

Regional Carbon Sequestration Partnerships (RCSP)

PROGRAM OBJECTIVES

- Develop a regional framework and the infrastructure necessary to validate and deploy carbon storage technologies within each region.
- Determine the most suitable technologies, regulations, and infrastructure for carbon capture, transport, and storage in each region.
- Inform regulatory and legal framework development for deployment of Carbon Capture, Utilization, and Storage (CCUS) projects in the different regions.

Characterization Phase

- Characterized regional CO₂ sources and potential storage locations within the U.S.
- Evaluated business cases based on the entire CCUS value chain
- Conducted outreach efforts to raise support for carbon storage within industry and the general public

Validation Phase

- 19 small-scale field projects in various carbon sinks such as: saline aquifers, terrestrial, basalt formations, and coal seams
- Cumulatively injected over 1 MMT of CO₂
- Validated each region's most promising storage opportunities

Development Phase

- 7 large-scale field laboratories located in saline formations and oil and gas fields
- Cumulatively injected over 11.1 MMT of CO₂
- Optimized Monitoring, Verification, and Accounting program (MVA) design and operational parameters





RCSP ACCOMPLISHMENTS



- Injected >12 MMT of CO₂, demonstrating capacity to permanently, economically, and safely store CO₂
- Received numerous awards from national and international organizations for pioneering work in CCUS
- Supported the development and verification of carbon storage related technologies including characterization, modeling and simulation, mitigation, and risk assessment
- Developed the National Carbon Storage Atlases and a Geographic Information System to store CCUS related data
- Contributed to a series of Best Practices Manuals (BPMs) for geologic storage projects to establish effective methods, reliable approaches, and consistent standards
- MGSC obtained an EPA Region 5 Underground Injection Control Class VI permit

Scan this link for more information about the RCSP projects in the Carbon Storage Atlas V







