

Storage Validation and Testing: Carbon Storage Assurance Facility Enterprise (CarbonSAFE) Phases II, III, III.5, and IV

- \$444 million invested in 16 projects managed by public, private, and university recipients in Alaska, California, Colorado, Florida, Georgia, Illinois, New Mexico, Ohio, Oklahoma, Texas, Virginia, and Wyoming
- Projects will advance the development of commercial-scale carbon capture and storage infrastructure capable of storing more than 50 million metric tons of carbon dioxide
- Project will provide economic and social benefits for local communities including:
 - Training existing workforces, creating new jobs, and establishing workforce development programs
 - Ensuring communities are engaged and a part of project decisions

Storage Validation and Testing: CarbonSAFE Phases II, III, III.5, and IV Program Overview

The funding will support projects in twelve states to advance the development of new and expanded large-scale commercial carbon capture and storage projects, each with the capacity to securely store 50 or more million metric tons of carbon dioxide over a 30-year period.

The projects will support FECM’s [Carbon Storage Assurance Facility Enterprise \(CarbonSAFE\) Initiative](#). Nine of the 16 projects will focus on technical and economic feasibility of potential carbon dioxide storage complexes (CarbonSAFE Phase II). Seven projects will focus on detailed site characterization, planning, and permitting stages of project development (CarbonSAFE Phase III).

Investing in America

Carbon dioxide is a greenhouse gas, and its emissions are fueling global warming, which has increased the threat of droughts, severe fires, rising sea levels, floods, catastrophic storms, and declining biodiversity. Large-scale deployment of carbon management technologies is crucial to addressing climate change and meeting President Biden’s goal of a net-zero greenhouse gas emissions economy by 2050.

These investments can help to eliminate hundreds of millions of tons of carbon dioxide emissions every year through the capture, transport, and use or permanent storage of carbon dioxide emissions. These efforts will not only help mitigate the impacts of climate change—they will also benefit communities across the nation by improving air quality, protecting existing industrial jobs, and creating new ones.

Selections

Organization	Purpose	Project Location	DOE Cost Share
CarbonSAFE Phase II			
Battelle Memorial Institute	Feasibility study to advance commercial-scale carbon capture and storage and explore potential for a regional storage hub	Illinois	\$8,999,989
Colorado School of Mines	Feasibility study for a storage reservoir to store carbon dioxide from existing local sources such as the Calpine Delta Energy Center	Northern California	\$8,915,350

Organization	Purpose	Project Location	DOE Cost Share
CarbonSAFE Phase II			
Commonwealth of Virginia Department of Energy	Evaluation of a regional southwest Virginia storage complex to store carbon dioxide from surrounding industrial sources	Wise County, Virginia	\$4,296,915
Electric Power Research Institute, Inc.	Feasibility study for transporting carbon dioxide from the Tracy Power Station in Sparks, Nevada to an onshore basalt storage complex on the Modoc Plateau	Northeastern California	\$9,000,000
Omnia Midstream Partners, LLC	Study to advance a storage hub in the Permian Region for future carbon dioxide transport and storage activities	Western Texas and Southern New Mexico	\$8,921,052
Southern States Energy Board	Feasibility study for potential carbon storage to reduce carbon dioxide emissions from industrial facilities	South Florida	\$9,000,000
Trifecta Renewable Solutions	Feasibility study for developing a proposed carbon storage hub at the Red Hills Mine, adjacent to the Ackerman Combined Cycle Plant	Ackerman, Mississippi	\$9,000,000
University of Alaska Fairbanks	Evaluation of a carbon storage complex in the northern Cook Inlet Basin for storing emissions from the proposed Susitna Power Plant and two existing plants	South-Central Alaska	\$8,880,349
University of Wyoming	Feasibility study to develop a saline carbon storage hub for current and future industries at Echo Springs	South-Central Wyoming	\$8,998,257
CarbonSAFE Phase III			
Advanced Resources International, Inc.	Develop a commercial-scale geologic carbon dioxide storage hub for offshore carbon capture and storage in Louisiana State waters	Monkey Island, Louisiana	\$21,175,655
BP Carbon Solutions	Develop a carbon storage hub located around the Whiting Refinery to help with the decarbonization of northwestern Indiana	Northern Indiana, Northeastern Illinois, and Southwestern Michigan	\$98,240,569
New Mexico Institute of Mining and Technology	Site characterization study for three proposed storage sites to facilitate the development of the Four Corners Carbon Storage Hub	Northwest New Mexico	\$41,409,910
Projeo Corporation	Demonstrate the feasibility of converting a mature oil and gas field into a dedicated carbon dioxide storage facility	Western Texas and Southeastern New Mexico	\$38,376,061
River Parish Sequestration, LLC	Develop a carbon dioxide transportation and storage solution for the Louisiana Chemical Corridor	Baton Rouge/New Orleans, Louisiana	\$25,634,345
Southern States Energy Board	Site characterization study of four geologic carbon storage sites for the Tri-State Carbon Capture and Storage Hub	Ohio, Pennsylvania, and West Virginia	\$55,248,174
Tampa Electric Company	Site characterization study for the proposed Polk Carbon Storage Complex, located near an existing natural gas power station	Polk County, Florida	\$88,349,189