Biden-Harris Administration Announces Up To $1.2 Billion For Nation's First Direct Air Capture Demonstrations in Texas and Louisiana

President Biden's Investing in America Agenda Will Fund Projects to Kickstart Critical New Industry, Remove Historic Climate-Harming Carbon Emissions Out of the Air, and Create 4,800 Good-Paying Jobs

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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 up to $1.2 billion to advance the development of two commercial-scale direct air capture facilities in Texas and Louisiana. These projects—the first of this scale in the United States—represent the initial selections from the President's Bipartisan Infrastructure Law-funded Regional Direct Air Capture (DAC) Hubs program, which aims to kickstart a nationwide network of large-scale carbon removal sites to address legacy carbon dioxide pollution and complement rapid emissions reductions. These emissions are already in the atmosphere, fueling climate change and extreme weather and jeopardizing public health and ecosystems across the globe. The Hubs are expected to ensure meaningful community and labor engagement and contribute to the President's Justice40 Initiative . Together, these projects are expected to remove more than 2 million metric tons of carbon dioxide (CO_2) emissions each year from the atmosphere—an amount equivalent to the annual emissions from roughly 445,000 gasoline-powered cars—and create 4,800 good-paying jobs in Texas and Louisiana.

Today's announcement will be the world's largest investment in engineered carbon removal in history and each Hub will eventually remove more than 250 times more carbon dioxide than the largest DAC facility currently operating. Their development will help inform future public and private sector investments and jumpstart a new industry critical to addressing the climate crisis on a global scale—highlighting how Bidenomics is driving a manufacturing boom that is delivering new economic opportunities, positioning America to be a global leader in the industries of the future, and accelerating efforts to meet the President's goal of a net-zero economy by 2050.

"Cutting back on our carbon emissions alone won't reverse the growing impacts of climate change; we also need to remove the CO_2 that we've already put in the atmosphere—which nearly every climate model makes clear is essential to achieving a net-zero global economy by 2050," said **U.S. Secretary of Energy Jennifer M. Granholm.** "With this once-in-a-generation investment made possible by President Biden's Investing in America agenda, DOE is laying the foundation for a direct air capture industry crucial to tackling climate change—transforming local economies and delivering healthier communities along the way."

DAC is a process that separates CO_2 from the air, helping to reduce legacy CO_2 in the atmosphere. The separated CO_2 can then be safely and

permanently stored deep underground or converted into useful carbon-containing products like concrete that prevent its release back into the atmosphere. Widespread deployment of DAC and other innovative technologies that capture emissions are key to combatting the climate crisis and reinforcing America's global competitiveness in the zero-carbon economy of the future. DOE estimates that reaching President Biden's ambitious plan for a net-zero emissions economy will require that between 400 million and 1.8 billion metric tons of CO2 be removed from the atmosphere and captured from emissions sources annually by 2050. The two DAC Hubs selected for award negotiations today will help further demonstrate the ability to capture and store atmospheric CO2 at scale.

Selected projects include:

- **Project Cypress (Calcasieu Parish, LA):** Battelle, in coordination with Climeworks Corporation and Heirloom Carbon Technologies, Inc., aims to capture more than 1 million metric tons of existing CO2 from the atmosphere each year and store it permanently deep underground. This hub intends to rely on Gulf Coast Sequestration for offtake and geologic storage of captured atmospheric CO2. The project is estimated to create approximately 2,300 jobs, with a goal to hire workers formerly employed by the fossil fuel industry for 10% of the overall workforce. Project Cypress will implement a robust two-way communication program with local communities and stakeholders to solicit input into the project while also generating new employment opportunities and advancing diversity, equity, inclusion, and accessibility principles.
- **South Texas DAC Hub (Kleberg County, TX):** 1PointFive, a subsidiary of Occidental, and its partners, Carbon Engineering Ltd. and Worley, seek to develop and demonstrate a DAC facility designed to remove up to 1 million metric tons of CO2 annually with an associated saline geologic CO2 storage site. The project is estimated to create approximately 2,500 jobs in construction, operations, and maintenance with existing agreements for local hiring. The selectees will also establish a Citizen Advisory Board to ensure meaningful community engagement.

DOE is dedicated to ensuring that the selected Regional DAC Hubs projects deliver community benefits and avoid harm in those communities while also advancing the development of carbon capture, transport, and storage systems. The Hubs are expected to ensure meaningful community and labor engagement and contribute to the President's Justice40 Initiative, which set a

goal that 40% of the overall benefits of certain federal investments, such as climate and clean energy, go to disadvantaged communities that have been marginalized and overburdened by pollution and underinvestment. DOE, in coordination with the selected project teams, is planning to co-host in-person community briefings to engage with local stakeholders in Texas and Louisiana in September. Learn more about the two Regional DAC Hubs projects selected for award negotiations here.

Potential Future DAC Hub Studies

To assess the viability of future DAC Hub demonstrations, DOE also announced 19 additional projects selected for award negotiations that will support earlier stages of project development, including feasibility assessments and front-end engineering and design (FEED) studies. Fourteen projects will enable early-stage efforts to explore the feasibility of a potential DAC Hub location, ownership structure, and business model. Five projects will perform FEED studies that establish and define technical requirements focused on project scope, schedule, and costs to reduce risk during later project phases. Learn more about these 19 projects selected for award negotiations here.

DOE intends to issue additional funding opportunity announcement in the coming years to fully implement the Regional DAC Hubs mandate from Congress. Selection for award negotiations is not a commitment by DOE to issue an award or provide funding. Before funding is issued, DOE and the applicants will undergo a negotiation process, and DOE may cancel negotiations and rescind the selection for any reason during that time.

Carbon Negative Shot Pilots

DOE also announced its intent to publish a series of funding opportunities for projects and prizes focused on supporting the development and commercialization of a suite of carbon dioxide removal technologies. These efforts will collectively support the Carbon Negative Shot, part of DOE's larger Energy Earthshots Initiative and the U.S. government's first major effort to help spur innovation and position U.S. enterprises as leaders in research, manufacturing, and deployment in the carbon dioxide removal industry. The Earthshot sets a goal to remove CO2 from the atmosphere and store it at meaningful scales for less than $100 per net metric ton of CO2-equivalent within the decade. Read the full NOI .

The DOE Office of Clean Energy Demonstrations (OCED), in collaboration with the DOE Office of Fossil Energy and Carbon Management (FECM), manages

the Regional DAC Hubs Program and will provide project management oversight for the DAC Hubs projects selected to demonstrate the capture, processing, delivery, and storage or end-use of captured carbon as well as community benefit plans and environmental safety.

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