



Task Force on Technical Challenges for Conversion of CO₂-EOR to CCS

Dr. Stefan Bachu, Canada

Technical Group Meeting, Perth, Australia, October 25, 2012

Origin of the Task Force



- ❑ At the CSLF Ministerial Meeting in Beijing, China, in September 2011, the CSLF Charter was amended to include CO₂ Utilization Technologies (the “U” in CCUS)
- ❑ On the Storage side, CO₂ utilization means
 - In enhanced oil recovery – **proven technology!**
 - In enhanced gas recovery – untested technology
 - In shale gas and oil production – unproven technology
 - In geothermal energy production – unproven technology

Task Force Mandate



- “Review, compile and report on technical challenges that may constitute a barrier to the broad use of CO₂ for EOR and to the conversion of CO₂-EOR operations to CCS operations”
- Economic and policy barriers are outside the scope of the Task Force, as these are policy matters and belong to the Policy Group

Expected Outcome



Report identifying technical challenges in the conversion of CO₂-EOR operations to CO₂ storage operations, including pure technical issues and regulatory issues that involve technical aspects

Task Force Timeline

- Finalize Task Force membership at the CSLF TG meeting in Bergen, June 2012 ✓
- Identify subjects and produce table of contents by the CSLF meeting in Perth, October 2012 ✓
- Produce first draft of the report by the CSLF TG meeting in spring of 2013
- Circulate report to CSLF TG members for review by August 2013
- Submission for approval of the final report at the CSLF meeting in the fall of 2013, with decision about the future of the Task Force



Task Force Membership

- **Canada (Chair):** Dr. Stefan Bachu
- **Brazil** Paulo Roberto da Motta Pires
- **China** Dr. Mingyuan Li, Dr. Jishun Qin
- **Mexico** Dr. Francisco Guzmán
- **Norway** Lars Ingolf Eide, P.E.
- **Saudi Arabia** Dr. Ahmed Al Eidan
- **United States** Stephen L. Melzer, P.E., Dr. Darren Mollot

Broad Report Outline



1. Foreword and Executive Summary
2. Introduction (Task Force mandate, scope and objective of the report, existing CO₂-EOR/CCS operations)
3. Characteristics of CO₂-EOR operations (objectives, suitability, operational aspects, monitoring & surveillance, regulatory requirements)
4. Characteristics of CO₂ storage operations (objectives, suitability, operational aspects, monitoring & surveillance, regulatory requirements)
5. Transitioning from CO₂-EOR to CCS (commonalities and differences, operational scenarios, storage integrity, monitoring and regulatory requirements)
6. Summary and Conclusions, including recommendations



Comments?

Thank you!