



MEETING SUMMARY
Technology Challenges of Conversion of CO₂-EOR to CCS Task Force Meeting
Rome, Italy
17 April 2013

Prepared by the CSLF Secretariat

LIST OF PARTICIPANTS

Chairman: Stefan Bachu* (Canada)

CSLF Delegates

Australia: Christopher Consoli
China: Qi Li, Xiaochun Li
European Commission: Stathis Peteves
France: Didier Bonijoly
Germany: Jürgen-Friedrich Hake
Japan: Ryozi Tanaka
Netherlands: Paul Ramsak
Norway: Trygve Riis
Russia: Georgy Ryabov
Saudi Arabia: Ahmed Aleidan*
South Africa: Tony SurrIDGE
United Kingdom: Suk Yee Lam
United States: Mark Ackiewicz*, George Guthrie

CSLF Secretariat: John Panek, Richard Lynch

Observers

Chinese Taipei: Chi-Wen Liao
Germany: Martin Streibel
IEA GHG: Tim Dixon
Norway: Lars Ingolf Eide*, Olav Hansen
United States: Rob Finley, Sallie Greenberg, Susan Hovorka

* Task Force member

1. Chairman's Welcome

Task Force Chairman Stefan Bachu of Canada welcomed the meeting attendees and provided a short summary of the task force and its activities. The task force consists of eight members, four of whom were present. Dr. Bachu stated that the purpose of this meeting was not to discuss the task force's draft report, which is in good shape going forward and will be complete in time for the upcoming CSLF Ministerial Meeting in

November. Instead, the time available would be used to consider proposed conclusions from the report.

2. Proposed Conclusions from Task Force Report

Dr. Bachu stated that the conclusions task force's report would highlight the commonalities and differences between CO₂-EOR and CCS, and proposed the following listings:

Commonalities

- a) CO₂-EOR and CCS technologies can all be considered mature.
- b) CO₂-EOR and CCS projects both include CO₂ transportation and injection. Purity of the CO₂ is of importance.
- c) CO₂-EOR and CCS projects both include wellhead monitoring of injected CO₂.
- d) Geochemical and geomechanical effects on reservoirs will occur for both CO₂-EOR and CCS projects.

Differences

- a) Assurance monitoring requirements are considerably different between CO₂-EOR and CCS projects, with CCS projects having far more rigorous regulatory obligations.
- b) The area of review and the area of influence for CO₂-EOR and CCS projects have considerably different reporting requirements, with CCS projects having far more rigorous regulatory obligations.
- c) The environmental monitoring requirements are considerably different between CO₂-EOR and CCS projects, with CCS projects having far more rigorous monitoring obligations.
- d) End-of-operations monitoring requirements are considerably different between CO₂-EOR and CCS projects, with CCS projects having far more lengthy and comprehensive monitoring obligations.
- e) Assurance of well integrity is somewhat different between CO₂-EOR and CCS projects, where CCS projects need to have well integrities confirmed prior to any operations while CO₂-EOR projects also have to have well integrities confirmed, but not necessarily prior to any operations.
- f) CO₂ storage considerations are considerably different between CO₂-EOR and CCS projects, with CCS projects optimized for CO₂ storage while CO₂-EOR projects are optimized to maximize the production of oil.

Dr. Bachu mentioned that the "assurance of well integrity" might in fact be more of a similarity than a difference. Mark Ackiewicz suggested that an additional commonality would be that both CO₂-EOR and CCS projects have mandate to protect potable water sources and other subsurface resources. Ahmed Aleidan proposed an additional difference: CCS projects lose money, while CO₂-EOR projects produce money. Dr. Bachu agreed, but said this would not be stated so directly.

3. Adjourn

In conclusion, Dr. Bachu stated that there are no technical challenges for any project to transition from CO₂-EOR to CCS, and that he would provide a timeline for the report's completion in the full Technical Group meeting. Dr. Bachu thanked the attendees for their participation and adjourned the meeting.