







About Newsroom

Caree



SCIENCE & INNOVATION

ENERGY ECONOMY

SECURITY & SAFETY

SAVE EI

Department of Energy

Biden Administration Launches \$3.5 Billion Program To Capture Carbon Pollution From The Air

MAY 19, 2022

Energy.gov »

Biden Administration Launches \$3.5 Billion Program To Capture Carbon Pollution
From The Air

DOE Announces Bipartisan Infrastructure Law Effort to Establish Regional

Direct Air Capture Hubs for Large-Scale CO2 Removal

washington, D.C. — The U.S. Department of Energy (DOE) today released a Notice of Intent (NOI) to fund the Bipartisan Infrastructure Law's \$3.5 billion program to capture and store carbon dioxide (CO2) pollution directly from the air. The Regional Direct Air Capture Hubs

program will support four large-scale, regional direct air capture hubs that each comprise a network of carbon dioxide removal (CDR) projects to help address the impacts of climate change, creating good-paying jobs and prioritizing community engagement and environmental justice. In addition to efforts to deeply decarbonize the economy through methods like clean power, efficiency, and industrial innovation, the widespread deployment of direct air capture technologies and CO2 transport and storage infrastructure plays a significant role in delivering on President Biden's goal of achieving an equitable transition to a net-zero economy by 2050.

"The UN's latest climate report made clear that removing legacy carbon pollution from the air through direct air capture and safely storing it is an essential weapon in our fight against the climate crisis," said U.S. Secretary of Energy Jennifer M. Granholm.

"President Biden's Bipartisan Infrastructure Law is funding new technologies that will not only make our carbon-free future a reality but will help position the U.S. as a net-zero leader while creating goodpaying jobs for a transitioning clean energy workforce."

Direct air capture is a process that separates CO2 from ambient air. The separated CO2 is then permanently stored deep underground or converted for use in long-life products like concrete that prevent its release back into the atmosphere. This differs from carbon capture systems at industrial facilities and power plants that prevent additional emissions from being released into the air in the first place.

By midcentury, CDR will need to be deployed at the gigaton scale. To put this in perspective, one gigaton of subsurface sequestered CO2 is equivalent to the annual emissions from the U.S. light-duty vehicle

fleet—the equivalent of approximately 250 million vehicles driven in one year.

Each of the projects selected for the Regional Direct Air Capture Hubs program will demonstrate the delivery and storage or end use of removed atmospheric carbon. The hubs will have the capacity to capture and then permanently store at least one million metric tons of CO2 from the atmosphere annually, either from a single unit or from multiple interconnected units.

In the development and deployment of the four regional direct air capture hubs, DOE will also emphasize environmental justice, community engagement, consent-based siting, equity and workforce development, and domestic supply chains and manufacturing.

For more information, read the NOI here.

To learn more about DAC and other CDR approaches, please also join us for the virtual **Carbon Negative Shot Summit** on July 20 and 21, 2022. The Summit will convene a diverse set of perspectives to discuss the development and deployment of CDR technologies and infrastructure in the United States, as well as explore justice and equity principles and workforce development opportunities.

DOE's Office of Fossil Energy and Carbon Management (FECM) funds research, development, demonstration, and deployment projects to decarbonize power generation and industrial production to remove carbon dioxide from the atmosphere and to mitigate the environmental impacts of fossil fuel production and use. Priority areas of technology work include point-source carbon capture, carbon dioxide conversion, carbon dioxide removal, reliable carbon storage and transport, 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**.

###

Media Inquiries: (202) 586-4940 or DOENews@hq.doe.gov

Read more at the energy.gov Newsroom

| | ABOUT ENERGY.GOV | ENERGY.GOV RESOURCES | FEDERAL |
|---------------|--------------------|--|-----------|
| ence Ave. SW | History | Budget & Performance | The White |
| ; 20585 | DOE STEM | | USA.gov |
| | Careers Contact Us | Covid-19 Response Directives, Delegations & Requirements | Vote.gov |
| Email Updates | | FOIA | |
|) in | | Inspector General | |
| | | Privacy Program | |
| | | Small Business | |
| | | | |

'eb Policies • Privacy • No Fear Act • Whistleblower Protection • Notice of EEO Findings of Discrimination • Iformation Quality • Open Gov • Accessibility • Vulnerability Disclosure Program