits of CSLF recognition
- Use the CSLF R&D projects to coordinate the development of policy and regulatory frameworks
- Widen areas of interest, and not restrict to "conventional" CO<sub>2</sub> capture & storage
- Seek out projects and solicit applications

# CSLF Project Recognition Survey – Stakeholders



## 3. What are the reasons for not seeking CSLF recognition?

- Benefits of doing so are not made clear
- Administrative burden outweighs apparent benefits
- Awaiting funding decisions/financial support
- For R&D projects there is currently little apparent pay-off in terms of project promotion and collaboration
- Lack of awareness of CSLF

# CSLF Project Recognition Survey – Stakeholders



**4. Is your organization presently a sponsor of any of the 19 CSLF-recognized projects?**

- Yes (7)
- No (4)

# CSLF Project Recognition Survey – Project Sponsors



## 1. What do you see as the value of CSLF recognition to a project sponsor?

- opportunity for to seek partnerships and collaborations
- distinguishes projects from rest of the pack
- “Prestige.”
- Access to US DOE co-funding, or other potential funding



# CSLF Project Recognition Survey – Project Sponsors



## 2. What can be done to make CSLF recognition more attractive for project sponsors?

- Pay for travel to present results at CSLF meetings
- Invite the project sponsors to present the progress, opportunities and technology advancement of a project to the CSLF audience
- Show clearly that the outputs from the research projects are used for policy development
- Increase the profile of projects and encourage CSLF members to work cooperatively rather than developing competing projects.
- Multi-lateral agreements among member countries that facilitate the project collaborations under those agreements.
- Seed funding for initiating collaborative projects through CSLF recognition
- There needs to be some way of CSLF demonstrating its value through national members or by providing better access to endorsed projects.

## Quarterly Reports (SPIRs)



<b>Project</b>	<b>July '07</b>	<b>Oct. '07</b>	<b>Jan. '08</b>	<b>Mar. '08</b>
Alberta Enhanced Coal-Bed Methane Recovery Project	X	X	X	X
CANMET Energy Technology Centre (CETC) R&D Oxyfuel Combustion for CO <sub>2</sub> Capture			X	
CASTOR	X	X		X
China Coalbed Methane Technology/CO <sub>2</sub> Sequestration Project	X	X		
CO <sub>2</sub> Capture Project	X	X	X	X
CO <sub>2</sub> CRC Otway Project		X	X	X
CO <sub>2</sub> Geonet	X	X		X
CO <sub>2</sub> Separation from Pressurized Gas Stream	X	X	X	

## Quarterly Reports (SPIRs)



<b>Project</b>	<b>July '07</b>	<b>Oct. '07</b>	<b>Jan. '08</b>	<b>Mar. '08</b>
CO <sub>2</sub> SINK	X	X		X
CO2STORE	X	X		
ENCAP	X	X		X
Feasibility Study of Geologic Sequestration of CO <sub>2</sub> in Basalt Formations of (Deccan Trap) in India				
Frio Project	X	X	X	X
Geologic CO <sub>2</sub> Storage Assurance at In Salah, Algeria				X
IEA GHG Weyburn-Midale CO <sub>2</sub> Monitoring and Storage Project	X	X		X

## Quarterly Reports (SPIRs)



<b>Project</b>	<b>July '07</b>	<b>Oct. '07</b>	<b>Jan. '08</b>	<b>Mar. '08</b>
ITC CO <sub>2</sub> Capture with Chemical Solvents	X	X		X
Regional Carbon Sequestration Partnerships	X	X	X	X
Regional Opportunities for CO <sub>2</sub> Capture and Storage in China			X	X
Zama Acid Gas EOR, CO <sub>2</sub> Sequestration, and Monitoring Project	X	X	X	X



# Suggested Modifications to CSLF Terms of Reference and Procedures

## Existing Language



4.2. Project Recognition. 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. Project Agreements. 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. The Project Recognition Process. 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.

## Suggested Change



4.2. Project Recognition. All projects proposed for recognition by the CSLF shall be evaluated via a CSLF Project Submission Form. The CSLF Project Submission Form shall request from project sponsors the type and quantity of information that will allow the project to be adequately evaluated by the CSLF.

A proposal for project recognition can be submitted by any CSLF delegate to the Technical Group and must contain a completed CSLF Project Submission Form. In order to formalize and document the relationship with the CSLF, the representatives of the project sponsors and the delegates of Members nominating a project must sign the CSLF Project Submission Form specifying that relationship before the project can be considered.

The Technical Group shall evaluate all projects proposed for recognition. Projects that meet all evaluation criteria shall be recommended to the Policy Group. A project becomes recognized by the CSLF following approval by the Policy Group.

4.3. Information Availability from Recognized Projects. Non-proprietary information from CSLF-recognized projects, including key project contacts, shall be made available to the CSLF by project sponsors. The Secretariat shall have the responsibility of maintaining this information on the CSLF Web site.

# Strategic Plan/Action Plan





# Proposed Revisions to Project Submission Form



## Existing Language:

### PROJECT TECHNOLOGIES:

Please check all that apply.

CO<sub>2</sub> Capture \_\_\_\_\_

CO<sub>2</sub> Transport \_\_\_\_\_

CO<sub>2</sub> Storage with Enhanced Oil Recovery \_\_\_\_\_

CO<sub>2</sub> Storage with Enhanced Coal Bed Methane Recovery \_\_\_\_\_

CO<sub>2</sub> Storage with Enhanced Natural Gas Recovery \_\_\_\_\_

CO<sub>2</sub> Storage with No Secondary Recovery \_\_\_\_\_

CO<sub>2</sub> Measurement, Monitoring, and Verification of Storage (MMV) \_\_\_\_\_

Identification of potential CO<sub>2</sub> storage sites \_\_\_\_\_

Identification of target CO<sub>2</sub> sources \_\_\_\_\_

Economic and/or Environmental Evaluation and/or Risk Assessment \_\_\_\_\_

Other (please describe):

# Proposed Revisions to Project Submission Form



## Proposed Expansion:

### PROJECT COMPONENTS:

Please check all that apply.

Pre-combustion CO<sub>2</sub> Capture \_\_\_\_\_

Post-combustion CO<sub>2</sub> Capture \_\_\_\_\_

CO<sub>2</sub> Capture using Amine-based Solvents \_\_\_\_\_

CO<sub>2</sub> Capture using Chilled Ammonia \_\_\_\_\_

CO<sub>2</sub> Capture by Other Means (please describe):

CO<sub>2</sub> Transport \_\_\_\_\_

CO<sub>2</sub> Storage with Enhanced Oil Recovery \_\_\_\_\_

CO<sub>2</sub> Storage with Enhanced Coal Bed Methane Recovery \_\_\_\_\_

CO<sub>2</sub> Storage with Enhanced Natural Gas Recovery \_\_\_\_\_

CO<sub>2</sub> Storage with No Secondary Recovery \_\_\_\_\_

CO<sub>2</sub> Measurement, Monitoring, and Verification of Storage (MMV) \_\_\_\_\_

Identification of Potential CO<sub>2</sub> Storage Sites \_\_\_\_\_

Identification of Target CO<sub>2</sub> Sources \_\_\_\_\_

Economic Evaluation \_\_\_\_\_

Environmental Evaluation \_\_\_\_\_

Risk Assessment \_\_\_\_\_

Other (please describe):

# Strategic Plan/Action Plan



## Strategy 1: CCS Technology Development and Deployment – Technical Group

### Research and Development

Key Outputs as Stated in the Strategic Plan	Current Progress
1. Key definitions for CCS identified and disseminated (2007).	<ul style="list-style-type: none"><li>• Not done.</li></ul>
2. Technology roadmap developed for each of the identified technical work areas, including links between them and member country roadmaps (2006-09).	<ul style="list-style-type: none"><li>• An update of the roadmap is in progress.</li></ul>
3. Identification of key obstacles to achieve improved technological capability (2006-07).	<ul style="list-style-type: none"><li>• Revised gaps analysis provides this identification.</li></ul>

# Strategic Plan/Action Plan



## Collaborative Projects

Key Outputs as Stated in the Strategic Plan	Progress to Date
1. Collaborative research, development, and demonstration (RD&D) projects that reflect members' priorities. (2006 and continuing)	<ul style="list-style-type: none"> <li>The project recognition process implements this.</li> </ul>
2. Guidelines for collaborations and reporting of results. (2006)	<ul style="list-style-type: none"> <li>New guidelines were proposed by PIRT and accepted by Technical Group at Technical Group London meeting in November 2006.</li> </ul>
3. Collaborative RD&D projects reviewed annually. (2006 and continuing)	<ul style="list-style-type: none"> <li>Ongoing activity of PIRT.</li> </ul>
4. Each country to provide information on its short term opportunities for international collaboration and coordination identified (e.g. EOR or removal of CO <sub>2</sub> from natural gas) (2006-07)	<ul style="list-style-type: none"> <li>A limited number of projects were identified.</li> </ul>
5. Each country to provide information on its full scale demonstration project opportunities for international collaboration and coordination.	<ul style="list-style-type: none"> <li>Not done.</li> </ul>
6. Recommendations for risk assessment standards and procedures.	<ul style="list-style-type: none"> <li>The Task Force on Risk Assessment is developing these standard and procedures.</li> </ul>

# Strategic Plan/Action Plan



## Strategy 1: CCS Technology Development and Deployment – Technical Group (Continued)

### Technical Support for Policy Development

Key Outputs as Stated in the Strategic Plan	Progress to Date
1. Key definitions for CCS identified and disseminated (2006-07)	<ul style="list-style-type: none"> <li>• Not done.</li> </ul>
2. Recommendations for standard methodologies to establish baselines against which CCS projects can be assessed. (2006-07)	<ul style="list-style-type: none"> <li>• New project submission form was approved at Paris meeting (April 2007) which standardized the information requested of project sponsors.</li> </ul>
3. Recommendations for guidelines for monitoring , measurement and verification systems taking into account the work of other international organisations. (2006-07)	<ul style="list-style-type: none"> <li>• Task Force submitted final report at Technical Group London meeting in November 2006 and it was approved.</li> </ul>
4. Capacity estimation methodologies developed. (2007-2009)	<ul style="list-style-type: none"> <li>• Task Force has completed its Phase III report, which includes coordination of methodologies with other national and international groups.</li> </ul>

# Strategic Plan/Action Plan



## Strategy 1: CCS Technology Development and Deployment – Technical Group (Continued)

### Technical Support for Policy Development

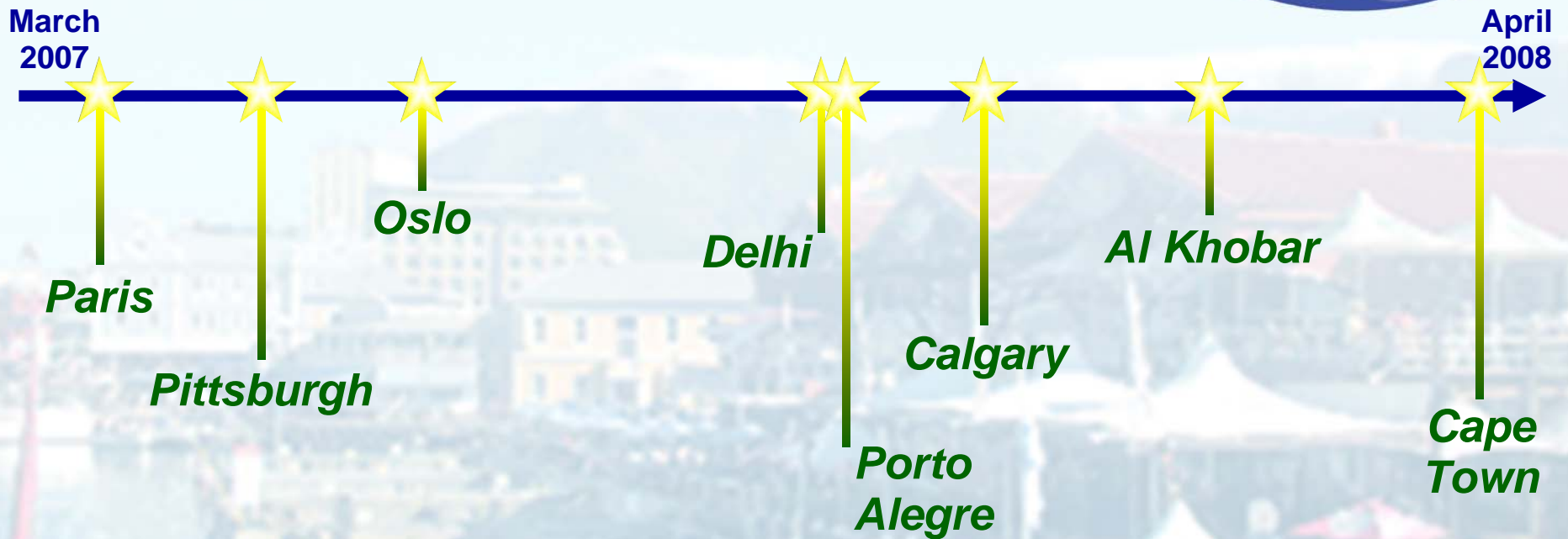
Key Outputs as Stated in the Strategic Plan	Progress to Date
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# CSLF Activities and Workshops March 2007 – April 2008



# CSLF Events Timeline





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# CSLF Annual Meeting Paris, France, March 25–28, 2007



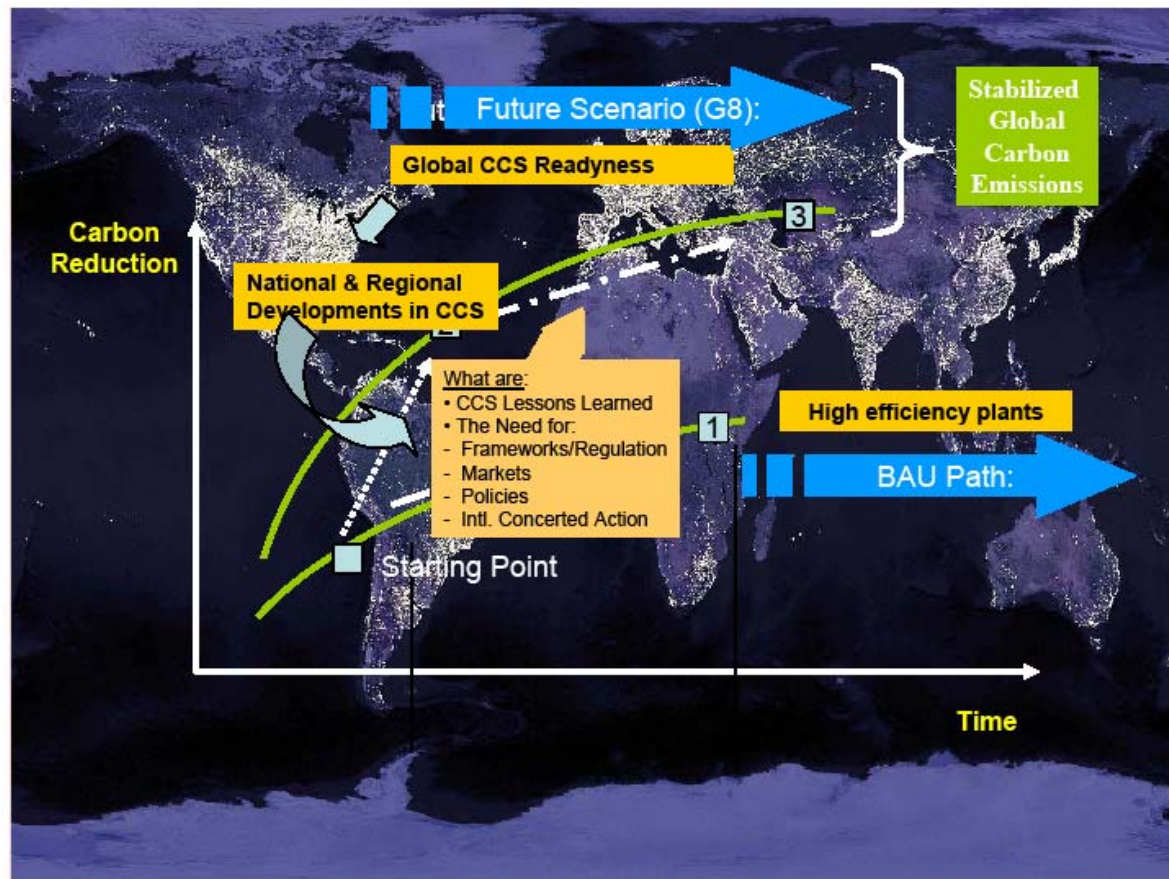
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# 1<sup>st</sup> Capacity Building Workshop Pittsburgh, PA May 7–11, 2007



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# 2<sup>nd</sup> IEA-CSLF Workshop on Near-Term Opportunities for CCS Oslo, Norway, June 21–22, 2007



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# Financial Issues Task Force

## Delhi, India, October 11–12, 2007



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## 2<sup>nd</sup> Capacity Building Workshop Porto Alegre, Brazil, October 18–19, 2007



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# 3<sup>rd</sup> IEA-CSLF Workshop on Near Term Opportunities for Carbon Capture and Storage Calgary, Alberta, November 27–28, 2007

A graphic titled "CANADA'S NATURAL RESOURCES NOW AND FOR THE FUTURE" with the website "nrcan.gc.ca". It features a topographic map of Canada with a color gradient from green to brown. An inset oval image shows a scenic view of snow-capped mountains and a turquoise lake. At the bottom left is the Canadian flag and the text "Natural Resources Canada" and "Ressources naturelles Canada". At the bottom right is the word "Canada" with a small Canadian flag icon.

CANADA'S NATURAL RESOURCES  
NOW AND FOR THE FUTURE  
nrcan.gc.ca

Natural Resources Canada  
Ressources naturelles Canada

Canada



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# CSLF Technical Group Meeting

## Al Khobar, Saudi Arabia, January 27–29, 2008



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**CSLF Annual Meeting**  
**Cape Town, South Africa**  
**April 13–17, 2008**

