

# CSLF Technical Group Meeting and Capacity Building Workshop

Report by the CSLF Secretariat

Al Khobar, Saudi Arabia

January 27, 2008

## **CSLF Members**













58% of world population

70% of world energy production

75% of world energy consumption

76% of world CO<sub>2</sub> emissions

76% of world GDP

Sources: IMF (GDP 2005 data) and EIA (2004 data)























#### **Overview of Secretariat Activities**

- Website updates
- CSLF Public Meeting Place (PuMP)
- Meetings and Workshops
- > Stakeholder Registry
- Workshop Survey
- > CSLF Projects



#### **CSLF Website**

- Continued to upgrade the site.
- Created a new search tool for the entire site.
- Posted press releases on CCS projects, programs, and events to promote CCS awareness.
- Posted presentations and materials from these meetings and workshops:
  - Capacity Building in Emerging Economies Workshop (Pittsburgh, USA, May 7–11, 2007)
  - 2nd Capacity Building in Emerging Economies Workshop (Porto Alegre, Brazil, October 18-19, 2007)
  - 2nd IEA-CSLF Workshop on Near Term Opportunities for Carbon Capture and Storage (Oslo, Norway, June 21-22, 2007)
  - Review and Identification of Standards for CO2 Storage Capacity Estimation Task Force Meeting (Paris, France, 25 March 2007).
  - CSLF Financial Issues Task Force Meeting (New Delhi, India, 11-12 October 2007).
  - Capacity Building Task Force Meeting (Oslo, Norway, June 20, 2007).
  - Capacity Building Task Force Meeting (Calgary, Canada, November 27–28, 2007).



#### **CSLF Public Meeting Place (PuMP)**

- Continues on trial basis. Online since November 2006. www.cslforum.org/forum
- Purpose to foster greater communication.
- Forum allows users to start discussion topics, post and read messages, and reply to the comments of others.
- Allows for special purpose meetings.
- Opportunity for task force or ad hoc meetings.
  - Could improve frequency and openness of discussion given membership's global schedules.



#### **Meetings and Workshops**

#### **Future**

- ➤ Meeting of the CSLF Policy and Technical Groups (Cape Town, South Africa, April 13–17, 2008)
  - Working with hosts to plan the meeting.





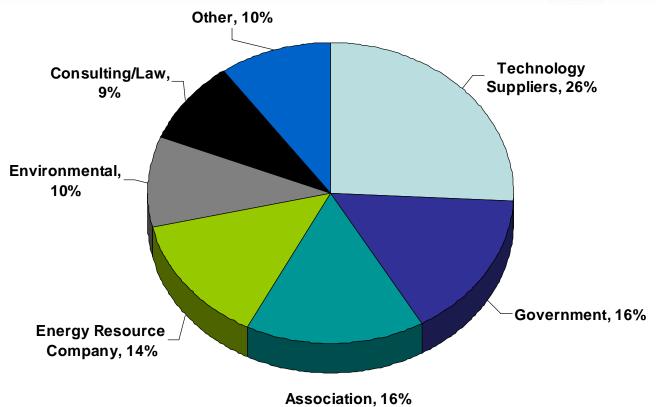
#### **Stakeholder Registry**

- 23 stakeholders have registered since the Paris CSLF meeting.
- 109 registered stakeholders, as of January 10, 2008.
- Stakeholders by Industry:
  - Technology suppliers 26%
  - Government 16%
  - Association 16%
  - Energy resource company 14%
  - Environmental 10%
  - Consulting/law 9%
  - Other 10%
- Type of organization:
  - Governmental 17%
  - Non-governmental 76%
  - Multilateral 6%

- > Areas of Interest:
  - CO<sub>2</sub> capture 82%
  - CO<sub>2</sub> transport 59%
  - CO<sub>2</sub> storage 87%
  - Environmental policy 80%
  - Energy policy 87%
  - Economics 73%
  - Legal/regulatory issues 80%
  - Capacity building 62%
  - Financing 51%

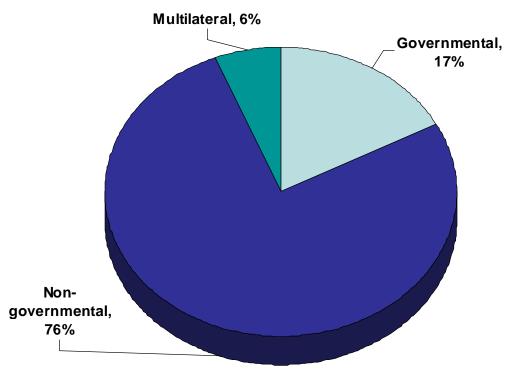


#### **Stakeholders by Industry**



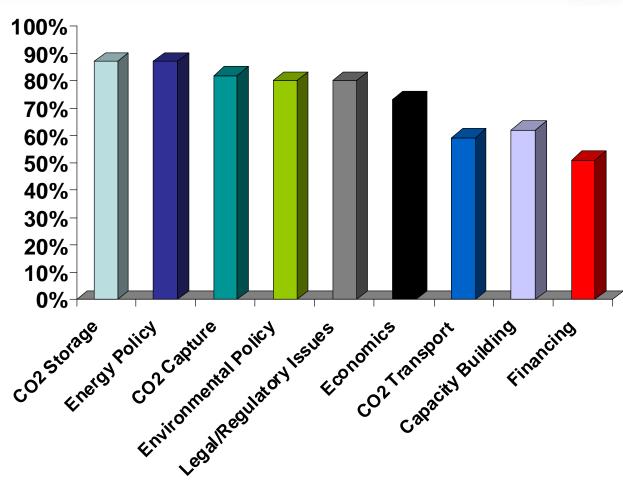


#### **Type of Organization**





#### **Areas of Interest**





# Overcoming Barriers to CCS Deployment Workshop

Survey Results Paris, France,

March 27, 2007



#### **Overview**

#### Purpose:

- Gather feedback on the workshop's strengths and weaknesses.
- Learn what attendees would like to see in future workshops.



#### **Overview**

#### Attendees were asked about:

- Level of success in identifying opportunities and obstacles;
- Appropriateness of workshop content;
- Value of the poster session;
- Overall success of the workshop in meeting expectations;
- Interests of workshop attendees;
- Amount of presentations and panel discussions;
- Ideas for future workshops; and
- Overall impressions.



#### **Overview**

**Date of Workshop:** March 27, 2007

Location: IFP Offices, Paris, France

Survey Methodology: Online Survey

Number of Attendees: Approx. 120

**Data Collection:** June 8th – 30th

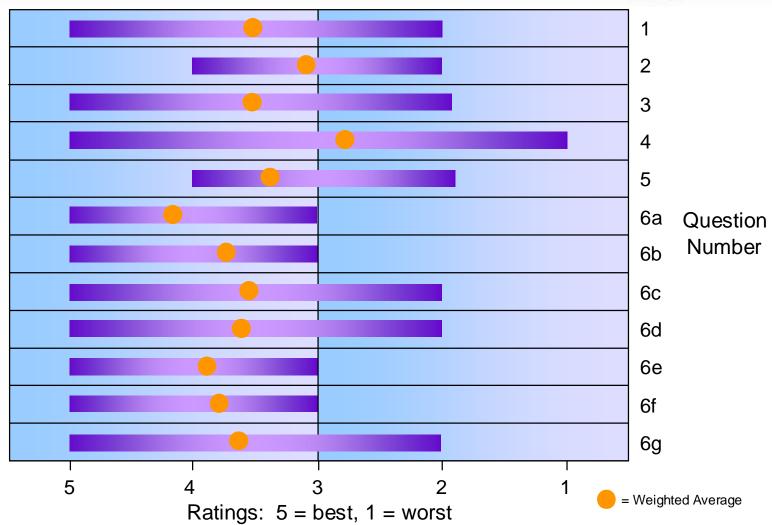


#### **Key Findings**

- The workshop was worthwhile.
- 85% thought topics were appropriate (neutral or higher).
- Most were interested in technical as well as policy aspects.
- Unanimous support for more time for panel discussions.
- Majority would like to see fewer presentations.
- Overall Impressions:
  - More time for audience interaction and panel discussion.
  - Fewer presentations and posters.
  - Scheduling the workshop in the middle of a CSLF meeting ensures best possible attendance.

#### **Overall Ratings**







#### **Survey Questions**

- > 1) Was the workshop successful in identifying the possibilities for deploying CCS technologies at a large scale?
- 2) Was the workshop successful in identifying ways of removing obstacles to deployment of CCS?
- ➤ 3) Was the workshop successful in identifying where actions and initiatives/projects are required to address some of the critical issues and gaps?
- ➤ 4) Did the poster event add to the success of the workshop?
- > 5) Did the workshop succeed in meeting your expectations?



#### **Survey Questions**

- ➤ 6) Were the program topics appropriate for the workshop?
  - a. Stakeholder input to policy development
  - b. Ongoing work to remove obstacles for large-scale industrial initiatives
  - c. Industrial initiatives: What is needed to make them happen?
  - d. What's next? *Technology*
  - e. What's next? Communication and Public Acceptance
  - f. What's next? Legislation and Regulation
  - g. What's next? Putting a value on CO<sub>2</sub>



#### **Survey Questions**

- > 7) What are your main interests in the CSLF workshops?
- > 8) Do you want to see more or less presentations at the next workshop?
- 9) Should future workshops provide more or less time for panel discussions?
- > 10) Have you previously attended a CSLF workshop or event?
- ➤ 11) What would you like to see in future CSLF workshops and events?
- ➤ 12) What was your overall impression of the workshop?



### **CSLF Projects Overview**

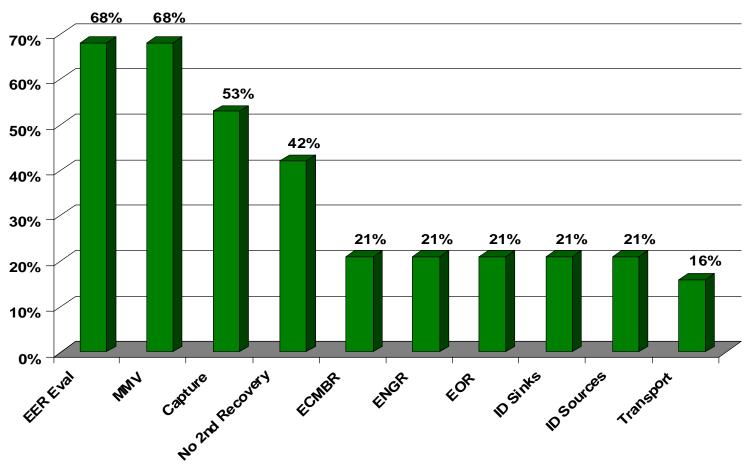


#### **Project Technologies**

- 19 CSLF Recognized Projects (17 Active Projects; 2 Completed Projects)
- Project Technologies:
  - CO2 Capture 10 projects
  - CO2 Transport 3 projects
  - CO2 Storage with Enhanced Oil Recovery 4 projects
  - CO2 Storage with Enhanced Coal Bed Methane Recovery 4 projects
  - CO2 Storage with Enhanced Natural Gas Recovery 4 projects
  - CO2 Storage with No Secondary Recovery 8 projects
  - CO2 Measurement, Monitoring, and Verification (MMV) of Storage 13 projects
  - Identification of potential CO2 storage sites 4 projects
  - Identification of target CO2 sources 4 projects
  - Economic and/or Environmental Evaluation and/or Risk Assessment 13 projects



#### **Project Technologies**



Percentage of CSLF-Recognized projects showcasing a given technology



#### **Completed CSLF Projects**

Project	Location
China's CRM Tachnology/CO2 Sequestration Project	China

Conclusion: enhancement of coalbed methane recovery and storage of CO2 is feasible in the anthracitic coals of Shanxi Province

Current bi-lateral country funding phase (Canada and China) completed

Recommendation 1: proceed to multi-well pilot at test site

Recommendation 2: evaluate deeper coal seams at alternative sites

Project paper in the International Journal of Greenhouse Gas Control Volume 1(2007) p. 215-

222, available at <a href="http://www.sciencedirect.com">http://www.sciencedirect.com</a>

CO2STORE Denmark, Germany, Norway, and United Kingdom

Report: "Best Practice Manual" summing up results from the previous SACS project and CO2STORE (http://www.co2store.org, look in "Archive")