## **ENERGY** Office of Fossil Energy and Carbon Management

## **Building a Clean Energy** and Industrial Economy and the Supporting Role of the **U.S. Department of Energy's** Office of Fossil Energy and **Carbon Management**

## INTRODUCTION

The U.S. Department of Energy's (DOE's) Office of Fossil Energy and Carbon Management (FECM) is dedicated to minimizing the environmental and climate impacts of fossil fuels and industrial processes while working to achieve net-zero emissions across the U.S. economy. In line with this mission, FECM developed the "Gulf Coast and South-Central



**Regional Report: Building a Clean Energy and Industrial** Economy and the Supporting Role of the U.S. Department of Energy's Office of Fossil Energy and Carbon Management."

The Gulf Coast and South-Central region, as defined in this report, includes New Mexico, Texas, Oklahoma, Arkansas, Louisiana, Mississippi, and Alabama. This region draws on the region's significant energy resources. Coupled with the region's vast geological formations, these energy resources support current efforts to decarbonize and scale clean energy technologies. Additionally, by referencing the region's industry, energy mix, and energy activities, this report identifies priority areas for the Gulf Coast and South-Central region and aligns them with the research, development, and demonstration portfolio of the U.S. Department of Energy's (DOE's) Office of Fossil Energy and Carbon Management (FECM) to curate relevant solutions.

KEY FINDINGS - The Gulf Coast and South-Central region's concentration of industries lends itself to creating economies of scale in carbon management, in which multiple facilities within close proximity to each other can deploy carbon capture

technologies to reduce CO2 emissions at the source and share CO<sub>2</sub> pipelines and storage infrastructure to reduce costs. The region's extensive LNG export infrastructure can help lay a foundation to advance the clean hydrogen and ammonia economy, and the oil and gas industry can reduce methane emissions and turn wastewater into a resource. The region also has a highly skilled energy workforce capable of supporting the new technologies.

FECM SUPPORT - As outlined throughout this report, FECM's focus areas and portfolio of technologies are well-aligned with the Gulf Coast and South-Central's energy and industrial mix, local infrastructure, and resources. These efforts will help the region engage communities, create new jobs, build new supply chains, and invest in university and private sector research and development and innovation. Further, through DOE's Community Benefits Plans and Community Benefit Agreements, FECM illustrates how the design and scope of a project can maximize economic, environmental, and societal benefits for communities in the region, contributing to project success and growth.

## DOWNLOAD THE REPORT AND SHARE YOUR THOUGHTS

The Gulf Coast and South-Central Regional Report is available for download on FECM's website: energy.gov/FECM/ reports-and-studies.

The Gulf Coast and South-Central Regional Report is one of six regional reports that highlight resource sustainability and decarbonization solutions in fossil energy-producing and industrial regions. Given the rapidly evolving market, technology, and policy environment, the regional reports are intended to be "living documents" and will be updated as the outlook on each region evolves. Please note these reports and regional decarbonization workshops do not represent DOE policy or strategy, but rather are a representation of DOE's current understanding based on a synthesis of available facts.

FECM welcomes input and feedback on content for each of the reports. Please direct all inquiries and input to FECMRegionalReport@hq.doe.gov. Input and feedback should not include business-sensitive information, trade secrets, proprietary, or otherwise confidential information. Please note that input and feedback provided is subject to the Freedom of Information Act.

To keep up to date with FECM investments, announcements, and project selections, visit energy.gov/FECM and sign up for news alerts here.



**ENERGY** Office of Fossil Energy and Carbon Management

Learn more at energy.gov/fecm For press inquiries email FECMCommunications@hq.doe.gov Information current as of October 2024.