



**MEETING SUMMARY**  
**Task Force to Assess Progress on Technical Issues Affecting CCS**  
**Beijing, China**  
**20 September 2011**

Prepared by the CSLF Secretariat

## **LIST OF ATTENDEES**

Australia:	Niki Jackson
Brazil:	Viviana Coelho, Beatriz Espinosa
Canada:	Stefan Bachu (Acting Chair), Eddy Chui
China:	Xiaochun Li, Jianghua Chen, Maoshan Chen, Yiman Li. Daan Liu, Jingrui Niu, Ruina Xu, Shu Wang, Yongsheng Wang, Yuan Wang, Ping Zhong
European Commission:	Jeroen Schuppers
France:	Didier Bonijoly
Germany:	Jürgen-Friedrich Hake, Peer Hoth
Italy:	Giuseppe Girardi, Sergio Persoglia
Japan:	Ryo Kubo
Korea:	Chang-Keun Yi
Netherlands:	Harry Schreurs, Erwin Giling, Mei Zhang
Norway:	Trygve Riis
Saudi Arabia:	Khalid Abuleif
South Africa:	Tony SurrIDGE
United Kingdom:	Philip Sharman, Gary Kirby, Peter Holland-Lloyd
United States:	George Guthrie, Joseph Giove, Chris Babel, Craig Hart, Margaret Lou, Alex Tyshko, Logan West, Cheryl Wilson
Asian Development Bank:	Mukhtor Khamudkhanov
Global CCS Institute:	Mike Miyagawa
IEA GHG:	Tim Dixon
CSLF Secretariat:	John Panek, Richard Lynch

## **1. Welcome and Opening Remarks**

Task Force Chairman Clinton Foster could not be present for the meeting, so Acting Chairman Stefan Bachu welcomed participants to the Task Force meeting. Dr. Bachu stated that there would be no formal agenda, and that the main topic of the meeting would be the activities and work plan of the Task Force's working groups.

Before proceeding further, Dr. Bachu briefly described previous afternoon's Projects Interaction and Review Team (PIRT) meeting, as the outcomes from the PIRT often affect this Task Force. The PIRT agreed that:

- Updates to the CSLF Technology Roadmap (TRM) will henceforward be on a three-year cycle. A major update will be done every third year, with minor updates scheduled as needed the other two years. The last major TRM update was in 2010, so the next major update will be in 2013.
- An update to the CSLF Project Submission Form, including revisions to the Gaps Checklist, was deferred until the next PIRT meeting. Two such Checklists are being considered – a condensed Checklist for possible use as a “Project Elements” listing for projects being nominated for CSLF recognition and a more comprehensive Checklist for use in addressing carbon capture, utilization and storage (CCUS) technology gaps.
- The twelve Actions in the Technical Group Action Plan should be prioritized before any decision is made on which ones the Technical Group should include in its work plan.

## **2. Updates from Working Groups**

### Transportation and Infrastructure Working Group

Harry Schreurs, as Chair of the Working Group, stated that he had contacted three of the CSLF-recognized projects that include CO<sub>2</sub> transportation in their scopes. Replies from these projects indicated they have much useful information on many different aspects of transporting CO<sub>2</sub> by pipeline including selecting the best corridor for the pipeline, obtaining rights of way, and handling public outreach. Mr. Schreurs suggested that a deeper evaluation would be beneficial and that this could be the basis for a future CSLF technical workshop. Mr. Schreurs also informed the Task Force that a new Transportation and Infrastructure Working Group Chair will be needed, as he will be retiring early next year. Dr. Bachu, speaking for the Task Force, thanked Mr. Schreurs for his years of contribution to the CSLF.

Ensuing discussion centered on whether CO<sub>2</sub> compression should be a component of this Working Group. Mr. Schreurs noted that compression is required for a CO<sub>2</sub> pipeline of any significant length, while Dr. Bachu observed that the compression of captured CO<sub>2</sub> always first occurs “behind the gate” for a project and for that reason could be considered part of the Capture Working Group. In the end, there was agreement that responsibility for CO<sub>2</sub> compression technologies should be split between both Working Groups with the Capture Working Group addressing compression technologies inside the project site and the Transportation and Infrastructure Working Group responsible for compression along the pipeline route.

### Storage and Monitoring Working Group

Dr. Bachu, as Chair of the Working Group, gave a progress report of recent activities. A questionnaire containing a listing of storage and monitoring technology gaps was sent to the 25 CSLF-recognized projects that have CO<sub>2</sub> storage components, asking if the project sponsors had any suggestions for additional gaps and requesting any information relevant to how identified technology gaps are being addressed by those projects. Based on responses received, Dr. Bachu stated that it seems clear that the term “gap” is no longer useful in this context; instead, the term “technical issue” is much more relevant. Also, there did not appear to be any technology-related showstoppers – the only huge issue is that CO<sub>2</sub> capture and storage technologies are expensive and would result in economic disadvantage for industries vs. those that just vent CO<sub>2</sub> to the atmosphere. The preliminary conclusions are that the CSLF Project Submission Form should be simplified and reflect that CCUS Projects are addressing

much more on the technical and deployment issues and less on science. Also, the Working Group should focus its efforts on areas relevant to projects and to advancement of CO<sub>2</sub> storage. Dr. Bachu closed by thanking Lars Ingolf Eide, of Norway's CLIMIT Programme, for his assistance to the Storage and Monitoring Working Group.

Ensuing discussion centered on what the Working Group and Task Force as a whole could do to advance the knowledge base concerning CCUS technology issues. Trygve Riis stated that this Task Force is an essential and main input for the next major update to the TRM. Philip Sharman stated that the Task Force could be more proactive in identifying projects that address specific gaps and invite them to bring their knowledge into the CSLF. Dr. Bachu stated that he would bring these suggestions forward at the upcoming Technical Group meeting.

### **3. New Business**

John Panek mentioned that there will be an Integration-themed technology workshop in early November in London, co-sponsored by the Global CCS Institute and the CSLF. This event is being held in conjunction with the upcoming IEA GHG Executive Committee meeting.

### **4. Adjourn**

Dr. Bachu thanked the attendees for their participation and adjourned the meeting.