

PROJECT facts

U.S. DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY
NATIONAL ENERGY TECHNOLOGY LABORATORY

Sequestration

07/2005



SOUTHEAST REGIONAL CARBON SEQUESTRATION PARTNERSHIP (SECARB)

Background

CONTACTS

Sean Plasynski

Sequestration Technology Manager
National Energy Technology
Laboratory
626 Cochrans Mill Road
P.O. Box 10940
Pittsburgh, PA 15236
412-386-4867
sean.plasynski@netl.doe.gov

Karen Cohen

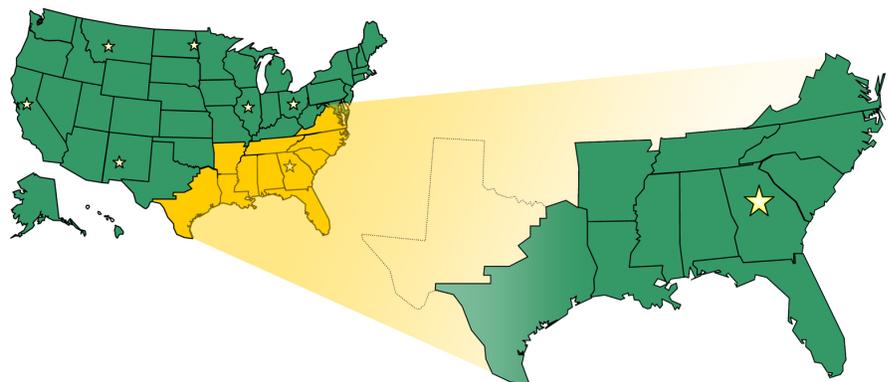
Project Manager
National Energy Technology
Laboratory
626 Cochrans Mill Road
P.O. Box 10940
Pittsburgh, PA 15236
412-386-6667
karen.cohen@netl.doe.gov

Ken Nemeth

Executive Director
Southern States Energy Board
6325 Amherst Court
Norcross, GA 30092
770-242-7712
nemeth@sseb.org

The U.S. Department of Energy has selected the seven partnerships of state agencies, universities, and private companies that will form the core of a nationwide network that will help determine the best approaches for capturing and permanently storing gases that can contribute to global climate change. All together, the partnerships include more than 240 organizations, spanning 40 states, three Indian nations, and two Canadian provinces.

The seven partnerships will develop the framework needed to validate and potentially deploy carbon sequestration technologies. They will evaluate and determine which of the numerous sequestration approaches that have emerged in the last few years are best suited for their specific regions of the country. They will also begin studying possible regulations and infrastructure requirements that would be needed should climate science indicate that sequestration be deployed on a wide scale in the future.



Southeast Regional Carbon Sequestration Partnership





Description

The Southeast Regional Carbon Sequestration Partnership (SECARB), led by the Southern States Energy Board (SSEB), Norcross, GA, represents the eleven southeastern states (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas and Virginia). SECARB will accomplish its objectives by defining similarities in the eleven state region; characterizing the region relative to sources, sinks, transport, sequestration options, and existing and future infrastructure requirements; identifying and addressing issues for technology deployment; developing public involvement and education mechanisms; identifying the most promising capture, sequestration, and transport options; and developing action plans for implementation and technology validation.

SECARB will define the geographic boundary of the study. CO₂ sources, sinks, and transport requirements will be described and entered into a GIS system. An assessment of public involvement and educational needs will be conducted, and an outreach plan will be developed so that stakeholders can help identify and implement regional CO₂ sequestration measures. Safety, regulatory, and permitting requirements within the region will be assessed in consultation with regulatory agencies, state public utility commissions, and oil and gas commissions. Assessment of ecosystem impacts will be completed, and an action plan to address impact issues will be developed. Monitoring and verification requirements will be established, along with protocols for geologic and terrestrial sequestration, and measurement of stack emissions of CO₂.

Primary Project Goal

The primary project goal is to promote the development of the framework and infrastructure necessary for the validation and deployment of carbon sequestration technologies, and to evaluate options and potential opportunities for regional CO₂ sequestration.

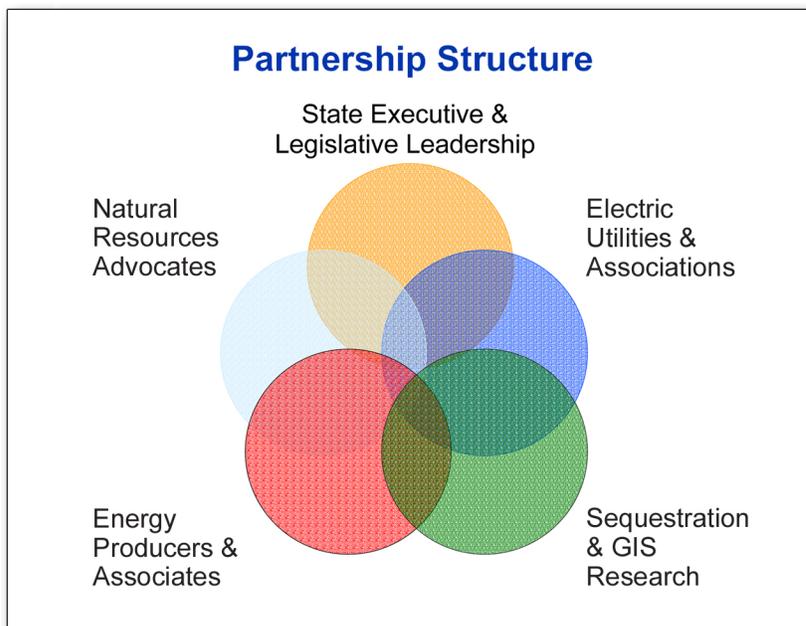
Objectives

- Define similarities among the eleven states in the region.
- Characterize the region relative to sources, sinks, transport, sequestration options, and existing and future infrastructure requirements.
- Identify and address issues involved with technology deployment.
- Develop public involvement and education mechanisms.
- Identify the most promising capture, sequestration, and transport options.
- Develop action plans for implementation and technology validation.

Benefits

SECARB's study for this eleven state region will result in the following specific programmatic benefits:

- Support the United States Department of Energy's (DOE) Carbon Sequestration Program by promoting the development of the framework and infrastructure necessary for the validation and deployment of carbon sequestration technologies.
- Support the President's Global Climate Change Initiative goal of reducing greenhouse gas intensity by 18 percent by 2012.
- Evaluate options and potential opportunities for regional CO₂ sequestration.



CUSTOMER SERVICE

1-800-553-7681

WEBSITE

www.netl.doe.gov

COST

Total Project Value
\$2,817,080

DOE/Non-DOE Share
\$2,019,908/\$797,172

PARTNERS

Lead:

**Southern States Energy Board
(SSEB)**

**Advanced Resources International
(ARI)**

Applied Geo Technologies (AGT)

Augusta Systems, Inc.

**Electric Power Research Institute
(EPRI)**

Geological Survey of Alabama (GSA)

**Gulf Coast & Carbon Center,
University of Texas at Austin**

**Massachusetts Institute of Technology
(MIT)**

**Mississippi State University (MSU)
Diagnostic Instrumentation and
Analysis Laboratory (DIAL)**

Phillips Group

The RMS Strategies

**Susan Rice and Associates,
Incorporated**

Tennessee Valley Authority (TVA)

**Virginia Center for Coal and Energy
Research, Virginia Polytechnic
Institute and State University**

Winrock International

Technology Coalition:

AGL Resources
American Electric Power
Arkansas Oil and Gas Commission
BP America
Center for Energy and Economic Development
CO₂ Capture Project
ChevronTexaco Corporation
Clean Energy Systems, Inc.
Composite Energy Technologies
Dominion
Duke Power
Edison Electric Institute
Entergy Services
Florida Power & Light Company
Geological Survey of Alabama
Georgia Environmental Facilities Authority
Georgia Forestry Commission
Interstate Oil and Gas Compact Commission
Louisiana Department of Environmental Quality
Marshall Miller & Associates
North American Coal Corporation
The North Carolina State Energy Office
Nuclear Energy Institute
Oak Ridge National Laboratory
Old Dominion Electric Cooperative
Progress Energy
SCANA Corporation
South Carolina Electric and Gas Company
South Carolina Public Service Authority/
Santee Cooper
Southern Company
Tampa Electric Company