



**IEAGHG Information Paper; 2013-IP28; CSLF Meetings, Washington DC,
4th - 7th November 2013**

The Carbon Sequestration Leadership Forum (CSLF) held its Fifth Ministerial Meeting in Washington, D.C. This included meetings of the CSLF Technical Group, CSLF Policy Group, related CSLF Task Forces, and the CSLF Ministerial meeting itself. The Ministerial meeting produced a Communiqué on “Re-energizing Global Momentum for CCS and Identifying Key Actions Needed for CCS Deployment”.

The mission of the CSLF is to facilitate the development and deployment of carbon dioxide and storage (CCS) technologies via collaborative efforts that address key technical, economic, and environmental obstacles. It is a government-to-government initiative, with 22 member countries and the European Commission.

CSLF Technical Group

IEAGHG and the CSLF Technical Group have a ‘Collaborative Arrangement’ in place since 2007, and IEAGHG presented an update on activities to the CSLF Technical Group, and presented the IEAGHG study on ‘Implications of Gas Production from Shales and Coal on CO₂ Storage’ (undertaken by ARI) which was originally proposed to IEAGHG by CSLF under the ‘Collaborative Arrangement’.

The Technical Group presented completed work on a new CCS Technology Road Map, a report on CCS technology status and gaps, a report on transitioning EOR to storage, a report reviewing best practice guides, guidelines and standards. The CSLF Technical Group agreed to re-establish a Task Force on storage capacity characterisation and capacity estimation. The Technical Group discussed new activities on energy penalty, CCS on industrial sources, competition with other resources, negative emission technologies (bio-CCS), and on CO₂ transport. Other topics covered in the CSLF meetings were discussions on a new task force on offshore CCS, the role of communication on CCS, the role of scientific collaboration on projects. IEAGHG undertakes work in these areas discussed and will assist in the future work in these. IEAGHG’s extensive activities in the Technical Group were also acknowledged and welcomed in the CSLF Policy Group meeting.

Projects

Five new projects were approved as CSLF Recognised Projects. The Uthmaniyah CO₂-EOR Demonstration Project is in Saudi Arabia, will capture and store approximately 800,000 tonnes of CO₂ per year from a natural gas production and processing facility, and will include a 70km pipeline to the injection site. The project duration is expected to be 4-5 years total, starting in 2013/2014.

The Alberta Carbon Trunk Line Project will collect CO₂ from two industrial sources (a fertilizer plant and an oil sands upgrading facility) in Canada’s Province of Alberta industrial heartland and transport it via a 240km pipeline to depleted hydrocarbon reservoirs in central Alberta for utilization and storage in EOR projects. Pipeline right-of-way clearing began in February 2013 with commissioning expected in 2014 and start of operations in 2015.

The Kemper County Energy Facility, located in the U.S. state of Mississippi, will use a 582MWe innovative Integrated Gasification Combined Cycle (IGCC) technology with low cost lignite. The project is expected to capture at least 65 percent of the CO₂ produced, around 3 Mt pa, which will be used for EOR. As an air-blown IGCC process for power generation, it



offers a simpler method for use of low-rank coal than most existing coal-gasification technologies.

The Midwest Regional Carbon Sequestration Partnership (MRCSP) Development Phase Project is designed to inject one million metric tons of carbon dioxide during a span of roughly four years. This project leverages existing enhanced oil recovery operations to inject CO₂ into a small number of oil fields located within a carbonate pinnacle reef complex in order to assess potential storage capacity, validate static and numerical models, identify cost-effective monitoring techniques, and develop system wide information to further understanding of other similar rock formations throughout the region. The MRCSP is a multi-year research program led by Battelle.

The Southeast Regional Carbon Sequestration Partnership (SECARB) Phase III Anthropogenic Test and Plant Barry Carbon Dioxide Capture and Storage Project is the largest pilot project of a fully-integrated pulverized coal-fired CCS project in the United States to date, pulling together components of capture (using Mitsubishi Heavy Industries technology on 25MW slip-stream), transportation (15km dedicated pipeline), subsurface storage, and monitoring, verification, and accounting. Project partners include Southern Company, Denbury Resources, and others. It has injected around 100,000t of CO₂ to date into the Paluxy saline formation within the Citronelle oil field.

Ministerial Meeting

The CSLF Ministerial Conference included views of leading CEOs relating to projects, and an interesting Ministerial discussion, chaired and lead by Ernest Moniz, the Secretary of Energy for the US. The Ministerial day concluded with a Communique on “Re-energizing Global Momentum for CCS and Identifying Key Actions Needed for CCS Deployment”. This emphasizes the role of research (which is IEAGHG’s main role in the international CCS arena) amongst other actions.

The Communique states that “the research and development (R&D), demonstration and global deployment of Carbon Capture and Storage (CCS) must be accelerated”. It states that key actions are needed on the following areas (summarized here):

- development of financial frameworks and incentive mechanisms
- demonstration and deployment strategies in both the power and industrial sectors,
- coordinated efforts on coherent and optimal CCS R&D and demonstrations, and opportunities through bilateral and multilateral collaboration with other key bodies and organizations including the IEA, the IEA GHG program, and the GCCSI.
- continue to establish permitting frameworks
- the need for pre-commercial geological storage validation
- improve understanding among the public and stakeholders of CCS technology
- support efforts to grow capacity in CCS and foster appropriate steps in knowledge sharing.

More information on the CSLF meetings and Communique can be found at <http://www.cslforum.net/>