



TECHNICAL GROUP

Planning Document: Storage and Monitoring for Commercial Projects Task Force

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PLANNING DOCUMENT:
STORAGE AND MONITORING FOR COMMERCIAL PROJECTS TASK FORCE

Note by the Secretariat

Background

At the 4th CSLF Ministerial Meeting, at Beijing, China in September 2011, the Technical Group approved a new multi-year Action Plan. “Storage and Monitoring for Commercial Projects” is one of the twelve Actions that comprise the Action Plan, and Norway has volunteered to lead a new Task Force that will focus on identification and review of standards for geological CO₂ storage and monitoring as well as for guidelines for communication with and engagement of involved communities and regulators. This paper is a Planning Document for the new Task Force that describes its mandate, scope, goals, timeframe, and expected outcomes.

Action Requested

The Technical Group is requested to review and approve this Planning Document.

Planning Document for Technical Group Action Plan #6 Storage and Monitoring for Commercial Projects

Background

Since its inception in 2003, the Carbon Sequestration Leadership Forum (CSLF) has focused its efforts to facilitate the research, development, demonstration and deployment of effective, low-cost CO₂ capture and storage (CCS) technologies as a viable option to reduce greenhouse gas emissions in an effort to combat the effects of global warming. For capture these efforts focused on a variety of technologies applicable to power and industrial plants that use or process fossil fuels. For the CO₂ storage the focus has primarily been on geological sequestration.

National and international regulations regarding storage of CO₂ in the underground are appearing. The European Commission has issued its directive 2009/31/EC, which has requirements on how to characterize and monitor a geological storage site. The OSPAR and London Conventions also have such requirements that will come into force when the conventions have been ratified by a sufficient number of parties. Thus, in connection with applications for underground CO₂ storage it will be beneficial to have standards, guidelines or best practice manuals to facilitate the process.

The first articles addressing the subject of site selection go back to around 2003. The first best practice manual was probably the one produced by the CSLF recognized CO2STORE project in 2006. It was later followed by, among others, a generic report on selection and characterizing of a storage sites by CO2CRC; several NETL best practices; guidelines for the entire CCS chain by World Resources Institute; a technical basis for carbon dioxide storage by the CO₂ Capture Project (CCP); and guidelines from Det norske Veritas (DNV). A review of existing best practice manuals for carbon dioxide storage and regulation was published by CO2CRC in March 2011.

At the start of 2012 there were eight large-scale integrated projects in operation and seven under construction, in addition to numerous smaller storage projects worldwide. There will be lessons learned from most of these and the experience is likely to find its way into updated and new standards, guidelines and best practices for CO₂ storage and monitoring.

Mandate

At the CSLF meetings in Beijing, China (September 19-23, 2011) the CSLF Technical Group agreed that the Secretariat should circulate, by the end of the first week of October, a listing of the twelve Actions of its five years Action Plan to Technical Group delegates with the request that that each CSLF Member provide a ranking by priority of importance. Delegates were asked to respond within three weeks and the results were then compiled by the Secretariat. Results from this survey were used to decide which Actions to undertake immediately and which ones to defer. The Secretariat was also asked to solicit ideas for additional Actions from the delegates.

Specifically, the prioritized actions of the five-year plan include Action Plan 6: Storage and Monitoring for Commercial Projects. The formation of a task force to implement Action Plan 6 was proposed.

Membership

Norway has agreed to lead or co-lead the task force. Membership of this task force is open to CSLF member countries and interested parties. *[Note: those interested in participating on the task force as a member or co-lead should contact the CSLF Secretariat or Mr. Trygve Riis, Research Council of Norway, tur@rcn.no]*

Outcome

The outcome of the Storage and Monitoring for Commercial Projects Task Force, will be regular identification and review of new and updated standards for storage and monitoring of injected CO₂. The application of such standards should inform CO₂ crediting mechanisms.

Action and Scope

To obtain this outcome, the task force will identify and review standards for geological CO₂ storage and monitoring as well as for guidelines for communication with and engagement of involved communities and regulators. As stated above, there are already several guidelines and best practice manuals. The Task Force will produce annual summaries of new as well as updated standards, guidelines and best practice documents regarding geological storage of CO₂ and monitoring of CO₂ sites. One important aspect of the scope will be to keep track of the work within ISO, where a CCS working group has been established and has recommended global standards on CCS to be elaborated. It is also expected the Task Force will need to follow the work of other task forces, in particular a new action proposed by Canada, Task Force on Storage Capacity Estimation. *[Note: the final scope of the work effort will be determined by the task force members]*

Milestones

The findings of the task force will be reported in an annual interim reports by [date], 2012, 2013, 2014 and 2015, with a final report completed by [date], 2016.