

**Active Sequestration Projects Summary Table – by State**

<b>Alabama</b>	<b>Primary Contractor</b>	<b>Area</b>
Geologic Screening Criteria for Sequestration of CO <sub>2</sub> in Coal: Quantifying Potential of the Black Warrior Coalbed Methane Fairway, Alabama	Geological Survey of Alabama	Geo. Carbon Storage
<b>Arizona</b>		
A Novel Approach to Mineral Carbonation: Enhancing Carbonation While Avoiding Mineral Pretreatment Process Cost	Arizona State University	Geo. Carbon Storage
<b>Arkansas</b>		
Application of Low-Cost Digital Elevation Models to Detect Change in Forest Carbon Sequestration Projects	Winrock International	MVA
<b>California</b>		
Carbon Dioxide Hydrate Process for Gas Separation from a Shifted Synthesis Gas Stream	Nexant	Pre-Combustion
Fabrication and Scale-Up of Polybenzimidazole-Based Membrane System for Pre-Combustion Capture of Carbon Dioxide	SRI International	Pre-Combustion
Carbon Sequestration Support to Collaborative Efforts in China*	Lawrence Livermore National Laboratory	Geo. Carbon Storage
Conceptual Design of Optimized Fossil Energy Systems with Capture and Sequestration of CO <sub>2</sub>	University of California - Davis	Geo. Carbon Storage
Full-Scale Bioreactor Landfill	Yolo County Planning and Public Works Dept	Geo. Carbon Storage
Multiple-Input Data Acquisition Systems (MIDAS) for Measuring the Carbon Content in Soil Using Inelastic Neutron Scattering	X-Ray Instrumentation Associates	Geo. Carbon Storage
GEO SEQ Project	Lawrence Berkley National Laboratory	MVA
Low Cost Open-Path Instrument for Monitoring Atmospheric Carbon Dioxide at Sequestration Sites	California Institute of Technology	MVA
A Sea Floor Gravity Survey of the Sleipner Field to Monitor CO <sub>2</sub> Migration	University of California - San Diego	MVA
Injection and Reservoir Hazard Management: Mechanical Deformation and Geochemical Alteration at the In Salah CO <sub>2</sub> Storage Project	Lawrence Livermore National Laboratory	Sim. & Risk Assessment
<b>Delaware</b>		
Intelligent Bioreactor Management Information System (IBM-IS) for Mitigation of Greenhouse Gas Emissions	University of Delaware	CO <sub>2</sub> Use
<b>Indiana</b>		
A Novel Approach to Experimental Studies of Mineral Dissolution Kinetics	Indiana University	Geo. Carbon Storage
<b>Kansas</b>		
Landfill Gas Sequestration in Kansas	Kansas Geological Survey	Geo. Carbon Storage
National Carbon Sequestration Database and Geographical Information System (NatCarb)	West Virginia University	MVA

**Kentucky**

Analysis of Devonian Black Shale in Kentucky for Potential Carbon Dioxide Sequestration and Enhanced Natural Gas Production	University of Kentucky Research Foundation	Geo. Carbon Storage
Carbon Sequestration on Surface Mine Lands	University of Kentucky	Geo. Carbon Storage

**Massachusetts**

Recovery and Sequestration of CO <sub>2</sub> from Stationary Combustion Systems by Photosynthesis of Microalgae	Physical Sciences Inc.	Geo. Carbon Storage
International Collaboration on CO <sub>2</sub> Sequestration	Massachusetts Institute of Technology	Geo. Carbon Storage
Development of a Carbon Management Geographic Information System (GIS) for the United States	Massachusetts Institute of Technology	MVA

**Minnesota**

A New Concept for the Fabrication of Hydrogen Selective Silica Membranes	University of Minnesota	Pre-Combustion
--	-------------------------	----------------

**Missouri**

Shallow Carbon Sequestration Demonstration Pilot	City Utilities of Springfield	Geo. Carbon Storage
--	-------------------------------	---------------------

**Montana**

(ZERT) Zero Emissions Research & Technology Center	Montana State University	MVA
--	--------------------------	-----

**N/A**

Geologic Sequestration Core Flow Laboratory	NETL	Geo. Carbon Storage
Computed Tomography (CT) Scanning for Petrophysical Applications	NETL	MVA
Degradation of Wellbore Cement Due to CO <sub>2</sub> Injection	NETL	MVA
Development of Comprehensive Monitoring Techniques to Verify the Integrity of Geological Sequestration Reservoirs Containing Carbon Dioxide	NETL	MVA
Stored CO <sub>2</sub> and Methane Leakage Risk Assessment and Monitoring Tool Development: CO <sub>2</sub> Capture Project Phase 2	BP North America	MVA
Weyburn Carbon Dioxide Sequestration Project	Petroleum Technology Research Centre	MVA

**New Jersey**

Advanced CO <sub>2</sub> Cycle Power Generation	Foster Wheeler North America Corp.	Geo. Carbon Storage
---	------------------------------------	---------------------

**New Mexico**

Thermally Optimized Membranes for Separation and Capture of Carbon Dioxide	Los Alamos National Laboratory	Pre-Combustion
CO <sub>2</sub> -Water-Rock Interactions and the Integrity of Hydrodynamic Fields	Los Alamos National Laboratory	MVA
Development of Novel Monitoring Tools for Geologic Sequestration	Los Alamos National Laboratory	MVA

**New Mexico continued**

Geologic Sequestration of Carbon Dioxide in a Depleted Oil Reservoir: A Comprehensive Modeling and Site Monitoring Project	Sandia National Laboratory	MVA
--	----------------------------	-----

**New York**

BNL: In Field, Continuous, Non-Invasive Soil Carbon Scanning System	Brookhaven National Laboratory (BNL)	MVA
---	--------------------------------------	-----

**North Carolina**

Bio-Tarp: Reducing Landfill Methane Emissions With Bioactive Alternative Daily Cover*	University of North Carolina	CO <sub>2</sub> Use
---	------------------------------	---------------------

**Ohio**

Enhanced Practical Photosynthetic CO <sub>2</sub> Mitigation	Ohio University	Geo. Carbon Storage
Storage of CO <sub>2</sub> in Geologic Formations in the Ohio River Valley Region	Battelle Memorial Institute	Geo. Carbon Storage
Upgrading Methane Streams with Ultra-Fast TSA	Velocys Inc.	Geo. Carbon Storage
Assessing Fossil Fuel and Recent Carbon Pools in Reclaimed Mined Soils	The Ohio State University	MVA
Leveraging Regional Exploration to Develop Geologic Framework for CO <sub>2</sub> Storage in Deep Formations	Battelle Columbus Laboratories	MVA
Carbon Management Plan for Coal and Biomass to Liquids Plant in Northeast Ohio	Baard Energy, LLC	CO <sub>2</sub> Use

**Oklahoma**

Unminable Coalbeds and Enhancing Methane Production Sequestering Carbon Dioxide	Oklahoma State University	Geo. Carbon Storage
---	---------------------------	---------------------

**Pennsylvania**

Chemical Looping for Combustion and Hydrogen Production	University of Pittsburgh	Pre-Combustion
Novel CO <sub>2</sub> - Phillic Absorbents	University of Pittsburgh	Pre-Combustion
Novel Membranes for CO <sub>2</sub> Removal	University of Pittsburgh, University of Notre Dame	Pre-Combustion
Solid Sorbents for CO <sub>2</sub> Capture from Pre-Combustion Gas Streams	Süd-Chemie Inc., Carnegie Mellon University	Pre-Combustion
Solvents for CO <sub>2</sub> Capture	University of Pittsburgh	Pre-Combustion
Carbon Dioxide in Coal Seams	NETL	Geo. Carbon Storage
Enhanced Coalbed Methane Production and Sequestration of CO <sub>2</sub> in Unmineable Coal Seams	CONSOL Energy Inc.	Geo. Carbon Storage
An Integrated Modeling Framework for Carbon Management Technologies	Carnegie Mellon University	Sim. & Risk Assessment

---

**Pennsylvania *continued***

Bauxite Residue/Brine for CO <sub>2</sub> and/or CO <sub>2</sub> /SO <sub>2</sub> Capture and Sequestration	Alcoa Technology	CO <sub>2</sub> Use
Capture and Use of Coal Mine Ventilation Air Methane	CONSOL Energy Inc.	CO <sub>2</sub> Use

**Tennessee**

Carbon Capture and Water Emissions Treatment System (CCWESTRS) at Fossil-Fueled Electric Generating Plants	Tennessee Valley Authority Electric Power Research Institute	Geo. Carbon Storage
Strategies for Controlling Coal Permeability in CO <sub>2</sub> -Enhanced Coalbed Methane Recovery	Oak Ridge National Laboratory	Geo. Carbon Storage

**Texas**

Optimal Geological Environments for Carbon Dioxide Storage in Saline Formations	University of Texas at Austin	Geo. Carbon Storage
The Coal-Seq Consortium: Advancing the Science of Carbon Dioxide Sequestration in Deep, Unmineable Coal Seams	Advanced Resources International	Geo. Carbon Storage
CO <sub>2</sub> Sequestration Potential of Texas Low-Rank Coals	Texas Engineering Experiment Station	Geo. Carbon Storage

**Virginia**

Natural Analogs for Geologic Sequestration	Advanced Resources International	Geo. Carbon Storage
Restoring Sustainable Forests on Appalachian Mined Lands for Wood Products, Renewable Energy, Carbon Sequestration, and Other Ecosystem Services	Virginia Polytechnic Institute and State University	Geo. Carbon Storage

**Washington**

CO <sub>2</sub> Sequestration in Basalt Formations	Pacific Northwest National Laboratory	Geo. Carbon Storage
Enhancing Carbon Sequestration & Reclamation of Degraded Lands with Fossil Fuel Combustion Byproduct	Pacific Northwest National Laboratory	Geo. Carbon Storage

---

\* Factsheet Under Development