



CARBON SEQUESTRATION LEADERSHIP FORUM

CARBON SEQUESTRATION LEADERSHIP FORUM Ministerial Communiqué 14 September 2004

Meeting of the Carbon Sequestration Leadership Forum (CSLF) Ministers

We, the Ministers of the CSLF Members, meeting in Melbourne, reaffirm our commitment to the CSLF as a framework for international cooperation in research and development for the capture, transport and storage of carbon dioxide (CO₂).

For the foreseeable future it is likely that fossil fuels will continue in widespread use throughout the world. Therefore, the considerations that stimulated the creation of the CSLF remain of vital importance. It may enable CO₂ capture, transport and storage technologies to be developed as one of the options for addressing greenhouse gas emissions and promoting sustainable development worldwide.

We warmly welcome the three new Members-France, Germany, and South Africa-that have joined the CSLF since the last Meeting of Ministers, held in Tysons Corner, Virginia, USA, during June 2003. We see their membership as clear evidence of the growing global interest in CO₂ capture, transport and storage as a means of mitigating emissions of greenhouse gases.

Projects and Technical Progress

We welcome and support the CSLF Technology Roadmap developed by the CSLF Technical Group and approved by the CSLF Policy Group. Although the roadmap does not commit the CSLF or its members to specific actions, we see it as an important framework that could guide future technical collaboration by the CSLF members. We see the CSLF Technology Roadmap evolving as more is learned. We anticipate that the CSLF Technology Roadmap should be revised from time to time to reflect this new knowledge.

We are pleased to be able to recognize ten collaborative projects proposed by Members. These projects range in scope and as a whole are expected to increase our knowledge in all areas, including technology, economics, health, safety, and the environment. Overall, they demonstrate the breadth and richness of ongoing activities around the world involving CO₂ capture, transport and storage and should lay the foundation for new and enhanced technology cooperation under the CSLF.

The ten projects are:

- **ARC Enhanced Coal-Bed Methane Recovery Project (Canada, United States and United Kingdom).** The objective of this project is to evaluate, from both economic and environmental criteria, a process of CO₂ injection into deep coal beds for simultaneous sequestration of the CO₂ and liberation (and subsequent capture) of coal-bed methane.
- **CANMET Energy Technology Centre (CETC) R&D Oxyfuel Combustion for CO₂ Capture (Canada and United States).** The objective of this project is to demonstrate oxyfuel combustion technology with capture of a high-purity CO₂ stream suitable for enhanced oil recovery and to provide information for the scale-up, design and operation of industrial and utility plants based on the oxyfuel concept.
- **CASTOR (European Commission, France and Norway).** The objective of this project is to attempt to validate, from process, economic, legal, and public acceptance perspectives, post-combustion capture and storage of CO₂ with a goal of achieving a major cost reduction in CO₂ capture cost.
- **CO₂ Capture Project, Phase II (United Kingdom, Norway, Italy, and United States).** The objective of this project is to continue the development of new technologies to reduce the cost of CO₂ separation, capture, and geologic storage from combustion sources such as turbines, heaters and boilers.
- **CO₂ Separation from Pressurized Gas Stream (Japan and United States).** The objective of this project is to evaluate processes and economics for CO₂ separation from pressurized gas streams with gas separation membranes.
- **CO₂SINK (European Commission and Germany).** The objective of this project is to test and evaluate CO₂ capture and storage in order to better understand the science and processes involved in underground storage of CO₂ and to provide experience for use in development of future regulatory frameworks for geological storage of CO₂.
- **CO₂STORE (Norway and European Commission).** The objective of this project is to demonstrate, as a follow-on to the current Sleipner project, monitoring to track CO₂ migration to undertake additional studies to gain further knowledge of geochemistry and dissolution processes.
- **Frio Project (United States and Australia).** The objective of this project is to demonstrate CO₂ sequestration in an on-shore underground saline formation in order to verify conceptual models and monitoring methods, demonstrate that no adverse health, safety or environmental effects will occur, and develop experience necessary for larger-scale experiments.
- **ITC CO₂ Capture with Chemical Solvents (Canada and United States).** The objective of this project is to demonstrate CO₂ capture using chemical solvents, with a goal of developing improved cost-effective technologies for separation and capture of CO₂ from flue gas.

- **Weyburn II CO2 Storage Project (United States, Canada, and Japan).** The objective of this project is to utilize CO2 for enhanced oil recovery at a Canadian oil field, including monitoring of CO2 migration within the oil field, with a goal of determining the overall performance and risks in using CO2 for enhanced oil recovery.

It is our expectation that the information generated through these collaborative projects will assist in the efforts to improve estimates of the potential performance, costs, and benefits of these technologies. Information on these projects will be made available through the CSLF Secretariat.

Work of the Legal, Regulatory and Financial Issues Task Force

We have received the report, “Considerations on Regulatory Issues for Carbon Capture and Storage Projects” from the CSLF Legal, Regulatory and Financial Issues Task Force. These considerations are based on experience with CO2 capture, transport and storage projects and related activities in those countries that currently participate in such projects and activities. The report could represent a useful point of reference when developing legislation, regulations and frameworks for CO2 capture, transport and storage.

Stakeholder Involvement and Public Awareness

We recognize that CO2 capture, transport and storage will affect many types of stakeholders. We further recognize that their views and contributions are important to the success of CSLF. We value the perspectives and potential contributions of stakeholders and express our commitment to include them in our work. We are convinced of the necessity of an open and transparent operation of the CSLF. Accordingly, we welcome the proposal of the Policy Group to create and administer a Stakeholder Engagement Register and to use the CSLF website and other appropriate media to create an ongoing two-way dialogue with stakeholders. We ask the Policy Group to consider ways to make public the work of the CSLF in a timely manner.

CO2 capture, transport and storage technologies are not widely known among the general public throughout the world. Yet, public acceptance and support based on a clear and accurate understanding of all aspects of these technologies, including the safety and environmental dimensions, is vital. Informing the public is thus a critical need for the acceptance of carbon dioxide capture, transport and storage. Therefore, we ask the Policy Group to examine public outreach programs on carbon dioxide capture, transport and storage to facilitate sharing of experiences among CSLF member countries. Public outreach programs should be based on sound scientific, technical, economic and environmental information.

Conclusion

The actions that we have taken today demonstrate our commitment to achieving the objectives of the CSLF Charter. We will work closely with our Ministerial colleagues to ensure that the CSLF achieves its purpose.