### Carbon Sequestration leadership Forum



www.c/lforum.org

### DRAFT

#### MEETING SUMMARY Projects Interaction and Review Team (PIRT) Meeting London, United Kingdom 27 June 2016

Prepared by the CSLF Secretariat

#### LIST OF ATTENDEES

#### **PIRT Active Members**

Australia:	Andrew Barrett (Chair), Max Watson
Canada:	Eddy Chui
France:	Didier Bonijoly, David Savary
Japan:	Ryozo Tanaka
Netherlands:	Paul Ramsak
Norway:	Lars Ingolf Eide, Åse Slagtern (Technical Group Chair)
Saudi Arabia:	Hamoud Al-Otaibi
South Africa:	Tony Surridge
United Kingdom:	Brian Allison
United States:	Mark Ackiewicz
IEAGHG:	Tim Dixon

#### **Other CSLF Delegates**

Australia: Italy: Japan: Korea: Saudi Arabia: United States:

<u>CSLF Secretariat</u>

#### Richard Lynch

Ahmed AlEidan

Paul Trotman

Paolo Deiana

#### **Observers**

Canada: Japan: Norway: United Kingdom: United States: Simon O'Brien Kimiko Nakanishi Britta Paasch Mark Crombie Sallie Greenberg, Judd Swift

Takashi Kawabata, Takura Okajima Chong Kul Ryu, Chang Keun Yi

Jarad Daniels (Policy Group Chair)

#### 1. Welcome

Following a brief host country greeting by Brian Allison, PIRT Chairman Andrew Barrett welcomed participants to the 25<sup>th</sup> meeting of the PIRT. Mr. Barrett stated that the emphasis of the current meeting would be on how the PIRT could better interact with CSLF-recognized projects. Mr. Barrett noted that representatives of CSLF-recognized projects were present and that he looked forward to their suggestions on that topic.

#### 2. Introduction of Meeting Attendees

PIRT meeting attendees introduced themselves. In all, twelve CSLF delegations were represented at the meeting.

#### 3. Adoption of Agenda

The draft agenda for the meeting, which had been prepared by the CSLF Secretariat, was adopted without change.

#### 4. Approval of Meeting Summary from Riyadh PIRT Meeting

The Meeting Summary from the November 2015 PIRT meeting in Riyadh was approved as final with no changes.

#### 5. Report from CSLF Secretariat

Richard Lynch provided a two-part report from the Secretariat, which covered the status of CSLF-recognized projects and, PIRT consensuses from the November 2015 meeting in Riyadh.

Concerning the portfolio of CSLF-recognized projects, Mr. Lynch stated that as of June 2016 there were 34 active projects and 15 completed projects spread out over five continents. Recent changes include addition of the five projects which were recognized by the CSLF at its November meeting in Riyadh. For the current meeting, no new projects had been proposed for CSLF recognition.

Mr. Lynch reported that there were two consensuses from the Riyadh meeting. The PIRT recommended approval by the Technical Group of five projects:

- CO<sub>2</sub> Capture Project, Phase 3
- CO2CRC Otway Project, Stage 2
- Oxy-Combustion of Heavy Liquid Fuels Project
- Carbon Capture and Utilization Project / CO2 Network Project
- Dry Solid Sorbent CO<sub>2</sub> Capture Project

Also, the PIRT recommended that the Technical Group assign a working group to formulate process and structure for future revisions of the CSLF Technology Roadmap (TRM). During the following day's Technical Group meeting, these recommendations were all accepted and approved.

#### 6. Current PIRT Activities

Discussions of current PIRT activities centered on the ongoing update activities for the TRM. Mr. Barrett stated that the TRM working group had been formed at the Technical Group meeting in Riyadh and consisted of Australia (Chair), Norway, South Africa, the United Kingdom, the United States, the IEAGHG, and the CSLF Secretariat. At that meeting there had been consensus that the process for the TRM rewrite would use the

2013 TRM as a foundation and refresh its content as needed, in order to keep the overall level of effort to a manageable level. Mr. Barrett stated that in the months following the Riyadh meeting there had been several meetings of the working group by teleconference and that the current focus was on updating Section 4 ("Identified Technology Needs"). The overall goal is to have a 2017 TRM in time for the expected end-of-2017 CSLF Ministerial Meeting.

Ensuing discussion provided valuable input on not only the content but also the desired timing of the rewrite process. There was consensus that the 2017 TRM should incorporate outcomes from the COP21 meeting in Paris, and also other relevant types of technologies such as Industrial CCS and Bioenergy with CCS (BECCS), both of which were only briefly mentioned in the 2013 TRM. It was also stated that the revised TRM should be clear on who will be its audience. Two existing areas, on Transportation and Infrastructure, will be combined into a single area with Norway as lead, and there was consensus that the TRM working group should change the structure of the TRM where needed. There was also agreement that the working group should create a survey for obtaining pertinent information from existing projects, which would assist the TRM rewrite effort. The survey would focus on technical needs.

The CSLF Policy Group Chair, Jarad Daniels, suggested that the TRM working group compress its work plan timeline so that a final draft of the 2017 TRM would be published in time for the 2017 CSLF Mid-Year Meeting. This timing change would allow recommendations from the TRM to be integrated into the planning for the 2017 Ministerial Meeting. There was agreement to make this timeline change.

#### 7. Future PIRT Activities

Mr. Barrett stated that one of the functions of the PIRT, as stated in its Terms of Reference, is to: "Ensure a framework for periodically reporting to the Technical Group on the progress within CSLF projects". To that end, there was general agreement that the PIRT was not doing enough to engage projects that have been recognized by the CSLF. Some of these projects have been involved in CSLF workshops but for many of the recognized projects, the PIRT has not had very much interaction. Several suggestions were offered to improve the situation: Technical Group Chair Åse Slagtern stated that more "Lessons Learned" workshops would be of high interest to the CSLF, Ahmed AlEidan suggested that the emphasis should be on finding ways to engage projects outside of meetings and workshops, and Sallie Greenberg mentioned that some of the CSLF-recognized projects may now be at the stage where intellectual property concerns have diminished and might be more disposed to share knowledge.

In the end, agreement was reached on a way forward that would improve interaction between the PIRT and recognized projects. The CSLF Secretariat and Dr. Greenberg (representing the CSLF-recognized Illinois Basin – Decatur Project) were requested to jointly develop a useful format (neither superficial nor onerous) for projects to report their status. Once this is available, PIRT delegates from Australia (Max Watson), Canada (Eddy Chui), and the United States (Mark Ackiewicz) would use this to engage project sponsors in their countries (targeting projects which have not participated in CSLF workshops) so that a sample status report on 4-8 projects can be finished in time for the 2016 CSLF Annual Meeting in October.

One other area of ongoing PIRT activity is technology workshops. Ryozo Tanaka stated that there would be a technical workshop at the upcoming 2016 CSLF Annual Meeting in

Tokyo. Due to the short time between the Mid-Year Meeting and the Annual Meeting, Mr. Tanaka and Mr. Lynch were requested to develop a structure for the workshop as expeditiously as possible.

#### 8. Open Discussion on Possible New Technical Group Activities

The CSLF Technical Group Chair, Åse Slagtern, made a short presentation that summarized existing Technical Group activities and possible new ones in advance of a more detailed discussion during the next day's full Technical Group Meeting. There are currently three active task forces besides the PIRT: Improved Pore Space Utilization (co-chaired by Australia and the United Kingdom), Bioenergy with CCS (chaired by the United States), and Offshore CO<sub>2</sub>-EOR (chaired by Norway). Decisions on forming task forces in two other areas, Industrial CCS and Geo-Steering and Pressure Management Techniques, had been postponed during the previous Technical Group Meeting.

Max Watson stated that the geo-steering activity could be taken up by the Improved Pore Space Utilization Task Force, but not elements associated with risk management. For that, a separate activity on Storage Mitigation would be needed. Didier Bonijoly offered that the Industrial CCS activity would need an active 'community' for a task force and that France's "Club CO<sub>2</sub>" might be able to assist, but he was not yet ready to propose creation of a task force until he checked with that association. Ms. Slagtern took all of this into consideration and stated that she would not propose that the Technical Group create any new task forces at the current Mid-Year meeting.

#### 9. Open Discussion and New Business

There was no new business offered or further discussion on any topic.

#### 10. Adjourn

Mr. Barrett thanked the attendees for their interactive participation and adjourned the meeting.

#### **Summary of Meeting Outcomes**

- The 2017 TRM should incorporate outcomes from the COP21 meeting in Paris, and also other relevant types of technologies such as BECCS that were not mentioned in the 2013 TRM.
- The TRM working group should change the structure of the TRM where needed.
- The TRM working group should create a "technical needs" survey for obtaining pertinent information from existing projects, in order to assist the TRM rewrite effort.
- The TRM working group should compress its work plan timeline so that a final draft of the 2017 TRM would be published in time for the 2017 CSLF Mid-Year Meeting.
- CSLF Secretariat and Dr. Sallie Greenberg (representing the CSLF-recognized Illinois Basin Decatur Project) should jointly develop a useful format (neither superficial nor onerous) for CSLF-recognized projects to report their status.
- PIRT delegates from Australia, Canada, and the United States should use the new project reporting format to engage projects located in their countries (approx. 4-8 projects in total) and prepare short status summaries in time for the 2016 CSLF Annual Meeting.

• PIRT delegate from Japan (Ryozo Tanaka) and CSLF Secretariat should develop a structure for a technical workshop to be organized as part of the upcoming 2016 CSLF Annual Meeting.