THE INFRASTRUCTURE INVESTMENT AND JOBS ACT:

Opportunities to Accelerate Deployment in Fossil Energy and Carbon Management Activities

The Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law, is a long-overdue investment in the United States' infrastructure, workers, families and competitiveness.

The infrastructure deal <u>includes more than \$62 billion for the U.S. Department of Energy (DOE)</u> to deliver a more equitable clean energy future for the American people by investing in American manufacturing and workers; expanding access to energy efficiency and clean energy for families, communities and businesses; delivering reliable, clean and affordable power to more Americans; and building the technologies of tomorrow through clean energy demonstrations. It also specifically includes historic investments in carbon management, both to mitigate and remove carbon dioxide (CO2) emissions.

CARBON MANAGEMENT FUNDING

As a part of the Bipartisan Infrastructure Law, DOE will deploy approximately \$12 billion in new carbon management funding over five years, largely for direct air capture and and CO2 capture, transport and storage. And of the \$8 billion authorized for the Hydrogen Hubs Program, at least \$500 million is available for a hydrogen hub using fossil fuels with carbon management.

Investments from the Bipartisan Infrastructure Law to DOE will address the Office of Fossil Energy and Carbon Management's (FECM's) priority/mission areas in the following ways:

CARBON DIOXIDE REMOVAL – DIRECT AIR CAPTURE (DAC)

Regional DAC Hubs: \$3.5 billion

For Fiscal Years (FYs) 2022-2026, DOE is allocated \$3.5 billion to lead the development

of four regional DAC hubs. These hubs, which will each have the capacity to capture and store and/or utilize one million metric tons of CO2 per year, will be networks of DAC projects, potential CO2 off-takers, transportation infrastructure and storage infrastructure—enhancing FECM's efforts to demonstrate CO2 removal in support of America's goal of net-zero emissions by 2050. The hubs will be selected based on geographic diversity, scalability, jobs, cost and other considerations to advance commercially viable, just and sustainable carbon dioxide removal.

DAC Technology Prize Competition: \$115 million

In FY 2022, DOE is allocated funding for two prize competitions focused on DAC technologies: \$100 million for commercial technologies and \$15 million for pre-commercial technologies. These prizes will promote diverse approaches to DAC, a potentially critical contributor to the nascent and necessary carbon dioxide removal industry.

ENGINEERED STACK CAPTURE AND TRANSPORT

Carbon Capture Demonstrations and Large Pilots: \$3.5 billion

For FYs 2022-2026, DOE is allocated \$2.5 billion to develop six integrated carbon capture and storage demonstration projects to accelerate the deployment of technologies to capture and store CO2 emissions generated by fossil energy power plants and industrial facilities.

Carbon Capture Technology Program: \$100 million

For FYs 2022-2026, DOE is allocated \$100 million for a front-end engineering and design program for CO2 transport infrastructure that will be required to enable carbon capture, utilization and storage deployment.

Carbon Dioxide Transportation Infrastructure Finance and Innovation Program: \$2.1 billion

For FYs 2022-2026, DOE is allocated \$2.1 billion to offer access to capital for large, common-carrier CO2 transport projects (e.g., pipelines, rail, shipping, etc.) that build additional common carrier transport systems and capacity for potential future demand. This money is available until expended and can be committed to eligible projects in one of three ways: loans, loan guarantees or grants.

The funding across these three programs will support the development of carbon capture technologies across a diverse range of CO2 sources, while connecting those sources to storage locations via CO2 transportation networks.

CARBON DIOXIDE UTILIZATION AND STORAGE

Carbon Storage Validation and Testing: \$2.5 billion

For FYs 2022-2026, DOE is allocated \$2.5 billion to develop new or expanded large-scale commercial carbon sequestration projects and supporting transport infrastructure. These projects will prioritize commercial capacity development and the ability to support storage from multiple carbon capture facilities—enhancing long-term storage for captured CO2. Commercial CO2 storage is critical both for CO2 mitigation and CO2 removal.

Carbon Utilization Program: \$310 million

For FYs 2022-2026, DOE is allocated \$310 million for the Carbon Utilization Program, which will be granted to entities to procure and use commercial or industrial products that utilize CO2 in a manner resulting in a product with significantly lower greenhouse gas emissions than alternatives. This funding supports the development of lower greenhouse gas supply chains as well as technologies to productively use CO2 for decarbonization.

STAKEHOLDER ENGAGEMENT

Through the funding granted by the Bipartisan Infrastructure Law, the United States will be able to accelerate carbon management innovation and position itself as a leader in research, manufacturing and demonstration. Equally important is pursuing this innovation in an equitable, sustainable way that promotes energy, economic and environmental justice. DOE will work to meaningfully engage with local communities and a wide array of stakeholders—including environmental and climate justice organizations, tribal nations, labor groups, industry and academia—as it pursues these carbon management technology areas to realize the nation's net-zero future.

Visit <u>DOE's website</u> for more information about the Bipartisan Infrastructure Law. ■