

Carbon Sequestration leadership forum

www.cslforum.org



Highlights and Outcomes from CSLF Technical Group Meetings

Åse Slagtern

Technical Group Chair

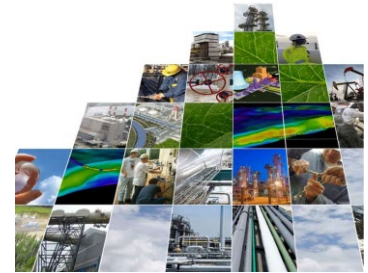
Highlights from Technical Group Meetings



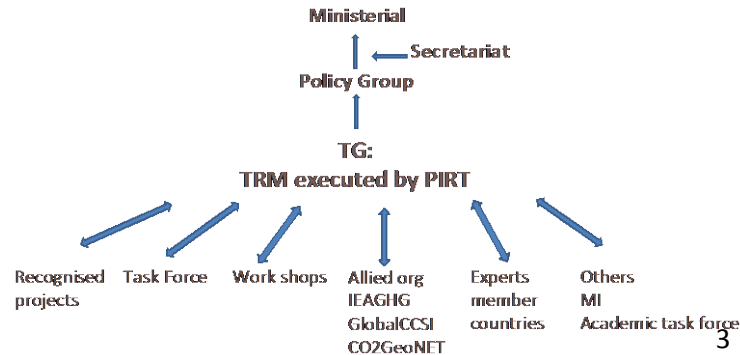
Overall Message: Technical Group is making progress toward key CSLF goals. *Our methodology:*

- Developing a forward-looking vision and how to get there (*CSLF Technology Roadmap*)
- Facilitating knowledge sharing among CCUS technology developers and users (*Project Engagement Strategy*)
- Encouraging collaborative activities among CSLF members (*CSLF-recognized Projects*)
- Developing messages and recommendations in specific CCUS technology areas (*Task Forces*)

CSLF Technology Roadmap 2017



- Objective
 - Provide recommendations to Ministers of the CSLF countries on technology developments that are needed to accelerate the deployment of CCUS
- Audience
 - Energy policy developers in general and the CSLF Ministers in particular
- Receives input from several sources



Highlights from Technical Group Meetings



Two Technical Group Meetings in 2018

- Venice, Italy (in April)
- Melbourne, Australia (on Wednesday)

Highlights from Technical Group Meetings



Venice Meeting Noteworthy Outcomes

- Two task forces (BECCS and Hydrogen with CCS) issued final reports and disbanded.
- New task force created to examine progress on non-EOR CO₂ 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 CO₂ Storage in Europe (ENOS) Project recommended for CSLF Recognition.



Highlights from Technical Group Meeting



Melbourne Meeting Highlights

Updates from three Technical Group Task Forces

- CCS for Industries
- Improved Pore Space Utilisation
- Non-EOR Utilization Options



Highlights from Technical Group Meetings



Melbourne Meeting Highlights

Updates from Allied Organizations

- IEAGHG
- GCCSI
- CO₂GeoNet Association



Highlights from Technical Group Meetings

Melbourne Meeting invited presentations:

- Report on the 3rd International Workshop on Offshore Geological CO₂ Storage
- Report on the International Overview of CO₂ Utilisation Symposium (France)
- Update from the Mission Innovation Carbon Capture Challenge
- Update on the International Test Center Network
- Preview of the CSLF Presentation at GHGT-14



Highlights from Technical Group Meetings

Melbourne Meeting invited presentations on activities in Australia:

- Programme Activities of the CO2CRC
- Activities of the Australia National Low Emissions Coal Research & Development (ANLEC R&D) Initiative
- Review of China Australia Geological Storage of CO₂ (CAGS) Project



Highlights from Technical Group Meetings

Melbourne Meeting Invited presentations:

- Updates from four CSLF-recognized Projects
 - Gorgon CO₂ Injection Project
 - CarbonNet Project
 - South West Hub Project
 - CO2CRC Otway Project (at PIRT meeting)

Outcomes from Technical Group Meetings



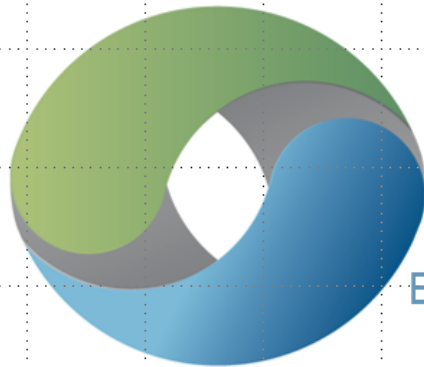
Melbourne Meeting Outcomes

- Hydrogen task force planning work shop with IEAGHG
- Hub and infrastructure task force phase “0” established. Lead is Norway together with Canada, Brazil, Australia, UK
- Revised task force working mode including overview reports, workshops and working with allied organisations. 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 and Canada re-elected as Technical Group Vice Chairs, and Japan elected as Vice Chair.



Outcomes from Technical Group Meetings

ENOS Project proposed for CSLF
Recognition



ENOS

Enabling Onshore Storage in Europe

Outcomes from Technical Group Meetings



ENOS Project proposed for CSLF Recognition

- Nominated by Italy (*lead*), Australia, Canada, France, the Netherlands, Norway, Romania, and the United Kingdom.
- The project is initiated by CO₂GeoNet Association.
- Overall goals are to help foster onshore CO₂ storage in Europe by advancing key technologies specifically adapted for onshore storage, and to help create a favorable environment for onshore storage in Europe.



Outcomes from Technical Group Meetings

ENOS Project Overview

- Consists of 29 partners in 17 European countries.
- Duration: September 2016 – August 2020.
- Budget: €12.5 million (contributed from European Commission). National funding supporting infrastructure.



Outcomes from Technical Group Meetings

ENOS Project Overview:

Leakage simulation:

- [GeoEnergy Testbed](#)
- [Sulcis fault lab](#)

Pre injection studies:

- [Q16 maas](#)
- [LBR 1](#)

Pilot CO₂ storage:

- [Hontomin](#)





Outcomes from Technical Group Meetings

ENOS Project Features

Demonstrating Key Technologies

- Ensure safe operation:
 - Injection strategies and reservoir monitoring
- Ensure storage capacities and cost effective characterization:
 - Reservoir modelling to assess and quantify storage capacity estimates
 - Validation of methodology to optimise exploration program
- Risk assessment and mitigation
 - Produce best-practice guidelines for monitoring strategy

Outcomes from Technical Group Meetings



ENOS Project Features

Engaging Researchers with Local Population

- Establishing communications channels and setting up citizens groups near field sites
- Integrating social aspects and citizens' input in best practice documents
- Integration of CO₂ storage with local economic activities

Outcomes from Technical Group Meetings



ENOS Project Features

Supporting Deployment

- International Collaboration
- Identification of possible future projects
- Capacity Building

Outcomes from Technical Group Meetings



The Technical Group
recommends that the Policy
Group provide CSLF recognition
to the ENOS Project