

# Report from the first Carbon Capture, Utilization, & Storage (CCUS) Task Force Meeting

**Bergen, Norway**  
**June 11, 2012**

Joseph Giove, United States, Task Force Chair

# CCUS Task Force

## History

- **At the CSLF Ministerial meeting in Beijing, the CSLF Charter was amended to, among other things, include CO<sub>2</sub> utilization technologies as an important aspect of a CO<sub>2</sub> emission reduction strategy, in addition to carbon capture and storage technologies that have been the focus of CSLF efforts since its inception in 2003.**
- **In response, the CSLF Technical Group included in its Five-Year Action Plan (2011-2016) included Action Plan #12: CO<sub>2</sub> Utilization Options**
- **At the September 2011 Joint Policy/Technical Meeting, the Five-Year Action Plan was approved, and the formation of a task force to implement Action Plan 12 was proposed.**

# CCUS Task Force

## History

- **The United States offered to chair or co-chair the new group**
- **After the meeting, the United States drafted a planning document that contained a draft charter, which was distributed to all delegates on December 8<sup>th</sup> by the CSLF Secretariat, along with an invitation to join the task force.**
- **China identified three technical experts to be involved, and the United Kingdom also expressed their desire to participate.**
- **Yesterday was the first meeting of the CCUS Task Force**

# CCUS Task Force

## Meeting Outcomes

- **Finalized and agreed upon CO<sub>2</sub> Utilization Task Force Planning Document, Charter, and Purpose Statement.**
- **Agreed upon a work plan and schedule for a Phase I (broadly focused) to set the stage for Phase II (more narrowly focused)**
- **Develop initial list of CO<sub>2</sub> utilization options for initial evaluation.**
- **Finalize CCUS Taskforce membership.**

# CCUS Task Force

## Purpose:

- **The purpose of the CCUS Task Force is to identify/study the most economically promising CO<sub>2</sub> utilization options that have the potential to yield a meaningful, net reduction of CO<sub>2</sub> emissions.**

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# CCUS Task Force

## Deliverables

### Phase I Report: **[By: October 23, 2012]**

- Phase I report will provide a summary of existing information regarding CO<sub>2</sub> utilization options,
- A discussion of the state of each relevant technology and application,
- A preliminary assessment of the relative value of the utilization option to make a meaningful impact on CO<sub>2</sub> emission reduction, and
- An indication regarding the economic viability of the technology.

# CCUS Task Force

## Deliverables

### Phase II Report: [By: TBD]

- Phase II report will provide a more thorough discussion of the most attractive CO<sub>2</sub> utilization options, based on economic promise and CO<sub>2</sub> reduction potential.
- An assessment of current and potential economic viability,
- CO<sub>2</sub> reduction potential at various price points,
- The potential for co-production, and
- A discussion of RD&D needs.



# CCUS Task Force



## Milestones: Phase I

- |   | Due Date/Lead |
|---|---------------|
| • Develop initial list of CO <sub>2</sub> utilization options for initial evaluation. | June 2012     |
| • Conduct literature review and draft report for review and comment by task force.    | Aug/Sept 2012 |
| • Final Phase I Report to CSLF Technical Group/Policy Group.                          | October 2012  |

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# CO<sub>2</sub> Uses – (not exhaustive)



## Hydrocarbon Recovery

- ~~CO<sub>2</sub>-EOR~~
- CO<sub>2</sub>-EGR
- CO<sub>2</sub>-ECBM
- CO<sub>2</sub>-EGHR
- Oil shale recovery
- CO<sub>2</sub>-fracturing

## Non-consumptive

- Fuels & chemicals
- Desalination
- Slurry transport
- Beneficiation
- Working/HT fluid
- Extractant
- Inerting Agent
- Fire Suppression
- Food/Products
- Refrigerant

## Consumptive

- Soil amendment/fertilizer
- Synthetic cementitious materials, building materials
- Chemicals
- Polycarbonates / polymers

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# CCUS Task Force

## Initial Task Force Membership

- China
- Germany
- Netherlands
- Saudi Arabia
- South Africa
- United Kingdom
- United States (chair)

(Task force is open to other participants)