Biden-Harris Administration Invests $251 Million to Expand Infrastructure to Support CO2 Transport and Storage

President Biden's Investing in America Agenda Supports Projects Across Seven States That Will Slash CO2 Emissions, Build High-Quality Jobs, and Deliver Cleaner Air

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WASHINGTON, D.C.— As part of President Biden's Investing in America agenda, the U.S. Department of Energy (DOE) today announced $251 million to support 12 selected projects across seven states that will bolster the nation's carbon management capabilities. The projects, funded by President Biden's Bipartisan Infrastructure Law, will expand carbon dioxide (CO2) transportation and storage infrastructure to help significantly and responsibly reduce CO2 emissions from power generation and industrial operations. In addition, DOE announced the second opening of a five-year $2.25 billion funding opportunity to provide for the continuous development of commercial-scale carbon storage infrastructure. Expanding commercial CO2 transport and storage will provide new economic opportunities and help achieve President Biden's goal of a net-zero emissions economy by 2050.

"Less pollution, cleaner air and more jobs are the upshots of President Biden's Investing in America agenda," said **U.S. Secretary of Energy Jennifer M. Granholm**. "Thanks to historic clean energy investments, DOE is building out the infrastructure needed to slash harmful carbon pollution from industry and the power sector, revitalize local economies, and unlock enormous public health benefits."

Carbon dioxide emissions are fueling global warming, which has increased the threat of droughts, severe fires, rising sea levels, floods, catastrophic storms, and declining biodiversity. The projects announced today will enable the capture, transport, and conversion or permanent storage of hundreds of millions of tons of CO2 emissions every year to help mitigate the impacts of climate change.

Carbon Storage Validation and Testing Project Selections

Nine projects were selected for a total of $242 million in funding to support the development of new and expanded large-scale, commercial carbon storage projects with capacities to securely store 50 or more million metric tons of carbon dioxide. Projects will focus on the detailed site characterization, planning, and permitting stages of project development under Phase III of FECM's Carbon Storage Assurance Facility Enterprise (CarbonSAFE) Initiative. To ensure these projects center on communities, all applicants were required to submit Community Benefits Plans detailing how the project will advance quality jobs, environmental justice, and community partnership throughout project development.

- **Bluebonnet Sequestration Hub, LLC (Houston, Texas)** plans to complete the site characterization, permitting, and environmental approvals for the Bluebonnet Sequestration Hub along the Texas Gulf Coast, with potential for more than 350 million metric tons of total CO2 storage capacity. (Award Amount: $16,480,117)
- **BP Corporation North America Inc. (Houston, Texas)** will focus on the characterization and permitting of two commercial-scale storage sites along the Texas Gulf Coast with the capacity to ultimately store up to 15 million metric tons of CO2 per year. (Award Amount: $33,411,193)
- **Colorado School of Mines (Golden, Colorado)** plans to develop a regional CO2 storage hub to address emissions from cement, hydrogen, and power plants, including geologic characterization efforts at two sites in Colorado's Pueblo region. (Award Amount: $32,671,554)
- **Magnolia Sequestration Hub, LLC (Houston, Texas)** intends to complete the site characterization, permitting, and environmental approvals for the Magnolia Sequestration Hub in Allen Parish, Louisiana, with an estimated 300 million metric tons of total CO2 storage capacity. (Award Amount: $21,570,784)
- **Southern States Energy Board (Peachtree Corners, Georgia)** plans to complete site characterization and permitting efforts to develop a storage hub near Bucks, Alabama, for CO2 sourced from a variety of industries including electric generation and steel manufacturing. (Award Amount: $17,984,523)
- **Timberlands Sequestration, LLC (Houston, Texas)** intends to complete site characterization efforts to develop a biomass carbon removal and storage project for the Alabama River Cellulose pulp and paper mill located in Monroe County, Alabama. (Award Amount: $23,779,020)
- **University of Illinois (Champaign, Illinois**) plans to complete site characterization efforts for the Cambrian Mt. Simon Sandstone/Eau Claire Formation storage complex, for storage of CO2 from the Dallman Power Generation Plant in Springfield, Illinois and about 50 million metric tons of total CO2 storage capacity. (Award Amount: $17,736,972)
- **University of North Dakota Energy & Environmental Research Center (Grand Forks, North Dakota)** intends to complete site characterization and permitting efforts for a CO2 storage hub in central North Dakota, with CO2 to be sourced from electric generation and ethanol production and about 200 million metric tons of total CO2 storage capacity. (Award Amount: $38,148,520)

- **University of Wyoming (Laramie, Wyoming)** plans to advance a commercial, multi-source, large-scale carbon capture and storage hub in Greater Green River Basin, Wyoming, with CO2 sourced from trona mining and direct air capture facilities. (Award Amount: $40,504,935)

Carbon Dioxide Transport Engineering and Design Project Selections

Three projects were selected for a total of $9 million in funding to perform detailed engineering design studies for regional CO2 pipeline networks. The studies will develop innovative methods to efficiently and safely transport captured CO2 from key sources like power plants, ethanol facilities, and other industrial operations to locations that will either use the CO2 to manufacture long-lived products—such as carbon-based building materials, fuels, and chemicals—or for permanent storage. Projects will focus on carbon transport costs, transport network configurations, and technical and commercial considerations that support broad efforts to develop and deploy carbon capture, conversion, and storage at commercial scale.

- **Carbon Solutions LLC (Okemos, Michigan)** will perform a study for a commercial-scale, statewide pipeline system capable of transporting up to 120 million metric tons of CO2 per year building primarily on portions of the Wyoming Pipeline Corridor Initiative. (Award Amount: $3,000,000)
- **Howard Midstream Energy Partners LLC (San Antonio, Texas)** will perform a study for a system capable of moving up to 250 million metric tons of CO2 per year from multiple sources to multiple storage locations on the Gulf Coast from the Port of Corpus Christi, Texas to the Mississippi River. (Award Amount: $3,000,000)
- **Southern States Energy Board (Peachtree Corners, Georgia)** will perform a study for a regional-scale CO2 transport system in the Houston-Galveston region along the Texas Gulf Coast to move at least 8 million metric tons of CO2 per year. (Award Amount: $3,000,000)

Reopening the Carbon Storage Validation and Testing Funding Opportunity

DOE also announced the re-opening of the $2.25 billion Carbon Storage Validation and Testing funding opportunity announcement. The funding opportunity has been modified to accept applications under a broader scope, including storage complex feasibility in addition to the site characterization, permitting, and construction stages of project development. It also expands the definition of large-scale storage to allow for additional storage options. Read the amended funding opportunity here.

Projects selected for funding under these opportunities must carefully address the societal considerations and impacts of their proposed projects, emphasizing active engagement with communities. Applicants must explain how projects are expected to deliver economic and environmental benefits and mitigate impacts; conduct community and stakeholder engagement; incorporate diversity, equity, inclusion, and accessibility; and promote workforce development and quality jobs. The selected projects are required to develop and implement strategies to ensure strong community and worker benefits, and report on such activities and outcomes.

Full applications are due by July 6, 2023.

DOE's Advancement of Carbon Management Technologies

Since January 2021, DOE has invested more than $737 million in projects that advance the research, development, and deployment of carbon management approaches, including carbon capture, conversion, and storage. This progress is essential to help drive economic development, technological innovation, and high-wage jobs as we build a clean energy and industrial economy.

DOE's Office of Fossil Energy and Carbon Management (FECM) minimizes environmental and climate impacts of fossil fuels and industrial processes while working to achieve net-zero emissions across our economy. Priority areas of technology work include carbon capture, carbon conversion, carbon dioxide removal, carbon dioxide transport and storage, hydrogen production with carbon management, methane emissions reduction, and critical minerals production. To learn more, visit the FECM website, sign up for FECM news announcements, and visit the National Energy Technology Laboratory website.

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