

Developing CCTUS Infrastructure in the United States

Decarbonization targets set by the U.S. Administration require major investments for the urgent development of dedicated storage infrastructure to support carbon capture, transport, utilization, and storage (CCTUS) deployment—essential to meet net-zero goals. There is a lot of forward momentum in the U.S for CCTUS deployments including financial incentives, Federal and State legislation, and advances in capture and storage technologies. The Department of Energy (DOE) Office of Fossil Energy and Carbon Management (FECM) will build off past lessons learned and best practices and invest funds appropriated in the Bipartisan Infrastructure Law (BIL) to develop commercial large-scale carbon storage projects and associated transport infrastructure. This infrastructure will provide access to future storage capacity of 2 billion metric tons and enable injection of at least 65 million metric tons per year by 2030.

The BIL will invest a total of \$2.5 billion for the five (5) year period for Carbon Storage Validation and Testing via the development of new or expanded commercial large-scale carbon storage projects and associated carbon dioxide transport infrastructure through Carbon Storage Assurance Facility Enterprise (CarbonSAFE) Initiative. Tools and technologies will also be developed and deployed to optimize basin development and include monitoring with real-time forecasting and visualization tools. Reduction of risks is a key component not only for basin-scale management but also all dedicated storage facilities. The validation of AI/ML tools for commercial storage application will also be an important component to reduce risks and costs.

Presentation will be provided by Traci Rodosta.

Traci Rodosta is the Storage Validation and Testing Infrastructure Program Manager in the Office of Fossil Energy and Carbon Management (FECM). She joined FECM in February 2020 as the Critical Minerals Program Manager in the Minerals Sustainability Division. Prior joining FECM, her career included seven years as the Carbon Storage R&D Technology Manager at the National Energy Technology Laboratory for the U.S. Department of Energy's Carbon Storage Program. Over her 15-year career at NETL, Ms. Rodosta was also the Director of the Carbon Storage Division, Regional Carbon Sequestration Partnership Coordinator, and project manager in the Storage, Natural Gas and Oil Project Management Divisions and Office of Systems Analysis. Before starting her tenure with the Federal government, she worked for Texaco and Chevron Oil Companies as both a development and exploration geoscientist on domestic and international assets. Ms. Rodosta received her B.S. degree from Louisiana State University in Geology & Earth Sciences/Geosciences and her M.S. degree from the University of New Orleans in Geology and Earth Sciences/Geosciences.