

## **Carbon Sequestration Leadership Forum Stakeholder Communiqué to CSLF Ministers**

CCS must be a core element of any environmentally and cost effective global response to address climate change. Fossil fuels supply nearly 80% of the world's energy needs and account for the majority of the world's energy-related GHG emissions. Expert and independent studies conclude that the use of fossil fuels is set to continue for many decades requiring CCS to contribute to global GHG emissions reduction efforts at a scale similar to that provided by renewables or energy efficiency. Yet despite the critical importance of CCS's contribution to the global fight against climate change international efforts to deploy this technology are significantly less than required.

### **Recommended actions by Governments**

To enable CCS to be deployed at the scale necessary to deliver CO<sub>2</sub> emissions cuts within the required timeframe, CSLF Stakeholders recommend that Governments urgently implement the following actions:

1. Accelerate the deployment of the 20 CCS demonstration projects approved by the G8 so that they commence operation at the earliest possible opportunity. Governments should aspire to have these plants operating from 2015;
2. Raise the level of ambition for CCS deployment beyond the first 20 projects approved by the G8 in 2008 and closer to the level actually needed to achieve international climate goals. The agreement of an ambitious climate deal in Copenhagen in December implies the need to be operating the equivalent of up to 100 commercial-scale power plants fitted with CCS worldwide by 2020;
3. Fully integrate CCS into the post-2012 climate change agreement that is expected to be negotiated at COP 15 in Copenhagen. The new climate agreement should promote the broad use of CCS technology in both developed and developing countries;
4. Develop the financing mechanisms and support frameworks capable of delivering this expanded deployment programme. Deploying CCS at this level could require total investments exceeding US\$130 billion between now and 2020;
5. Develop viable and predictable regulatory and incentives frameworks that will be necessary to deliver CCS policy goals. These should include regulations that support the transboundary export of CO<sub>2</sub> for CCS;
6. Create conditions that will stimulate improvement in the cost and performance of CCS technology and facilitate the exploration and development of large scale geological storage sites to enable CCS to become fully commercial; and
7. Build the public acceptance and support that will be necessary for CCS to be deployed at the scale required and implement knowledge sharing programmes from the early CCS projects to accelerate the diffusion of the technology.

## Supporting Statements

In 2008 the G8 agreed “to commit by 2010, to a diverse portfolio of at least 20 fully integrated industrial-scale demonstration projects (larger than 1Mt CO<sub>2</sub> per year) for the broad deployment of CCS by 2020”. CSLF Stakeholders recommend that the timely implementation of these projects should be a priority for Governments and the industry. Governments have already agreed to commit to these projects in 2010 and should strive to have these projects operating from 2015.

This requires governments to urgently provide clarity on the legal and regulatory frameworks and financing mechanisms under which these first pioneering projects will operate. Once these are in place the industry believes there to be no other significant barriers preventing the deployment of the first CCS demonstration projects and is ready to make investments in these projects, which will in turn allow for lessons from these projects to contribute to lower capital and operating costs for the next generation of projects.

CSLF Stakeholders stress that the first 20 industrial-scale projects are not an end in themselves and only represent a vital first step on the path to the viable, commercial and widespread deployment of CCS. If countries agree in Copenhagen to limit global average temperature increases to less than 2°C then CCS projects will need to be storing around 300 MtCO<sub>2</sub> per year in 2020. This is equivalent to operating one hundred 500MW power plants fitted with CCS.

2009 is a critical year for the international community’s response to climate change. The outcome of the UNFCCC COP-15 summit in Copenhagen in December will shape the international response to climate change for many years to come. CSLF Stakeholders strongly believe that CCS should be recognised as a core mitigation technology in any new climate change agreement. The Copenhagen agreement should also include mechanisms that will incentivise the deployment of CCS in fossil fuel dependent developed and developing countries. These mechanisms will enable those countries to continue to use fossil fuels for their economic development in an environmentally sustainable manner.

Achieving a new and more ambitious level of CCS deployment of 100 projects by 2020 would demand a significant scaling up of investment in CCS projects and could require in excess of US\$130 billion to be invested in CCS by 2020. To generate these financial flows Governments need to develop the policy frameworks to enable CCS to become commercial. The financing requirements for the broader roll out of CCS projects will be distinct from what is required for the first demonstration projects.

Over time, the combination of lower CCS technology costs and the strengthening of carbon markets and other low carbon technology support mechanisms will mean that less direct government support will be required and that CCS can begin to complement emission reductions from other low carbon technologies that have already benefitted from very significant and necessary government policy support.

CSLF Stakeholders emphasise the important role of Governments in creating the long-term, viable, predictable and commercially attractive, legal, regulatory and support frameworks that are required for industry to be able to make the necessary investment in CCS. Moving beyond the first 20 demonstration projects, Governments will need to establish the frameworks that can promote the commercial investment in CCS projects at the scale required. It is vital to move quickly from a world where we plan to develop tens of CCS projects to a world where hundreds of projects are deployed to achieve international climate goals.

To be successful the financial and regulatory frameworks must cover the full CCS chain: capture, transportation and storage. Countries without access to adequate geological storage sites should be able to transport their CO<sub>2</sub> across national borders

to other countries with suitable storage sites. Governments can make an important first step to enabling the transboundary transport of CO<sub>2</sub> by approving the proposal to amend the London Protocol and permit the transboundary movement of CO<sub>2</sub> at the next meeting of the London Protocol, 26 – 30 October, in London.

Governments have a central role to play in facilitating the necessary research and innovation into CCS to improve the technical performance and lower the costs of CCS. During this pre-commercial phase of CCS deployment governments also have an important role to play in facilitating the exploration and development of large-scale geological storage sites. The combination of improved technological performance of CCS and the identification of suitable storage sites will promote the widespread diffusion of CCS and enable fossil fuel dependent countries to contribute to ambitious emission reduction objectives.

CSLF Stakeholders firmly believe that public acceptance and support for CCS is necessary if CCS is to contribute to climate change mitigation at the scale that is required. While the effective sharing of experiences from early CCS projects will play an important role in building confidence in the technology, Governments, industry and civil society also have an important role in communicating to the public the actions required to address climate change and the contribution and benefits of CCS to these efforts.

CSLF Stakeholders recognise the need to actively share the knowledge generated from early CCS projects which will be crucial to efforts to:

1. Build confidence and acceptance of CCS as a climate mitigation technology;
2. Develop the capacity required to deploy the technology; and
3. Accelerate the development of the technology so that it can be deployed at the scale and rate necessary.

While effective and comprehensive knowledge sharing is important for the acceleration of CCS technology it is equally important that Intellectual Property Rights (IPR) are adequately protected. IPR are an important driver of technology innovation and facilitates the private sector's investment that will ultimately benefit CCS.

The CSLF Stakeholders welcome the opportunity to deliver these messages to the CSLF Ministers. We also reaffirm our commitment and support to the continuing work of the CSLF and acknowledge the important role that the CSLF has played in raising awareness on the role of CCS in addressing climate change.