

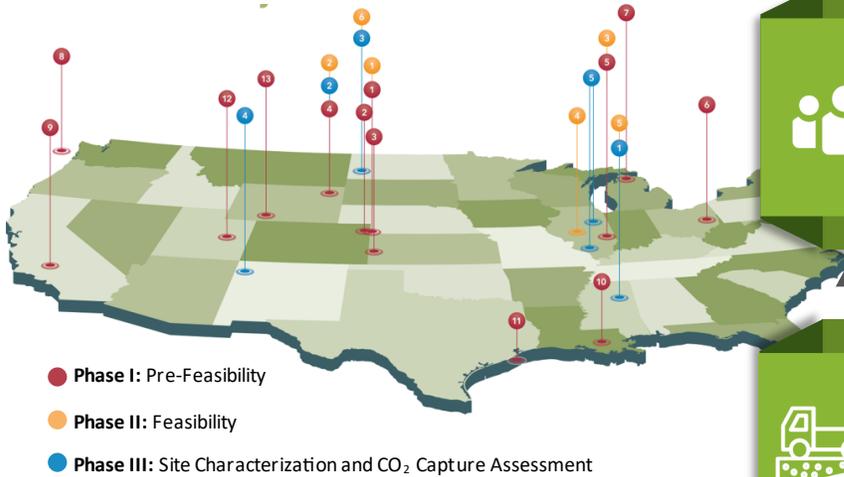


Carbon Storage Assurance Facility Enterprise (CarbonSAFE)

The CarbonSAFE Initiative builds off the work done by the Regional Carbon Sequestration Partnerships to fund and develop projects focused on ensuring carbon storage complexes will be ready for integrated Carbon Capture, Utilization, and Storage (CCUS) system deployment in the 2025-2030 timeframe.



CarbonSAFE Illinois Macon County




Phase I: Integrated CCS Pre-Feasibility
18-month initiative

- Formation of a team; development of a feasibility plan; and high-level technical evaluation of the sub-basin and potential CO₂ sources
- Thirteen projects funded



Phase II: Storage Complex Feasibility
2-year initiative

- Data collection; geologic analysis; analysis of contractual and regulatory requirements; subsurface modeling; risk assessment; evaluate monitoring requirements; and public outreach
- Six projects funded



Phase III: Site Characterization and CO₂ Capture Assessment
3-year initiative

- Detailed site characterization; obtain Underground Injection Control (UIC) Class VI Permit to construct; CO₂ Capture Assessment; NEPA approvals
- Five projects funded



Phase IV: Permitting and Construction of Storage Complex
2.5-year initiative

- Obtain UIC Class VI permit to inject; drill and complete injection and monitoring wells; develop risk and mitigation plans
- Subject to funding

Program Objectives

- ⇒ Address the R&D knowledge gaps and develop the technologies needed to nationally deploy commercial scale (50+ million metric ton) CO₂ storage.
- ⇒ Understand the development of a CCUS storage complex from the feasibility study through the point of injection.
- ⇒ Improve understanding of commercial-scale project screening, site selection, geologic characterization, modeling, and monitoring.
- ⇒ Address both the technical and non-technical challenges associated characterization, permitting, and monitoring of a geologic storage complex.



CARBON STORAGE CONTACTS

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