

Minutes of the Carbon Sequestration Leadership Forum (CSLF)
Policy Group Meeting

London, United Kingdom
Thursday, 5 June, 2014

LIST OF ATTENDEES

Chair: Christopher Smith (United States)

Policy Group Delegates

Brazil: Tulio Andrade

Canada: Geoff Murphy, Stefan Bachu

China: Jiutian Zhang

European Commission: Ilinca Balan, Jeroen Schuppers

France: Bernard Frois

Japan: Takashi Kawabata, Ryozi Tanaka

Mexico: William Jensen Diaz

Norway: Tone Skogen, Fredrik Netland, Trygve Riis

South Africa (via Skype): Gina Downes

United Kingdom: Amy Clemitshaw, Tony Ripley, Jonathan Hood

United States: Julio Friedmann

Representatives of Allied Organizations

IEA CCS Unit: Juho Lipponen, Tristan Stanley

Global CCS Institute: Andrew Purvis

CSLF Secretariat

Jarad Daniels

Observers

Allan Baker, Société Générale, France

Carole Chapman, Department of Energy & Climate Change (DECC), United Kingdom

Jeff Chapman, CCS Association, United Kingdom

Edward Heartney, U.S. Embassy London, United States

Ashley Ibbett, Department of Energy & Climate Change (DECC), United Kingdom

Peter Radgen, E.ON, Germany

Robert Van Voorhees, Carbon Sequestration Council, United States

Ruth Van Voorhees, EcoReg Matters Ltd., United States

Barry Worthington, United States Energy Association, United States

1. Welcome and Opening Statement. On behalf of the CSLF Policy Group Chair Christopher Smith, Julio Friedmann, United States, called the meeting to order.

2. Host Country Welcome. Amy Clemitshaw, Head of CCS Policy, Department of Energy & Climate Change (DECC), United Kingdom, welcomed the attendees and provided the host country remarks.

3. Introduction of Delegates. Policy Group delegates present for the meeting introduced themselves. Eleven of the twenty-three CSLF members were present, including representatives from Brazil, Canada, China, the European Commission, France, Japan, Mexico, Norway, South Africa, the United Kingdom, and the United States. Observers representing the IEA CCS Unit and the Global CCS Institute were also present.

4. Adoption of Agenda. The Agenda was adopted without change.

5. Approval of Minutes from Washington Meeting. The Minutes from the November 2013 Policy Group Meeting in Washington, D.C. were approved without change.

6. Review of Action Items from Washington Meeting. Jarad Daniels, Director, CSLF Secretariat, provided a brief summary of the action items from the November 2013 Washington Policy Group Meeting. All action items have been completed or are in process.

7. Update from CSLF Technical Group. Trygve Riis, Technical Group Chair, provided an update from the CSLF Technical Group, including a summary of the recent Technical Group Meeting in Seoul, Korea, in March 2014.

8. Discussion of Exploratory Committee Work Plan. Approximately one hour was spent discussing each topic area identified by the CSLF Exploratory Committee, established at the November 2013 CSLF Ministerial Meeting in Washington, and tasked to identify topics of interest from which an action plan can be developed.

A. Financing for CCS Projects: Bernard Frois, France, summarized his work to conduct a series of workshops and discussions on the business case for CCS, including the recent Financial Roundtable hosted by Société Générale in Paris on 23 May 2014. It was agreed that outcomes and recommendations from such workshops should be captured and disseminated to maximize value of these efforts, especially given that in the last two years there has been a large growth of interest in CCS from financial institutions. This interest from financial institutions has been driven by “good news” stories on the construction and completion of large scale CCS plants worldwide. It was stated that operating CCS plants, which employ a range of technologies, now exist and has started to create the “precedent” base required by the financial community to get comfortable with CCS as a new industry. Dr. Frois will draft a work plan on how to best continue engaging the finance community, with the next workshop planned to focus on CCS deployment in Asia, to be hosted in Washington, D.C. later in 2014.

B. Communications: Andrew Purvis, Global CCS Institute, presented the Communications Task Force Work Plan. Their mandate was presented as providing a focal point for coordinating consistent messaging on CCS internationally with organizations such as the IEA and the Global CCS Institute, enabling key messages to be delivered more frequently than through bi-annual CSLF Ministerial meetings, and evaluating the potential to communicate directly with other key audiences. Much discussion ensued regarding potential audiences, outreach opportunities, key messages, appropriate communication mechanisms, etc. The Communications Task Force was asked to draft a Communications Action Plan based on input received during the meeting. Specifically, it was agreed that key messages should come from within the CSLF, the Task Force should recommend prioritized target organizations to engage, and draft a CSLF procedure on how to engage other organizations (e.g. provide standardized CSLF communication messages to Ministers to deliver, develop a procedure for CSLF representatives to speak on behalf of the CSLF as opportunities arise,

etc.)

- C. Global Collaboration on Large-Scale CCS Projects:** Julio Friedmann, United States, presented a phased approach to look at what the CSLF can do to progress large scale projects and the sharing of large scale project data. The proposed scope was to: 1) promote and coordinate the sharing of knowledge gained from large-scale CO₂ saline storage projects carried out in CSLF member countries, and 2) Coordinate a process to identify and select a large-scale CO₂ saline storage site suitable for advancing the CO₂ storage state-of-the art. After good discussion, it was suggested that this effort continue to explore potential collaboration options and develop an action plan to 1) determine potential government interest in participating/supporting such efforts, 2) engage major projects that currently exist to determine opportunities to leverage existing project data and capital, and explore the potential for a collaborative effort under the CSLF to add additional functionality in the future, and 3) better refine the goals and key metrics we are striving for. Co-leads China and the US were requested to refine the action plan based on input from the meeting and information gained from planned discussions with interested parties.
- D. Supporting Development of 2nd and 3rd Generation CCS Technologies:** Trygve Riis, Norway, presented the task force's views on what and how efforts should be taken to better understand the role of 2nd and 3rd generation technologies for CCS deployment, policies and approaches that can stimulate advanced technology development, and possible actions that the CSLF could take to advance technology development. It was noted that the CSLF Technical group should map and identify 2nd and 3rd generation technologies under consideration in CSLF member countries and identify technologies that may mature in the 2020-2030 timeframe. It was suggested that the CCS Test Centre Network & the CSLF Technical Group should use existing networks to map the potential for testing promising technologies. In parallel, the Policy Group should map initiatives and funding mechanisms for 2nd and 3rd generation technologies in CSLF member countries, and prepare a policy document on how to accelerate implementation of 2nd and 3rd generation CO₂ capture technologies, including investigating new mechanisms that may be possible and highlighting opportunities for international collaborations.

It was agreed that each of the above task forces should draft detailed action plans and deliver them to the CSLF Secretariat approximately two months after the meeting, such that the Secretariat can distribute the draft action plans to all members, and solicit feedback in advance of the next Policy Group meeting.

9. Proposed Policy Group Activity concerning Policy, Legal, and Regulatory Challenges for Transitioning from CO₂-EOR to CCS. Stefan Bachu, Canada, presented on behalf of the Technical Group Task Force on Technical Challenges in the Transition from CO₂-EOR to CCS, including the recommendation that the Policy Group establish a Task Force to examine and address "Policy, Legal and Regulatory Challenges in the Transitioning from CO₂-EOR to CCS." Many technical and policy aspects were presented regarding the difference and similarities between deep saline storage and CO₂-EOR. It was suggested that Policy Group delegates digest Dr. Bachu's presentation and suggestions for policy topics, and provide feedback to the CSLF Secretariat, such that the conversations may continue on these topics and to see which ones get interest for further discussion.

10. Review of Stakeholder Recommendations to CSLF. Barry Worthington, United States Energy Association, briefly reviewed the stakeholder recommendations from the last CSLF Ministerial Meeting in Washington, D.C., and noted that some of the stakeholders would like to be more

engaged with the CSLF. The CSLF Secretariat took the action item to work with Mr. Worthington and USEA to ensure that moving forward, stakeholders are more engaged. Mr. Worthington also recommended that the CSLF should consider hiring communication professionals to help with reinvigorated outreach and communication efforts, and it was decided that the Communications Task Force should investigate this.

11. Planning for 2014 CSLF Annual Meeting. Jarad Daniels, Director, CSLF Secretariat, stated that no country had yet volunteered to host the 2014 CSLF Annual Meeting, and requested that each country inform the CSLF Secretariat of their intention within the next two weeks. Christopher Smith, United States, noted that he strongly preferred to have the next CSLF meeting hosted in Europe to bring focus to the potential for CCS in Europe.

12. Action Items and Next Steps. Jarad Daniels, Director, CSLF Secretariat, summarized the results of the day's discussions and noted that each Task Force has the action to draft a short working paper on their plans forward, and to provide that to the CSLF Secretariat within two months. The CSLF Secretariat will then circulate the materials for review and feedback in advance of the next CSLF meeting. Each country has the action to inform the CSLF Secretariat within the next two weeks if they would like to host the next CSLF meeting.

13. Open Discussion and New Business. No new business was discussed.

14. Closing Remarks / Adjourn. Christopher Smith, United States, closed the meeting by thanking all of the participants for their input, and by thanking the government of the United Kingdom for hosting the event.