

Carbon Sequestration Leadership Forum Academic Council

Sallie Greenberg, Illinois State Geological Survey, United States

David Malloy, University of Regina, Canada

7 October 2016

Policy Group Meeting

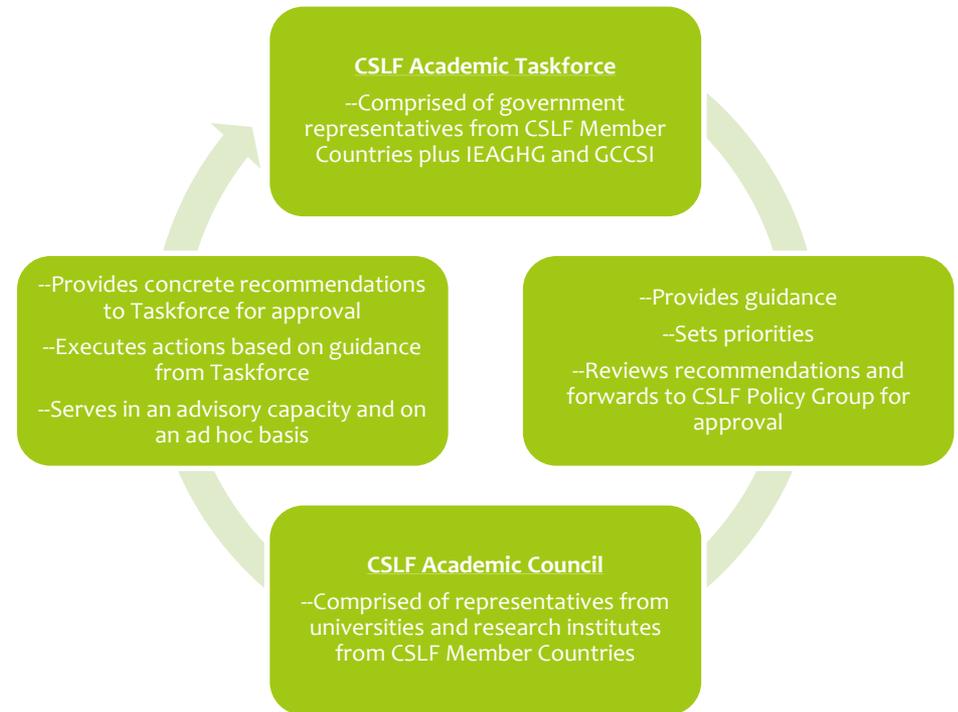
Carbon Sequestration Leadership Forum Annual Meeting

Tokyo, Japan

What is the Academic Council?

Academic Council

- Established by the CSLF Academic Task Force following the 2015 Ministerial Meeting
- Comprised of representatives from institutes and universities in CSLF member countries
- Serves in advisory capacity to the Task Force
- First meeting held in June 2016 as part of the CSLF Mid-Year Meeting in London



Priority Topics for First Academic Council Meeting

- Student Training and Practical Learning
- CCS Curriculum and Research Projects Development
- Communications
- Capacity Building

- Goals:
 - Identify academic research linkages with CSLF Technical Group and Policy Group priorities
 - Determine where and how CSLF can help leverage international collaborations, student exchanges, networks and funding opportunities to further CSLF goals
 - Finalize Plan of Action for 2016 CSLF Annual Meeting

Outcomes from London Meeting

- ❑ Utilize existing resources and linkages where possible
 - ❑ Leverage established connections, programs, and entities and avoid duplication of effort to maximize effectiveness of additional resource inputs
 - ❑ Foster new connections between existing facilities, experts, and sectors
 - ❑ Streamline and focus on best practices
 - ❑ CSLF can act as a global repository for information
 - ❑ Showcase talent and technologies

- ❑ Focus on priority areas:
 - ❑ Training and Academic Resources
 - ❑ Communications
 - ❑ Capacity Building

Action Plan

In discussions following the Academic Council meeting, the group agreed to combine two themes and concentrate recommendations on:

- Student Training, Practical Learning, and Curriculum Development
- Communications and Outreach
- Academic Community and Capacity Building

Student training, practical learning, and curriculum development

Overview: This is an area academics can contribute in educating researchers, academics, industry and the public through sharing resources. Well-organized, accessible resources can be leveraged towards capacity building in disseminating concepts, theory, and case studies in building the knowledge foundation in the CCS area.

■ Key Recommendations:

- Update Baseline Survey and Plan of Action to include input from ALL CSLF Member Countries prior to the 2017 CSLF Mid-Year Meeting
- Conduct a gap analysis on CCS post-graduate course mapping and summer school programs, leveraging ongoing work under the Trilateral CCS Initiative (Canada, Mexico, and the United States)
- Identify existing modularized content for CCS knowledge sharing and education for broad dissemination and develop new modularized content, as needed
- Request CSLF Member Countries identify existing internships with applicability to CCS and provide information to the Secretariat prior to the 2017 CSLF Mid-Year Meeting
- Request CSLF Member Countries' government organizations consider hosting interns to expose them to CCS policy and technical perspectives of the respective countries
- Request CSLF stakeholder community to identify internship opportunities, with an emphasis on exposure to and/or hands-on experience at operational CCS sites.

Communications and Outreach

Overview: Currently, there is not a 'one-stop' resource for storing and advertising postgraduate academic opportunities around the world. Developing such a collaborative resource should see an increase in the level of collaboration, as contributors are kept up to date with active research in foreign institutes.

□ Key Recommendations:

- Build website page under CSLF website on academic resources that includes links to: outreach programs; internship opportunity announcements; summer schools and training programs on CCS; webinar announcements; and CCS modularized training
- Task and fund, where necessary, the Academic Council to identify and create content for website
- Post videos from CSLF meetings and CCS workshops, in addition to relevant course materials for the meetings and workshops
- Request CSLF Member Countries to provide information on their international funding opportunities for publication and broad dissemination via CSLF website on a routine basis
- Request CSLF Member Countries' identify a point of contact for country-specific updates to the website
- Post student research on CCS on the CSLF website
- Enable academics to register as an academic (instead of a stakeholder) on the CSLF website
- Fund an annual academics event based on International CCS Academic Summit

Academic Community and Capacity Building

Overview: CSLF Member Countries are leaders in CCS, and many are home to a variety of academic institutions, research and development, and industry. Several countries are also host to demonstrations, projects, and fully operational plants that showcase CCS technologies. For members of the public, these sites are examples of CCS in action. For researchers, academics, and industry, these sites offer the chance to observe and learn. Study tours of project sites and plants are valuable resources where visitors can learn directly from plant operator and take this knowledge with them.

■ Key Recommendations:

- Work with Capacity Building Governing Council on recommendations for capacity building moving forward
- Request CSLF Member Countries to consider hosting study tours for developing countries (potentially outside of CSLF membership) with engagement and organization by the academic community
- Evaluate CSLF Academic Council hosted webinars via CSLF for capacity building
- Develop stakeholders' guidelines and engagement objectives document for use by CSLF Member Countries' Stakeholders
- Create, evaluate, and refine stakeholder engagement strategy and communications plan

Conclusion

- CCS activities are widespread across academic institutions.
- It is imperative that the next generation of researchers are identified and supported through exchanges, credit transfers, and exposure to cutting edge technology.

Next Steps

- As we move forward with academic pursuits to build capacity and further CCUS, we will bridge technical and policy with attention to the non-technical issues and methods of communication.
- Explore the notion of a CSLF Task Force on CCS Public Policy & Social Values.