

Carbon Sequestration leadership forum

Update from Working Group on Evaluating Existing and New Ideas for Possible Future Technical Group Actions

CSLF PIRT Meeting Venice, Italy, 22nd April 2018

> Åse Slagtern Technical Group Chair



Identify important technical aspects for implementation of CCS

Review Team 2017

- At the Technical Group meeting in Abu Dhabi, Unites Arab Emirates, December 2017, a review team reported:
 - 24 potential new topics on longlist
 - 11 from Action List 2015
 - 11 past task force topics to be reviewed for update (all included, not only last four years)
 - 2 new proposals
 - Shortlist reduced to 12

Completed actions



- Technical Challenges for Conversion of CO₂-EOR Projects (Final Report in Sept. 2013)
- CCS Technology Opportunities and Gaps (Final Report in Oct. 2013)
- **CO₂ Utilization Options** (*Final Report in Oct. 2013*)
- **Review of CO₂ Storage Efficiency in Deep Saline Aquifers** (*Final Report in June 2015*)
- Reviewing Best Practices and Standards for Geological Monitoring and Storage of CO₂ (Final Report November 2014)
- Technical Barriers and R&D Opportunities for Sub-Seabed CO₂ Storage (*Final Report in Sept. 2015*)
- Supporting Development of 2nd and 3rd Gen. CO₂ Capture Technologies (*Final Report in Dec. 2015*)
- **Off-Shore CO₂-EOR** (*Final Report in December 2017*)

Current Actions



- **Bioenergy with CCS** (Since 2015, USA Lead, Final Report in Technical Group meeting, Venice, Italy, April 2018)
- Improved Pore Space Utilisation (Since 2015, UK and Australia Lead, *Final Report due at 2018, Melburne Australia 2018?*)
- Industry CCS (Since 2016, France Lead, Final Report due in 2018)
- **Hydrogen** (Since 2017, "Phase O" activity, Norway lead, contributions from Australia, Canada, France, Japan, the Netherlands, Saudi-Arabia, United Arab Emirates, the United Kingdom, IEAGHG, and CSLF Sectrtariat)



- Geo-steering and Pressure Management Techniques and Applications (Note: Geo-Steering has been incorporated into Improved Pore Space Utilisation action.)
- Advanced Manufacturing Techniques for CCS Technologies
- Dilute Stream / Direct Air Capture of CO₂
- Global Residual Oil Zone (ROZ) Analysis and Potential for Combined CO₂ Storage and EOR
- Study / Report on Environmental Analysis Projects throughout the World
- Update on Non-EOR CO₂ Utilization Options
- Ship Transport of CO₂
- Investigation into Inconsistencies in Definitions and Technology Classifications
- Compact CCS
- Reviewing Best Practices and Standards for Geologic Monitoring and Storage of CO₂*
- CO₂ Capture by Mineralization *
- Global Scaling of CCS *

*Received a high prioritization score from Working Group on Evaluating Existing and New Ideas for Possible Future Technical Group Actions.

Possible new actions with highest priority

Торіс	Possible	Contributors
	Lead	
Capture by mineralization	NL*	
Reviewing Best Practices and		Australia, France, Norway, Saudia-
Standards for Geological Monitoring		Arabia
and Storage		
Global scaling of CCS		France, Saudia-Arabia
Geo-steering and pressure		
management techniques and		
applications		
Utilisation options of CO ₂		

*to report back on possible Lead