Carbon Sequestration leadership forum

www.c/lforum.org



MEETING SUMMARY

CO₂ Utilization Options Task Force Meeting Bergen, Norway 11 June 2012

Prepared by the CSLF Secretariat

LIST OF ATTENDEES

Chairman: Joseph Giove (United States)

CSLF Delegates

Australia: Clinton Foster, Richard Aldous

Brazil: Paulo Negrais Seabra

Canada: Stefan Bachu China: Ping Zhong

Germany: Jürgen-Friedrich Hake

Japan: Ryo Kubo Chang-Keun Yi Korea: Netherlands Paul Ramsak Trygve Riis Norway: South Africa: Tony Surridge Ahmed Aleidan Saudi Arabia: United Kingdom: Philip Sharman United States: Grant Bromhal

<u>CSLF Secretariat</u>: 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

Joseph Giove of the United States, the Chair of this task force, welcomed the meeting attendees and provided a short summary of how the task force was formed. "CO₂ Utilization Options" 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, the United States had volunteered to chair a new task force on this Action.

2. Objective and Scope of Task Force

Mr. Giove noted that the CSLF Charter was amended in 2011 to specifically include CO_2 utilization technologies as an important aspect of a CO_2 emission reduction strategy, in addition to carbon capture and storage (CCS) technologies that have been the focus of CSLF efforts since its inception in 2003. To that end, Mr. Giove proposed that the objective of this task force would be to identify/study the most economically promising CO_2 utilization options that have the potential to yield a meaningful, net reduction of CO_2 emissions. The proposed scope of the task force would be to summarize existing information regarding utilization options, assess the state of each relevant technology and application, and assess the relative value of specific utilization options for making a meaningful impact on CO_2 emissions.

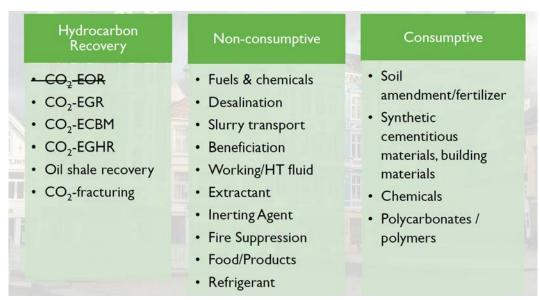
Ensuing discussion centered around the wording of the task force's objective and scope, but in the end there was consensus that the wording of the objective was sufficient for at least the initial phase of task force's activities. Mr. Giove agreed that the objectives could be refined in greater detail as the task force proceeded, and Philip Sharman of the United Kingdom kindly offered his assistance.

3. Activities, Schedule, and Deliverables of Task Force

Mr. Giove proposed a two phase activity plan and schedule for the task force, with Phase I (broadly focused analysis) setting the stage for Phase II (more narrowly focused analysis). Specifically, the focus of the Phase I work will be to do an initial assessment of all technologies that beneficially utilize CO₂. The purpose of the Phase II work will be to narrow the Phase I technologies down to those that have the greatest potential for future impact on emissions reductions, and do a more in-depth study of those technologies.

In regard to task force deliverables, Mr. Giove stated that the Phase I report will provide a summary of existing information regarding CO₂ utilization options, a discussion of the state of each relevant technology and application, a preliminary assessment of the relative value of the utilization option to make a meaningful impact on CO₂ emission reduction, and an indication regarding the economic viability of the technology. The Phase I report is intended to be a deliverable at the upcoming 2012 CSLF Annual Meeting.

Mr. Giove provided the following preliminary list of CO₂ utilization options that he had developed prior to this meeting:



Mr. Giove noted that this list was not exhaustive and should be modified in the future as other technologies become more/less useful. In the short term, it was agreed that the focus of the task force not be solely on Enhanced Oil Recovery (EOR), as there is another new Technical Group task force with that mission. As the new Technical Challenges of Conversion of CO₂-EOR to CCS task force scopes out its mission in greater detail, it will become clearer what elements of EOR can/should be covered by the CO₂ Utilization Options task force. There was consensus for this approach.

4. Task Force Membership

Mr. Giove stated that membership of the task force was open to all CSLF member countries and interested parties. The following CSLF Technical Group delegations have volunteered to participate and are "charter members" of the task force:

- a. China
- b. Germany
- c. Netherlands
- d. Saudi Arabia
- e. South Africa
- f. United Kingdom
- g. United States (chair)

5. Closing Comments / Adjourn

Mr. Giove thanked meeting attendees for their input and enthusiasm, and adjourned the meeting.

Action Items

Item	Lead	Action
1	Task Force Chair	Refine the scope of the task force as necessary.
2	Task Force	Complete a draft of the Phase I Report in time for 2012 CSLF Annual Meeting.