

Carbon Sequestration Leadership Forum Ministerial Meeting
December 6, 2017
Abu Dhabi – United Arab Emirates
Stakeholder Messages to the Ministers

The Carbon Sequestration Leadership Forum (CSLF) recognizes its stakeholder process in advance of the CSLF Ministerial Meeting. A regional approach was taken with regional champions for the Americas, Europe, the Mid-East & Africa, and Asia Pacific.

Common Messages from Regional Meetings

Stakeholders expressed that sustained political support is the most important enabler for CCS and CCUS. Clear messages to this effect could include:

- a) Ministers must assess the role for CCS in meeting 2030 and 2050 climate targets (including NDCs) and include CCS in next iteration of national climate, energy, industry and infrastructure plans;
- b) Ministers must ensure a minimum of policy parity with other low carbon options. We stakeholders have identified 15 fiscal tools available to governments to create a level playing field for CCS.

In order to overcome commercial barriers to implement CCS increased awareness in and support for CCS/CCUS is needed from national financial communities and international funding bodies, ministers must support and enable:

- a) Identifying appropriate national funding mechanisms (e.g. subsidies, grants, carbon tax, cap and trade) including exploring utilization to advance relevant technologies and reduce costs;
- b) Supporting CCS projects through international funding mechanisms (e.g. Green Climate Fund, the World Bank and other international financial institutions).

In order to remove remaining barriers to implement CCS, continued research, development and demonstration of CCS as well as communication between stakeholder communities is needed, ministers must support:

- a) Exploring and promoting synergies with other low carbon technologies (e.g. hydrogen)
- b) Prioritizing CCS in, and providing funding via, mechanisms such as H2020, Green Climate Fund, Mission Innovation and ERDF/INTERREG to target remaining barriers to large scale implementation of CCS and to ensure continued international cooperation on CCS
- c) Enabling dialogue between stakeholder groups (e.g. supporting public engagement actions, partnerships to advance CCS around industrial clusters, knowledge exchange between project developers/operators and national regulators, industrial-academic collaborations)
- d) Ministers must be CCS proponents and advocates

Recommendations to Ministers from CSLF Americas Stakeholders—Regional Differentiation

This Message to the Ministers represents the outcome of the Americas Regional Meeting. All participants were asked to complete a survey.

Stakeholders expressed that a majority (54.55%) believe that regional issues are most important. A vast majority believe that CSLF should host stakeholder events either once or twice a year.

CSLF Stakeholders urge the Ministers to become involved with regional Stakeholder activities.

CSLF Stakeholders expressed that policy parity for CCS relative to other low-carbon, no-carbon technologies is most critical.

The 3 next most important actions are:

- a) Ministers should improve CCS/CCUS awareness and understanding within financial communities.
- b) Ministers should improve public perception and grow public awareness.
- c) Ministers should gain more political momentum for CCS/CCUS.

CSLF Stakeholders expressed that political support was the most important enabler. The next two most important enablers were:

- a) Access to direct subsidies.
- b) Off-take arrangements offering guaranteed prices.

CSLF Stakeholders cited politicians as the most important target audience for CCS/CCUS communications. Second was regulatory and policy developers. Ministers are credible CCS messengers.

Ministers should insist that recommendations from UNECE Group of Experts on Cleaner Electricity to encourage international financial organizations to finance CCS demonstration projects in developing countries, including the Green Climate Fund.

Recommendations to Ministers from CSLF European Stakeholders – Regional Differentiation

Ministers should:

1. Provide a clear message of long-term political support by assessing and specifying the role for CCS in achieving national 2030 and 2050 emission targets (including NDCs);
2. Reflect in policy messaging that we should not wait to implement CCS by including CCS in the next iteration of national climate, energy, industry and infrastructure plans as appropriate (drawing on lessons learned from national/transnational transport of energy commodities);
3. Accelerate identification of clusters of sources of CO₂ emissions that can best be reduced through the use of CCS as well as potential storage sites that can be rapidly developed (including exploring role for utilization in advancing long term CO₂ storage);

4. Direct development of tailored financial mechanisms to advance CCS rollout to deployment; recognizing its unique role in decarbonizing multiple sectors;
 - a. Funding should be ring-fenced specifically for CCS (e.g. from green taxes)
 - b. Prioritize CCS in, and provide funding via, mechanisms such as H2020, Mission Innovation and ERDF/INTERREG to target remaining barriers to large scale implementation of CCS.
5. Establish a national ministerial body with a mandate to engage with CCS project developers /operators to build long term relationship and to share knowledge and experience;
6. Provide policy support for collaboration with industrial companies and industrial regions on CCS (e.g. building public-private partnerships) to overcome commercial barriers to implementation of CCS.

Actions/Recommendations: From the Middle East/Africa – Regional Differentiation

1. Efforts and global commitment are needed to incorporate CCUS in Green Climate Fund projects.
2. Ministers should support policy parity among all clean energy technologies. This is essential to ensure cost effectiveness in achieving Paris Agreement ambitious goals.
3. Align with the 30 Priority Research directions in the Mission innovation report coming out early 2018.
4. Ministers should support stronger collaboration between industry and academia, considering confidentially/business proprietary information.
5. Ministers should support a nationally determined prize/award for innovations under CSLF to boost public awareness and engagement.
6. Offset-based policy options should be employed to capitalize cost effective application of CCUS

Asia Pacific Region Stakeholder Message – Regional Differentiation

Ministers should:

1. Provide support for the implementation and continuation of CCS demonstration projects to allow for the verification of technology, reliability and safety. The publicity of a successful demonstration project will result in acceptance by the general public and media.
2. Provide support for R&D of capture technology and storage management technology. The development of low cost capture technology is an absolute must in reducing the cost of CCS which is necessary for its dissemination, and the development of storage management technology is essential for establishing the reliability and safety of storage.

3. Establish fiscal incentives for the deployment of CCS. The stakeholders considered grants and carbon valuation (i.e., cap and trade or carbon tax) to be the most effective mechanisms for achieving policy parity with other global warming countermeasures. As these are conflicting concepts, it is essential that each country sets incentives taking into account the circumstances of the country in question. Incentives are necessary to stimulate competition by the private sector, which will lead to technological innovation and cost reduction.
4. Consider the establishment of infrastructure for the dissemination of CCS. CCS infrastructure (capture, transportation and storage facilities) will be required following demonstration, and it is necessary that government consider the establishment of such infrastructure. The cost to establish infrastructure is too large for the private sector, especially if there is no revenue from EOR.
5. Establish a legal and regulatory framework and technical standards for the dissemination of CCS. A legal and regulatory framework defining the responsibilities and liabilities of the public and private sector, as well as technical standards for safe implementation is essential.
6. Provide support for further promotion of international cooperation. International cooperation and knowledge sharing are indispensable in order to accelerate the implementation of CCS.