# Carbon Sequestration leadership forum

**CSLF-T-2014-02** 24 February 2014



## TECHNICAL GROUP

# Proposal for New Task Force on Technical Barriers and R&D Opportunities for Offshore, Sub-Seabed Geologic Storage of Carbon Dioxide

### **Background**

The November 2013 CSLF Technical Group Meeting in Washington included a presentation on offshore carbon storage. There was no consensus at that time for a new task force on this topic but subsequently the United States has volunteered to lead such a task force. This paper is a proposal for creating the task force and a brief description of its projected mission and objectives.

### **Action Requested**

The Technical Group is requested to review the proposal for a new task force on Technical Barriers and R&D Opportunities for Offshore, Sub-Seabed Geologic Storage of CO<sub>2</sub>.

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# Proposal for New Task Force on Technical Barriers and R&D Opportunities for Offshore, Sub-Seabed Geologic Storage of Carbon Dioxide

## **Background:**

Offshore geologic storage offers additional carbon dioxide (CO<sub>2</sub>) storage opportunities and may have several advantages, such as:

- Avoids issues with heavily populated, onshore areas
- May require only one owner for leasing and pipeline siting
- Reduces difficulty of surface and mineral owner rights, in areas where jurisdiction can be an issue
- Reduces risks to underground drinking water sources
- Provides storage opportunities in areas of many large emission sources along coastlines, and areas that may have potentially limited options for onshore storage

While the number of offshore carbon capture and storage (CCS) projects is limited, one of the most successful CCS projects is an offshore effort that has been demonstrated since 1996 at Statoil's Sleipner field, located approximately 240 kilometers off the coast of Norway in the North Sea. However, the offshore CO<sub>2</sub> geologic storage potential is not well characterized globally as a whole (although some individual countries have performed more in-depth characterization and analysis). There is also a need to understand and address technical challenges associated with the added complexities of operating a CCS project in a marine environment.

At the November 2013 CSLF Ministerial Meeting in Washington, DC, USA, both the Technical and Policy Group meetings included presentations on offshore carbon storage. The Technical Group meeting included a discussion on the topic of offshore storage and the possibility of creating a new task force, however, no consensus was reached at the meeting on the scope of the task force or a volunteer to lead this effort. A similar discussion on offshore storage also occurred during the Policy Group Meeting. Additionally, the Ministerial Communiqué from the meeting noted that offshore geologic storage options are of interest since a diverse suite of options will be necessary for widespread global deployment of CCS.

### **Proposal:**

The United States proposes to serve as chairperson and lead a Technical Group Task Force that is focused on identifying the Technical Barriers and R&D Opportunities for Offshore, Sub-Seabed Geologic Storage of CO<sub>2</sub>. The Task Force will develop a report that will:

- Identify existing projects and characterization activities worldwide on offshore CO<sub>2</sub> storage and progress to date;
- Provide a current assessment or understanding (using available analyses) on the status of global offshore storage potential (including potential for offshore enhanced oil recovery (EOR));
- Identify the technical barriers/challenges to offshore CO<sub>2</sub> storage (e.g., characterization, monitoring, transport challenges (a separate task force may be formed for this so would leverage or reference that effort)) and R&D opportunities;
- Identify potential opportunities for global collaboration; and
- Include conclusions and recommendations for consideration by CSLF and its member countries.

#### **Tentative Timeline for Task Force Activities:**

Activity	Completion/Due Date
Introduction and Request for Interest in Participation on Task Force	March 27, 2014
Task Force Membership Established	April 30, 2014
Initial/Draft Outline of Report Developed by Task Force	June 30, 2014
Task Force Progress Report to Technical Group	September-December 2014
First Draft of Report Complete	December 31, 2014
Task Force Report Complete/Progress Report to Technical Group	March-May 2015