



SOUTHEAST REGIONAL CO₂ UTILIZATION

SECARB-USA

and STORAGE ACCELERATION PARTNERSHIP

DOE-NETL Integrated Project Review Meeting: CCUS Integrated Projects

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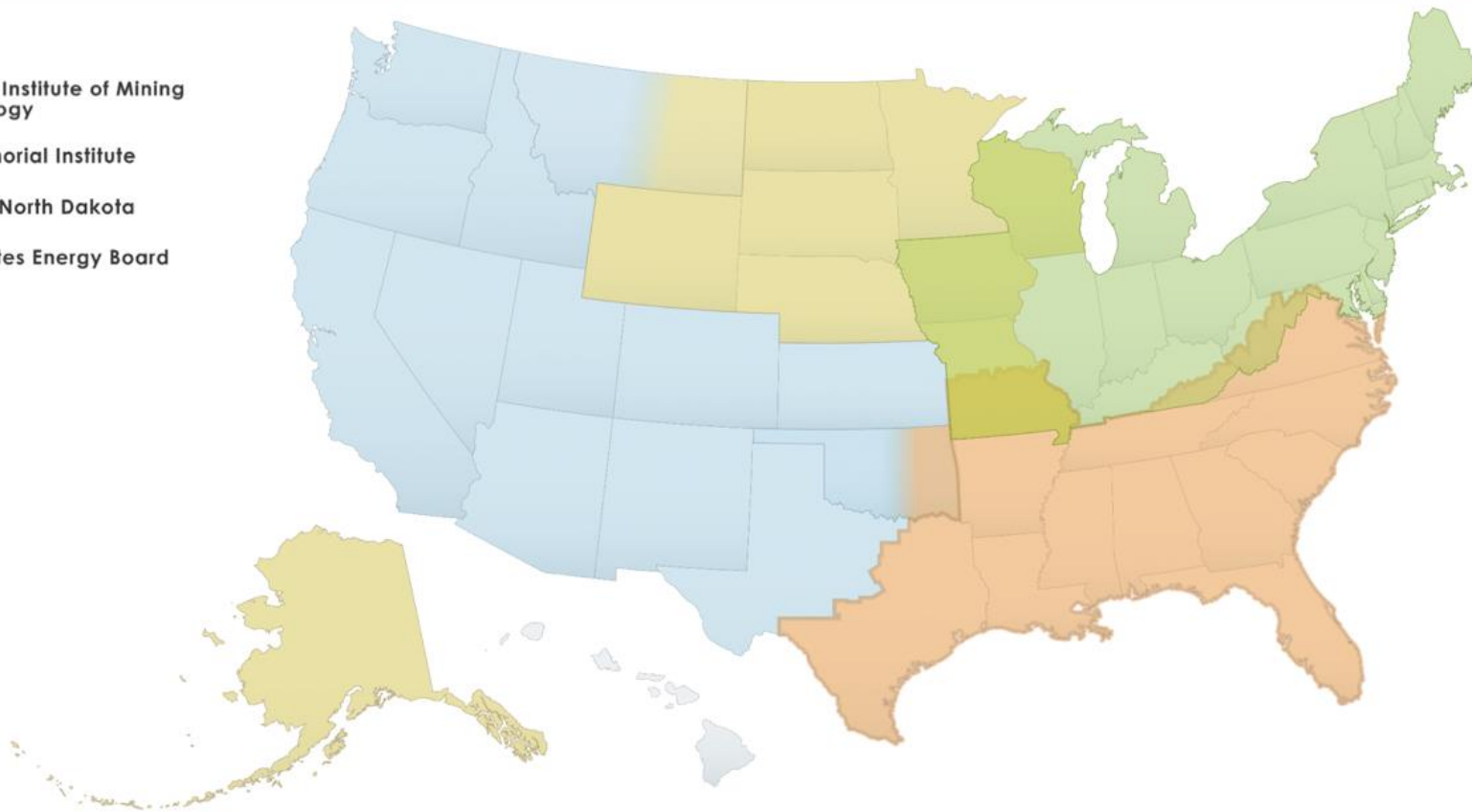


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Company

SECARB-USA

Regions Associated with DE-FOA-002000 Recipients

- New Mexico Institute of Mining and Technology
- Battelle Memorial Institute
- University of North Dakota
- Southern States Energy Board



SECARB-USA Region

Alabama
Arkansas
Florida
Georgia
Louisiana
Mississippi
North Carolina
South Carolina
Tennessee
Virginia

and portions of:
Kentucky
Missouri
Oklahoma
Texas
West Virginia

Map: NETL

SECARB-USA

Program Goal, Objective, and Research Areas

The **SECARB-USA** project supports the U.S. Department of Energy (DOE) Office of Fossil Energy's (FE) mission to help the United States meet its need for secure, affordable, and environmentally sound fossil energy supplies by **utilizing the advancements made by the current Regional Carbon Sequestration Partnership (RCSP) Initiative to continue to identify and address knowledge gaps.**

Identify and address regional onshore storage and transport challenges facing commercial deployment of carbon dioxide (CO₂) capture, utilization, and storage (CCUS) technologies.

Primary Research Areas:

- 1) address key technical challenges;
- 2) facilitate data collection, sharing and analysis;
- 3) assess transportation and distribution infrastructure; and
- 4) promote regional technology transfer and dissemination of knowledge.

SECARB-USA at a glance...

Basics

- 5-year project, start date 10/1/2019
 - Conditional award
- 2 phases (P) and 2 budget periods (BP)
 - PI/BP1 (3 years): 10/1/19-9/30/22
 - PII/BP2 (2 years): 10/1/22-9/30/24
- Federal \$5,000,000 (\$5 million/RI appropriated and currently under negotiation with NETL for scope enhancement)
- Non-Federal \$1,335,136 (21%)
- 8 Subrecipients
- 1 National Laboratory
- 5 Industry Network Organizations – advisory capacity
- Existing Public-Private Partnership

Primary Tasks

- T1: Project Management & Planning
- T2: Technical Challenges
- T3: Data Collection, Sharing, and Analyses
- T4: Regional Infrastructure
- T5: Regional Technology Transfer

Project-Specific Meetings

- Annual Partners Meetings
- Annual Stakeholders' Briefing
- Project Review Meetings and Kickoff and Final Briefings

Completed Deliverables and Milestones

- Participate in Project Kickoff Meeting
- Project Management Plan
- Data Management Plan
- Published Fact Sheet
- Published Webpage



Southeast Regional CO₂ Utilization & Storage Acceleration Partnership

SECARB-USA

Summary

The Southern States Energy Board (SSEB) is leading a coalition of technical experts to identify and address regional onshore storage and transport challenges facing commercial deployment of carbon dioxide (CO₂) capture, utilization and storage (CCUS) technologies.

The goal of the "Southeast Regional CO₂ Utilization and Storage Acceleration Partnership" (SECARB-USA) project is to help the United States meet its need for secure, affordable, and environmentally sound fossil energy supplies by utilizing the advancements made by the Regional Carbon Sequestration Partnership (RCSP) Initiative to continue to identify and address knowledge gaps.

SSEB and a select network of experienced CCUS project developers and operators will coordinate their capabilities to accelerate CCUS deployment and achieve four primary research objectives: 1) address key technical challenges; 2) facilitate data collection, sharing and analysis; 3) assess transportation and distribution infrastructure; and 4) promote regional technology transfer and dissemination of knowledge.

The SECARB-USA regional initiative encompasses the States of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and portions of Kentucky, Missouri, Oklahoma, Texas, and West Virginia. The Southern States Energy Board is the award recipient.

The Partners will collaborate with DOE and the National Laboratories to accelerate CCUS technology development, to support the National Risk Assessment Partnership (NRAP) initiative and other modeling and simulation efforts that arise, and to participate in a new machine learning initiative. Results and knowledge gained will be archived in the Energy Data eXchange (EDX) database and made available to the public for the benefit of industry and other CCUS stakeholders.

CARBON STORAGE MAP

SOURCE: NETL (2019)

- SOUTHERN STATES ENERGY BOARD
- BATTELLE MEMORIAL INSTITUTE
- UNIVERSITY OF NORTH DAKOTA
- NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY

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Field Test Partners

Primary Sponsors

- » US DOE
- » NETL
- » SSEB

Industrial Partners

- » Advanced Resources International, Inc.
- » Auburn University
- » Bureau of Economic Geology at the University of Texas at Austin
- » Crescent Resource Innovation (Gerald R Hill PhD)
- » Environmental Defense Fund
- » Geological Survey of Alabama
- » Los Alamos National Laboratory
- » Oklahoma State University
- » Virginia Center for Coal and Energy Research at the Virginia Polytechnic Institute and State University

Industry Network

- » Clean Air Task Force
- » Denbury Resources, Inc.
- » Mitsubishi Heavy Industries America, Inc.
- » SAS Institute, Inc.
- » Southern Company

Upcoming 2020 Deliverables and Milestones*

- Inventory Initial List of Non-Technical Challenges for CCUS*
- Needs Assessment Framework
- Preliminary Regional Assessment of Potential Storage Complexes, Including Capacities and Costs, Based on Application of NRAP and SCO2T
- Sub-basin Prospective Areas
- Data Quality Methodology

2021 Deliverables and Milestones*

- Complete Needs Assessment Framework for Storage Complexes*
- Host First Partners Meeting on Risk Needs for 2025 Commercial Deployment*



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Thank you!