

# Minutes of the CSLF Policy Group Meeting

Thursday, 18 October 2018

Melbourne Convention and Exhibition Centre

Melbourne, Victoria, Australia

# List of Attendees Policy Group Delegates

Australia: Jason Russo, Tim Sill

Brazil: Renato Salim

Canada: Kathryn Gagnon, Eddy Chui

China: Ping Zhong

European Commission: Jeroen Schuppers France: Didier Bonijoly

Italy: Sergio Persoglia, Paolo Deiana Japan: Yukihiro Kawaguchi, Takuro Okajima

Korea: Hyanjong Park, Hanim Kwon Norway: Stig Svenningsen, Espen Kjærgård

Saudi Arabia: Hamoud AlOtaibi (Vice Chair), Abdullah Alsarhan

United Kingdom: Brian Allison (Vice Chair)

United States: Steve Winberg (Chair), Mark Ackiewicz

### **Organization Representatives**

IEA: Samantha McCulloch

IEAGHG: Tim Dixon

### **CSLF Secretariat**

Jarad Daniels, Richard Lynch, Adam Wong

### **Invited Speakers**

Australia: Sarah Chapman, Department of Industry, Innovation and Science

Japan: Ryozo Tanaka, Research Institute of Innovative Technology for the Earth

(RITE)\*

Yasushi Yoshino, Kawasaki Heavy Industries

Norway: Åse Slagtern, Research Council of Norway (Technical Group Chair)\*

United States: Barry Worthington, United States Energy Association

### **Observers**

Australia: Andrew Barrett\*, Max Watson\*, David Byers, Chamaka De Silva, Fiona

Koelmeyer, Victoria Mendes Da Costa, Kingsley Omosigho

Brazil: Ana Musse\*

Canada: Mike Monea\*, Beth Hardy

France: Juho Lipponen Japan: Jiro Tanaka

Korea: Yi Kyun Kwon\*, Mi Hwa Kim\*

Norway: Lars Ingolf Eide\* Saudi Arabia: Amar Alshehri\* United Kingdom: Brendan Beck

United States: Sallie Greenberg, Frank Morton, Katherine Romanak

<sup>\*</sup>CSLF Technical Group Delegate

### 1. Welcome and Opening Statement

Steven Winberg, Policy Group Chair, United States, called the meeting to order and thanked Australia and the Department of Industry, Innovation and Science for hosting. Mr. Winberg noted some of the significant recent multilateral achievements in carbon capture, utilization, and storage (CCUS). He thanked all participants for their contributions and commitments to the goals of the CSLF.

### 2. Host Country Welcome

Jason Russo, General Manager, Onshore Minerals, Department of Industry, Innovation and Science, Australia, welcomed attendees to Melbourne, Australia. Mr. Russo highlighted the role that carbon capture and storage (CCS) has both economically and with global carbon abetment. Mr. Russo also noted that good outcomes need good government, and he looked forward to the day's discussion.

### 3. Introduction of Delegates

Delegates around the table introduced themselves. Thirteen of the twenty-six CSLF members were present, including representatives from Australia, Brazil, Canada, China, European Commission, France, Italy, Japan, Korea, Norway, Saudi Arabia, United Kingdom, and United States.

### 4. Adoption of Agenda

The agenda was adopted without any changes.

5. Review and Approval of Minutes from December 2017 Policy Group Meeting in Abu Dhabi The Minutes from the CSLF Policy Group Meeting in December 5, 2017 in Abu Dhabi, UAE were approved without any changes.

### 6. Report from CSLF Secretariat

Jarad Daniels, CSLF Secretariat, provided a brief summary of the action items from the CSLF Policy Group Meeting on December 5, 2017, in Abu Dhabi, UAE. All action items have been completed or are currently in progress. Delegates were encouraged to continue to send updated country CCUS developments, including any CCUS-related quotes from country Ministers, to the CSLF Secretariat for the CSLF website country pages.

### 7. Report from CSLF Stakeholders

Barry Worthington, United States Energy Association gave an update from the CSLF Stakeholders. As noted at the last meeting, the CSLF Stakeholders have taken a regional approach, and remain committed to hosting annual or biannual meetings. Mr. Worthington noted that an Intergovernmental Panel on Climate Change (IPCC) report released last week emphasized CCS. Mr. Worthington then highlighted and reminded the participants of CSLF Stakeholders views, including that national and subnational governments should increase policy support, and that national governments should urge international financial institutions to finance CCS, while also supporting policy parity for CCS. The CSLF Stakeholders also suggested that the CSLF increase its Ministerial-level involvement, maybe through initiatives such as the Clean Energy Ministerial (CEM). Other recommendations from the CSLF Stakeholders included the belief that governments should include a clear roadmap to attract private investment, while also incorporating CCS and CCUS into green climate funds and other institutions. Ultimately, governments should not wait to implement CCS, but instead, act now.

### 8. International Energy Agency (IEA) CCUS Unit Update

Samantha McCulloch, International Energy Agency (IEA) provided an update from the IEA. With the UK Government, the IEA will hold an International CCUS Summit in Edinburgh, United Kingdom, co-chaired by IEA Executive Director Fatih Birol and UK Minister of State for Clean Energy and Growth Claire Perry.

9. United Kingdom and IEA International CCUS Summit on 28 November 2018 in Edinburgh Brian Allison, United Kingdom, provided additional details regarding the upcoming International CCUS Summit, and noted the inclusion of a number of Ministers and senior government officials, in addition to CEOs and industry executives, global partnerships and organizations, and the financial community. The hosts expect around 50 high-level participants to the invite-only Summit, which includes a workshop the following day.

# 10. IEA Greenhouse Gas R&D Programme (IEAGHG) 14th Greenhouse Gas Control Technologies (GHGT) Conference Overview

Tim Dixon, IEAGHG, provided an overview of next week's IEA Greenhouse Gas R&D Programme (IEAGHG) 14th Greenhouse Gas Control Technologies (GHGT) Conference (GHGT-14). GHGT-14 will highlight advances in CCS in Australia as well as developments in the whole Asia-Pacific region. This includes the Yangchuan project in China, and the Tomakomai/Osaki CoolGen and the Ministry of Environment Sustainable CCS projects in Japan. It will also aim to provide information on R&D developments in rapidly expanding economies like Indonesia. As the premier international technical conference on carbon capture and storage (CCS), the Conference includes four days of programs and exhibitions.

# 11. Report from CSLF Technical Group

On behalf of the Technical Group, Åse Slagtern, Technical Group Chair, Norway, reported out on recent Technical Group activities. Overall, the Technical Group is making progress toward key CSLF goals. Its methodology includes developing a forward-looking vision and how to get there through the CSLF Technology Roadmap; facilitating knowledge sharing among CCUS technology developers and users through the Project Engagement Strategy; encouraging collaborative activities among CSLF members through CSLF-recognized Projects; and developing messages and recommendations in specific CCUS technology areas through the various CSLF Task Forces. The recent CSLF Technology Roadmap 2017 provided recommendations to Ministers of the CSLF countries on technology developments that are needed to accelerate the deployment of CCUS.

The Technical Group has held two meetings in 2018: one in Venice, Italy in April; and one earlier this week in Melbourne, Australia on Wednesday, October 17. Noteworthy outcomes from the Technical Group Meeting in Venice, Italy in April included:

- Two task forces (BECCS and Hydrogen with CCS) issued final reports and disbanded
- New task force created to examine progress on non-EOR CO<sub>2</sub> Utilization (Chair is United States)
- Established ad-hoc committee to work on Task force knowledge sharing and working mode as well as measuring TRM recommendation progress
- Enabling Onshore CO<sub>2</sub> Storage in Europe (ENOS) Project recommended for CSLF Recognition

Noteworthy outcomes from the Technical Group Meeting in Melbourne, Australia on Wednesday included:

- Hydrogen task force planning work shop with IEAGHG
- Hub and infrastructure task force phase "0" established Lead Norway together with Canada, Brazil, Australia, UK
- Revised task force working mode including overview reports, workshops and working with allied organizations (practical implementation to be worked out by ad-hoc committee)
- Methodology on measuring progress of TRM technical recommendations to be worked out by the ad-hoc committee
- Norway re-elected as Technical Group Chair. Australia, Canada and re-elected as Technical Group Vice Chairs and Japan elected as vice-chair

The Technical Group also recommended that the Policy Group provide CSLF recognition to the ENOS Project. The project is initiated by CO<sub>2</sub>GeoNet Association, and its overall goals are to help foster onshore CO<sub>2</sub> storage in Europe by advancing key technologies specifically adapted for onshore storage, and to help create a favorable environment for onshore storage in Europe.

The Policy Group approved the ENOS Project for CSLF recognition.

## 12. Hydrogen Energy Supply Chain Project

Sarah Chapman, Department of Industry, Innovation and Science, Australia and Yasushi Yoshino, Kawasaki Heavy Industries, Japan, presented an update on a joint Hydrogen Energy Supply Chain Project.

### 13. Report from the Communications Task Force

Hamoud AlOtaibi, Task Force Chair, Saudi Arabia spoke on recent activities of the CSLF Communications Task Force. The Task Force's strategy has included efforts to expand strategic engagement, simplify CSLF messaging, expand message delivery mechanisms, and a refresh of the CSLF's digital profile. Completed activities have included: a media kit on the role of the CSLF, a Global Media List and forward CCS calendar, website development on country pages, coordinated regional workshops, work with the host country (UAE) on the 2017 CSLF Ministerial Meeting communication strategy, ensuring key messages aligned within the 2017 CSLF Technical Roadmap and 2017 Communique, helping support for CCUS initiative under CEM9/MI3, and support for the 2017 CSLF Communiqué.

Going forward, the Communications Task Force will explore new communications alignment with CSLF stakeholder representatives and others; facilitate more CSLF regional stakeholders meetings while targeting other audience members (e.g. financial institutions), and work to carry core CSLF messages under the CEM CCUS Initiative.

### 14. Report from the Capacity Building Governing Council

Stig Svenningsen, Governing Council Chair, Norway, provided an update from the Capacity Building Governing Council (Council). The Council had agreed to remove the ring-fenced funding for the project for India. At its meeting the day before, the Council also agreed to the following actions:

- All remaining CSLF funds will be allocated to CSLF members from developing countries to support their participation in CEM CCUS Initiative and other CCUS-related convenings.
   Each participating country will be provided US\$50,000.
- The entirety of the remaining unallocated CSLF funds will be paid to the CEM CCUS coordinator with the intention that 50% will be used to support developing country member fees and 50% to support travel or other related costs for those same members.
- The CEM CCUS coordinator will advise eligible countries of the availability of the funding and will manage requests from and payments to those countries.
- The CSLF Governing Council will become inactive and will be dissolved as soon as practical.
- The Global CCS Institute will provide periodic updates to USDOE, as the Governing Council Secretariat, until all funds are dispersed, and the fund balance is \$0.

### 15. Planned International Roundtable on Strengthening Collaboration on CCUS

Ryozo Tanaka, Japan, presented on a planned "International Roundtable on Strengthening Collaboration on CCUS." As Japan will host the G20 Summit in Osaka in June 2019, this Roundtable objective will be to discuss options for strengthening international CCUS collaboration at the Osaka G20 Summit in order to contribute to fulfilling the Paris Agreement and the U.N. Sustainable Development Goals. This one and a half day Roundtable will take place in early-2019 in Washington, D.C. and expects 50-60 participants from government and private sector in the G20, CSLF, and CEM. Japan's Ministry of Economy, Trade and Industry (METI) will sponsor this Roundtable, and the event will also be hosted by the Center for Climate and Energy Solutions (C2ES) and Japan's Research Institute of Innovative Technology for the Earth (RITE), and Japan would also like this even to be held in cooperation with the CSLF and the CEM CCUS Initiative.

After the Roundtable, C2ES and RITE will produce a final report with recommended options for strengthening international CCUS collaboration at the Osaka G20 Summit. The Policy Group agreed that the upcoming Roundtable should also be held in cooperation with the CSLF, and can use the CSLF logo.

# 16. Clean Energy Ministerial (CEM) Carbon Capture, Utilization, and Storage (CCUS) Initiative Update

Jarad Daniels, United States, provided an update on the CCUS Initiative under the Clean Energy Ministerial (CEM). At the 8<sup>th</sup> Clean Energy Ministerial (CEM8) in Beijing in June 2017, U.S. Secretary of Energy Rick Perry noted that the U.S. feels strongly that CCUS should be included within the suite of clean energy technologies under consideration by CEM. At CEM9 in Copenhagen in May 2018, the CEM Ministers approved a new CCUS initiative, and the CEM CCUS Initiative was launched at an official CEM9 CCUS Side Event where energy ministers, industry executives, and the IEA Executive Director discussed the role of governments, industry, and the financial community in accelerating CCUS deployment. The key objectives of the Initiative include:

- Expand the spectrum of clean energy technologies actively considered under CEM to include CCUS
- 2. Create a sustained platform for the private sector, governments, and the investment community to engage and accelerate CCUS deployment
- 3. Facilitate identification of both near and longer-term investment opportunities to improve the business case for CCUS
- 4. Disseminate emerging CCUS policy, regulatory, and investment best practices as part of integrated clean energy systems

Currently, the CEM CCUS Initiative is co-led by Norway, Saudi Arabia, and the United States, and other members include China, Canada, Japan, Mexico, South Africa, the United Arab Emirates, and the United Kingdom (note: during the following afternoon meeting of the CEM CCUS Initiative, the United Kingdom was approved as a new co-led with Norway, Saudi Arabia, and the United States).

A discussion was then held on what the new CEM CCUS Initiative means for the CSLF. It was noted that Ministers like to participate in CEM because it is broader than CCUS, and includes other topics such as financing and other technologies. It was also mentioned that it is difficult to get Ministers to travel, particularly to discuss a single topic such as CCUS. There was also strong support to keep the Technical Group as is. It was agreed that no changes would be made to either the CSLF Charter or the CSLF Terms of Reference. Instead, the CSLF Policy Group would try to collocate its future meetings with the CEM CCUS Initiative or other multilaterals, while the CSLF Technical Group will continue with its two meetings a year, potentially held separately from the CSLF Policy Group Meeting.

## 17. Future CSLF Meetings

As agreed by the Policy Group, the next Policy Group Meeting in 2019 will be co-located with another event, such as a CEM CCUS Initiative meeting or other multilateral event. The CSLF Technical Group will continue with its two meetings a year, potentially held separately from the CSLF Policy Group Meeting.

### 18. Open Discussion and New Business

No new business was raised.

### 19. Election of Policy Group Officers

Jarad Daniels, United States presided over the election of Policy Group Officers. As stated in Section 3.3 (a) of CSLF Terms of Reference and Procedures, CSLF Chairs and Vice Chairs elected every three years. The Policy Group elected the Chair (United States) and Vice Chairs (China, Saudi Arabia, United Kingdom) to continue serving as Policy Group Officers for a three-year term through the end of 2021.

### 20. Summary of Meeting

Jarad Daniels, CSLF Secretariat, provided a summary of the day's Policy Group Meeting, and noted the significant agreements and action items. The Policy Group reached a consensus on the following items:

Approved the ENOS Project for CSLF recognition

- Agreed that the upcoming "International Roundtable on Strengthening Collaboration on CCUS" hosted by Japan in Washington, D.C. in early-2019 should also be held in cooperation with the CSLF
- Elected the Chair (United States) and Vice Chairs (China, Saudi Arabia, United Kingdom) to continue serving as Policy Group Officers for a three-year term through the end of 2021

Action items from the meeting are as follows:

Item	Lead	Action
1	All delegates	Send updated country CCUS developments, including any CCUS-related quotes from country Ministers, to the CSLF Secretariat for the CSLF website country pages
2	Communications Task Force	Explore new communications alignment with CSLF stakeholder representatives and others
3	Communications Task Force & CSLF Stakeholders	Facilitate more CSLF regional stakeholders meetings while targeting other audience members (e.g. financial institutions)
4	Communications Task Force in coordination with the Clean Energy Ministerial (CEM) CCUS Initiative	Work to carry core CSLF messages under the CEM CCUS Initiative
5	Capacity Building Governing Council	Work to transfer remaining funds to support capacity building through the CEM CCUS Initiative, and then dissolve the Capacity Building Program

# 21. Closing Remarks / Adjourn

Steve Winberg, CSLF Policy Group Chair, United States, closed the meeting. He thanked all of the participants and the government of the Australia for hosting the event, and looked forward to continuing the conversation during the afternoon's CEM CCUS Initiative discussion.