

Carbon Sequestration Leadership Forum



The CSLF

The Carbon Sequestration Leadership Forum (CSLF) is a framework for international cooperation in research and development (R&D) for the separation, capture, transportation, and storage of carbon dioxide. The CSLF will seek to realize the promise of carbon capture and storage over the coming decades, making it commercially competitive and environmentally safe.

The CSLF was established to facilitate the development of improved cost-effective technologies for the separation and capture of carbon dioxide for its transport and long-term safe storage; to make these technologies broadly available internationally; and to identify and address wider issues relating to carbon capture and storage. Activities could also include promoting the appropriate technical, political and regulatory environments for the development of such technology.

The first ministerial-level meeting took place June 23–25, 2003, near Washington, DC. The CSLF charter was signed on June 25, 2003, by representatives of 13 countries and the European Commission. Since then, Germany, South Africa, and France have joined, bringing the total number of CSLF members to 17. The second CSLF meeting was held in Rome, Italy on January 19–23, 2004.

The charter, in effect for 10 years, establishes a broad outline for international cooperation. While several large-scale international carbon sequestration projects are underway, this first-

ever ministerial-level sequestration forum for energy technology underscores the new importance given to international cooperation.

The CSLF will seek to:

- Identify key obstacles to achieving improved technological capacity;
- Identify potential areas of multilateral collaborations on carbon separation, capture, transport, and storage technologies;
- Foster collaborative R&D and demonstration projects reflecting Members' priorities;
- Identify potential issues relating to treatment of intellectual property;
- Establish guidelines for collaborations and reporting of results;
- Assess regularly the progress of collaborative R&D projects and make recommendations on the direction of such projects;
- Establish and regularly assess an inventory of potential areas of research;
- Organize collaboration with all sectors of the international research community, including industry, academia, government and non-government organizations (the CSLF is also intended to complement ongoing international cooperation in this area); and
- Develop strategies to address issues of public perception.



Organization of the CSLF

The CSLF is a ministerial-level organization involving participating governments at its highest levels. The operation of the CSLF is guided by two working groups and a secretariat.

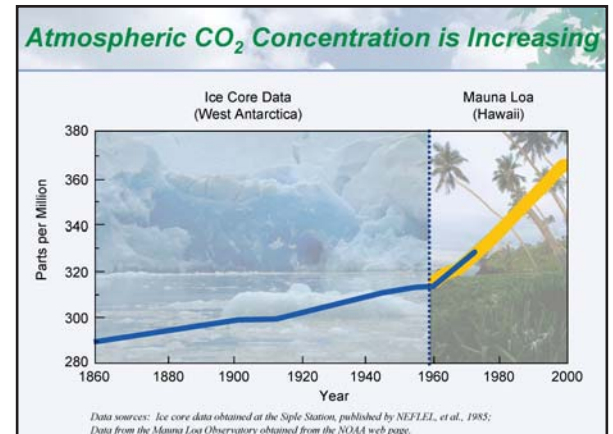
The **Policy Group** guides the operation of the CSLF and studies the many policy issues that may impact carbon capture and sequestration.

The **Technical Group** consists of experts on technology and considers and recommends technical projects and actions.

A **Secretariat** reporting to the Policy Group provides the ongoing administrative support needed to keep the CSLF operating.

Input and participation from non-governmental entities such as industry, non-governmental organizations (NGO) and the public is encouraged.

Overall, the structure is intended to stimulate both collaboration and innovation in carbon sequestration R&D.



Need for Collaboration

Carbon sequestration is in its infancy. Researchers around the world are beginning to identify and evaluate options, estimate costs and risks, demonstrate practicality, define paths to development and commercialization, assess environmental tradeoffs, and understand institutional considerations and constraints on carbon sequestration. Many technical, economic, and institutional challenges must be addressed before carbon capture and storage can become cost-effective and practical. A great amount of work must be done and it will take many years.

The CSLF will leverage resources of developed and developing countries around the globe, and work together to reduce carbon dioxide emissions and move technologies to market—rather than individual countries having to work on projects alone. The CSLF will focus the world's best minds on the most challenging problems.

Involvement of Stakeholders

The CSLF will call upon a diverse group of stakeholders to help realize the promise of cost-effective carbon capture and storage. Industry, academia, research institutions, multilateral organizations, NGOs, and others all have important roles to play. Potential roles of stakeholders include:

- Providing advice and counsel to the CSLF;
- Sharing needs and concerns related to carbon capture and storage;
- Conducting the R&D to develop carbon capture and storage technologies;
- Working to make these technologies commercially-available;
- Participating in the outreach needed to inform the world about the potential of carbon sequestration; and
- Identifying and helping to remove the institutional barriers to deployment of carbon sequestration.

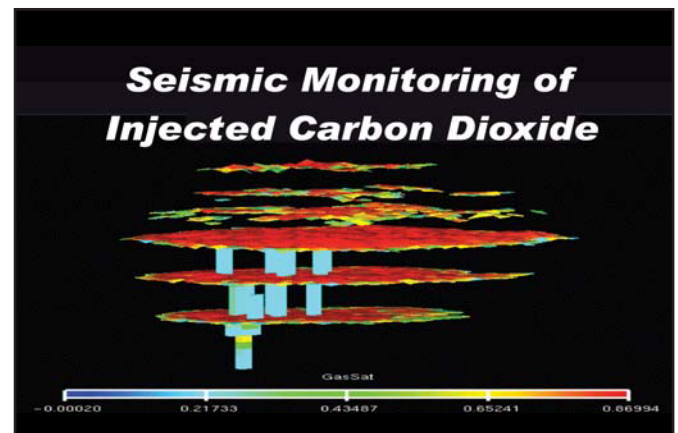


CSLF Activities

Specific projects proposed for CSLF endorsement must be nominated by at least two members. Initial projects fall into four broad categories:

- Information exchange about both technical and institutional considerations;
- Joint research, development, and demonstration;
- Evaluation of institutional barriers and identification of the means to overcome them; and
- Creation of public awareness.

As of August 2004, a total of 10 collaborative projects had been nominated for CSLF recognition by members. In addition, the Technical Group is developing a technology roadmap that will serve as guidance for future project proposals, while the Secretariat is conducting several studies of institutional issues at the request of the Policy Group.



Carbon Sequestration

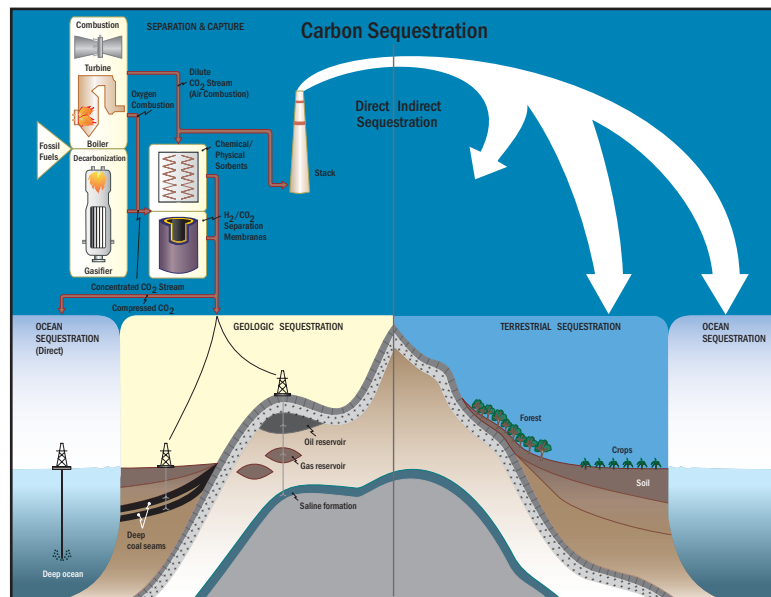
Carbon sequestration is the capture—from power plants and other facilities—and storage of carbon dioxide and other greenhouse gases that would otherwise be emitted to the atmosphere.

Direct sequestration involves the capture of carbon dioxide at the source, typically a large power generation or industrial facility, and its transportation and storage in a nearby geologic formation.

Indirect sequestration involves the storage of carbon dioxide already in the atmosphere in various enhanced natural sinks such as the oceans, forests, and crops.

Sequestration offers many benefits. For example, it:

- Provides for energy security by enabling use of vast fossil fuel resources for new power generation;
- Removes a major environmental concern associated with continued operation of existing fossil fuel plants; and
- Forestalls the need for a massive and costly overhaul of energy infrastructure.



Fossil fuels are projected to remain the mainstay of energy consumption well into the 21st century. Availability of these fuels to provide clean, affordable energy is essential for global prosperity and security. Carbon sequestration provides the means to enable fossil fuel

use without further elevating atmospheric carbon dioxide concentrations attributable to anthropogenic emissions.

- Offers the promise of being the most affordable option for reduction of greenhouse gases;



For More Information

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