MEETING SUMMARY
Technology Gaps Closure Task Force Meeting
Bergen, Norway
11 June 2012

Prepared by the CSLF Secretariat

LIST OF PARTICIPANTS

Chairman: Richard Aldous (Australia)

CSLF Delegates
Australia: Clinton Foster
Brazil: Paulo Negrais Seabra
Canada: Stefan Bachu
China: Ping Zhong
Germany: Jürgen-Friedrich Hake
Japan: Ryo Kubo
Korea: Chang-Keun Yi
Netherlands: Paul Ramsak
Norway: Trygve Riis
South Africa: Tony Surridge
Saudi Arabia: Ahmed Aleidan
United Kingdom: Philip Sharman
United States: Grant Bromhal, Joseph Giove

CSLF Secretariat: John Panek, Richard Lynch

Observers
China: Xiaochun Li
Korea: Chonghun Han
Norway: Lars Ingolf Eide, Åse Slagtern
United Kingdom: Mark Crombie
United States: Chris Babel, Jeff Jarrett

1. Welcome and Summary of Task Force Formation
Richard Aldous of Australia, the Chair of this task force, welcomed the meeting attendees and provided a short summary of how the task force was formed. “Technical Gaps Closure” was one of the twelve Actions in the new Technical Group Action Plan. At the previous meeting of the Technical Group, in September 2011 in Beijing, Australia had volunteered to chair a new task force on this Action.
2. **Objective and Scope of Task Force**

Dr. Aldous stated that at the 4th CSLF Ministerial Meeting, at Beijing, China in September 2011, the Technical Group approved a new multi-year Action Plan, and one of the twelve key Actions identified by the plan was “Technology Gaps Closure”. The intention was that the Technical Group would identify and monitor key CCS technology gaps / related issues and recommend any R&D and demonstration activities that address these gaps / issues, while determining the effectiveness of ongoing CCS RD&D for addressing these gaps / issues.

To that end, Dr. Aldous stated that the objective of this new task force would be to assess the status of carbon capture, utilization and storage (CCUS) technologies to identify gaps and also opportunities. The scope would be to identify and focus on the ten most important gaps and the ten most important opportunities. To address each gap, the task force would attempt to determine what resources would be needed, who the main players (i.e., governmental bodies or companies) might be for taking on the activity, and the probability for success. This information could potentially feed into future recommendations to the G8/G20 on how to get better value for global expenditures on CCUS. Results from this task force could also be inputs to future versions of the CSLF Technology Roadmap.

3. **Activities, Schedule, and Deliverables of Task Force**

Dr. Aldous proposed that this task force should build on results from the recently discontinued Task Force for Assessing Progress on Issues Affecting CCUS, and that it focus on five technology areas of interest:

- Capture (including solvents, adsorbents, membranes, cryogenics, and related technology areas)
- Storage (including characterization of storage reservoirs, monitoring / verification, technical management of storage reservoirs, mitigation, and related technology areas)
- Transport (including pipeline design/structure, storage economics, and network economics)
- MMV (including sub-seabed MMV, atmospheric monitoring, induced seismicity, and near-surface pressure events)
- Technology and Skills (including education)

All of these areas have potential links to other CSLF task forces, so collaborations are possible within the CSLF as well as with outside organizations.

Dr. Aldous stated that the intention was to have a preliminary report in time for the upcoming 2012 CSLF Annual Meeting that would list technology areas of interest to the task force, and identify and rank technology gaps in each of these areas. By the time of the 2013 Technical Group meeting, the task force would produce a draft report that would focus on the most important gaps, with recommendations how these gaps could be closed. This report would then be finalized by the third quarter of 2013, in time for the next CSLF Ministerial Meeting.

4. **Task Force Membership**

Dr. Aldous stated that membership of the task force was open to all CSLF member countries and interested parties. Current membership in this task force consists of Australia (as Chair), Korea, Norway, and the United States, and Dr. Aldous stated his
preference that each of these CSLF delegations appoint one expert on CO₂ capture and one expert on CO₂ storage.

5. Closing Comments / Adjourn
Dr. Aldous thanked meeting attendees for their input and enthusiasm, and adjourned the meeting.

**Action Item**

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<td>Task Force</td>
<td>Complete a preliminary report in time for 2012 CSLF Annual Meeting.</td>
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