



REGIONAL CARBON CAPTURE DEPLOYMENT INITIATIVE

UPDATE

June 24, 2022

ClearPath Releases Infrastructure Tracker

ClearPath recently released an [infrastructure tracker](#) to monitor the implementation of the recently enacted bipartisan infrastructure bill and the Energy Act of 2020, which both commit billions of dollars to research, development, and demonstration to help scale pre-commercial energy technologies.

The tracker is designed specifically to include competitive programs implemented by the Department of Energy authorized and/or funded by the two laws and includes an interactive spending and an implementation dashboard.

- **Implementation Dashboard:** This dashboard shows the Department of Energy's steps to develop funding opportunities and implement these programs. This dashboard is a real-time view of where appropriations will be deployed.
- **Spending Dashboard:** This dashboard shows where dollars have been awarded and is updated monthly with a three-month lag based on data from USASpending.gov.

In each board, users can search details based on program names, leading offices, or other pieces of data such as awards by state or Congressional district.

Bipartisan “CREST” Act, Focusing on Carbon Removal Introduced in Senate

On June 16, 2022, Senators Collins (R-ME) and Cantwell (D-WA) introduced the [Carbon Removal and Emissions Storage Technologies \(CREST\) Act](#), legislation that would direct the Departments of Energy and Interior to establish new research programs and evaluate the feasibility of carbon removal and storage pathways, quantify the net impact of carbon removal solutions, and establish an innovative pilot reverse auction purchasing program to accelerate carbon removal market commercialization.

The CREST Act builds upon previously authorized carbon removal research and development programs to include biomass, geological, aquatic, and atmospheric carbon removal pathways that can permanently sequester carbon dioxide or use carbon dioxide to produce valuable products such as biofuels.

Read a summary of the legislation: [here](#)

IEA Releases Yearly World Energy Investment Report, Highlights Record Clean Energy Spending

The International Energy Agency (IEA) released its annual [World Energy Investment report](#) this week, which concludes that record clean energy spending is set to help global energy investment grow by 8 percent in 2022, although much of this increase is due to higher costs.

Part of the report discusses the increase in plans for carbon management projects and the resulting implications, citing the 130 commercial-scale CO₂ capture projects in 20 countries announced in 2021. The projects are varied in their applications and have attracted substantial public and private investment.

Key takeaways from the report related to carbon management include:

- Net-zero pledges and anticipated low-carbon hydrogen have led to increasing amounts of carbon management project announcements that could push annual investment up to USD 40 billion by 2024;
- Governments announced nearly USD 18 billion in new public funds for the development and deployment of carbon management in 2021, most of which needs to be spent by 2030;
- Renewed private-sector commitment to CCUS is reflected in six FIDs (final investment decisions) for projects in 2021

University of Illinois Receives 3.5 million to Conduct Air Capture Study using Concrete

The University of Illinois Urbana-Champaign's Prairie Research Institute has received a \$3.5 million grant from the Department of Energy to lead a front-end engineering and design (FEED) study on air capture and storage at Gary Works, a steel mill in Gary Indiana near Lake Michigan that is operated by United States Steel Corporation.

The study will explore capturing carbon dioxide from the air and storing it in concrete, specifically using a DAC technology developed by CarbonCapture Inc. After CO₂ emissions are captured from the atmosphere around Gary Works, the liquified gas will be transported to nearby Ozinga ready-mix concrete plants and injected into the concrete as it is being mixed. When injected, the CO₂ will mineralize in the concrete and stay there. The technology will use the plant's waste heat, energy, and location, so energy and transportation costs can be minimized.

Read DOE's funding announcement from April 2022 here: [DOE Invests \\$14 Million to Scale Up Direct Air Capture and Storage Technology, Coupled to Low-Carbon Energy Resources | Department of Energy](#)

Associated News Coverage:

- [University of Illinois Receives \\$3.5 Million from the Department of Energy to Advance Air Capture and Storage Study at U. S. Steel's Gary Works | Business Wire](#)
 - [US Steel part of groundbreaking study to snatch carbon emissions from the air and store them in concrete | | union-bulletin.com](#)
 - [University of Illinois to study carbon capture at Gary steel mill – Inside INdiana Business](#)
 - [Net zero? University of Illinois lands \\$3.5 million to study carbon capture at Gary Works steel mill - Indiana Economic Digest](#)
 - [U.S. Steel part of groundbreaking study to snatch carbon emissions from the air and store them in concrete | Pittsburgh Post-Gazette](#)
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News Roundup

- [Biden Administration Releases Unified Agenda, Outlining Regulatory Priorities \(bhfs.com\)](#)
 - [Gulf carbon capture projects will face a critical hurdle \(houstonchronicle.com\)](#)
 - [E&E News | Article | Biden admin postpones power plant carbon rules \(politicopro.com\)](#)
 - [EXCLUSIVE BP beefs up hydrogen team in bet on fuel's future | Reuters](#)
 - [Manchin Resistance to Clean Energy Provisions Could Harm Clean Energy Goals](#)
 - [Doe Loan Office Director Skeptical About Pace of Transmission Buildout \(politicopro\)](#)
 - [Electric Hydrogen startup raises \\$198m for plants to produce green fuel \(energyvoice.com\)](#)
 - [E&E News | Article | Granholm: DOE in talks on funding clean energy manufacturing \(politicopro.com\)](#)
 - [Decarbonizing industry: if industrial clusters win, we all win | World Economic Forum \(weforum.org\)](#)
 - [Green hydrogen: Scaling the decarbonization heavyweight | Greenbiz](#)
 - [It's Official: Oil Giants Seek New Revenue in Green Hydrogen \(triplepundit.com\)](#)
 - [Democrats may drop another clean energy proposal to appease Manchin - The Washington Post](#)
 - [Can Natural Gas Be Used to Create Power With Fewer Emissions? - The New York Times \(nytimes.com\)](#)
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Global News

- [Trudeau's Energy Chief Jonathan Wilkinson Unveils Low-Carbon Industrial Strategy - Bloomberg](#)
- [Abu Dhabi to develop hydrogen policy with new regulations and standards \(ampproject.org\)](#)
- [Carbon capture deal 'key' to unlocking CCS market | News | gasworld](#)
- [CNOOC Completes China's First Offshore Carbon \(oedigital.com\)](#)
- [Qatar plans to capture up to 11mn tonnes of carbon per annum \(gulf-times.com\)](#)
- [SK Earthon to enhance its capabilities in petroleum development and Carbon Capture & Storage - Korea IT Times](#)

- Danish govt to hold co-ownership in future CO2 storage licenses under new political deal - Offshore Energy (offshore-energy.biz)
 - World's first open CO2 transport and storage infrastructure to use ABB technology (worldoil.com)
 - Equinor, AMRC in second Humber low carbon hydrogen project funding bid | S&P Global Commodity Insights (spglobal.com)
 - Global Ship Lease Announces Pa - GuruFocus.com
 - Air Products to support a low-carbon future in China | News | gasworld
 - New deal to accelerate CCS in Dutch North Sea | News | gasworld
 - LG Chem announces 50,000 ton Hydrogen project for 2024 with circular CO2 : Biofuels Digest
 - How this groundbreaking carbon capture facility could help fight climate change (interestingengineering.com)
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New podcasts, reports, statements & blogs

- Shell and Dow start up e-cracking furnace experimental unit | Shell Global
 - The race to produce green steel | Ars Technica
 - Honeywell (HON) Unveils Carbon & Energy Management Solution | Nasdaq
 - Carbon Direct and Scope3 Partner to Decarbonize the Advertising Industry - EIN Presswire (einnews.com)
 - Carbon Capture Navigating Path into Clean Energy Mainstream | RTO Insider
 - Will Capturing Carbon Emissions Save Our Planet? (azocleantech.com)
 - Switching protocol doubles carbon capture capacity of supercapacitors | Research | Chemistry World
 - Is green hydrogen a 'game changer' in clean energy transition? (trust.org)
 - Carbon Capture: the "New" Technology that Can Help Solve the Climate Conundrum | RealClearEnergy
 - Infographic---Decarbonization-Pathways-for-Steel-and-Cement-Industries.pdf (ihsmarkit.com)
 - Chevron to Invest \$2.5bn in Low-Carbon Hydrogen - Microgrid Media
 - IEA sees African 2030 renewable hydrogen costs at \$2/kg | Argus Media
 - Carbon Border Adjustments Considerations For Policymakers.pdf (c2es.org)
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News in the States

California

- SoCalGas gets \$750K grant to develop renewable hydrogen from biogas : Biofuels Digest
- CARB Releases Draft Scoping Plan - EHS Daily Advisor (blr.com)

Illinois

- See above story on University of Illinois Receives 3.5 million to Conduct Air Capture Study using Concrete

Indiana

- See above story on University of Illinois Receives 3.5 million to Conduct Air Capture Study using Concrete

Iowa

- [Local News: Navigator briefs O'Brien County on CO2 pipeline \(6/21/22\) | Cherokee Chronicle Times](#)
- [Floyd County Supervisors Get Update on Carbon Pipeline Project – KCHA News](#)
- [Fort Madison couple gears up for fight with Navigator over Heartland-Greenway pipeline > PenCityCurrent.com](#)
- [Mahaska Supervisors to protest pipeline | Local News | oskaloosa.com](#)
- [Local News: Supervisors hear CO2 pipeline update \(6/17/22\) | Cherokee Chronicle Times](#)

Louisiana

- [Louisiana's 'Cancer Alley' residents in clean air fight - ABC News \(go.com\)](#)
- [Venture Global inks LNG offtake deals for Louisiana projects \(naturalgasworld.com\)](#)

Minnesota

- [West central Minnesota counties are along proposed path of \\$4.5B carbon capture pipeline - West Central Tribune | News, weather, sports from Willmar Minnesota \(wctrib.com\)](#)
- [MN Nears Next Step in Regulating Underground Carbon Pipelines / Public News Service](#)
- [Minnesota pledges 100 percent carbon-free energy. Is it possible? | | southernminn.com](#)

Nebraska

- [Winnebago Tribe calls for study of carbon pipelines' impact on environment | Regional Government | journalstar.com](#)
- [Nebraska ethanol plants could soon store carbon dioxide underground | Nebraska News | journalstar.com](#)
- [Nebraska is likely headed for another pipeline controversy — this time over carbon dioxide | Nebraska News | journalstar.com](#)
- ['Wild West territory': New fight over pipelines emerging in Nebraska | Nebraska News | journalstar.com](#)
- [Summit Carbon acquires 6.45 miles of land for pipeline project - RIVER COUNTRY - NEWS CHANNEL NEBRASKA](#)

New Mexico

- [New Mexico's aggressive pursuit of hydrogen reignites debate - Albuquerque Journal \(abqjournal.com\)](#)

New York

- [NYISO: 'Wholesale market changes will drive energy storage uptick' \(energy-storage.news\)](#)

North Dakota

- [Doug Burgum's Climate Crisis Plan: Will It Help? Is It Going To Work? | High Plains Reader, Fargo ND \(hpr1.com\)](#)
- [Tribune editorial: Exciting coal research has long way to go | Editorial | bismarcktribune.com](#)

South Dakota

- [Poet and navigator co2 pipeline partnership heres what to expect \(aberdeen news\)](#)
- [Huron Plainsman | Some answers to questions regarding carbon pipelines](#)

Texas

- [Houston's relationship with oil and gas industry may be an asset \(houstonchronicle.com\)](#)
- [Honeywell, Enlink Midstream partner on Carbon Capture solutions for US Gulf Coast : Biofuels Digest](#)
- [Targa Strikes \\$3.5B Deal to Buy Lucid, Expand Permian Delaware Footprint - Natural Gas Intelligence](#)

Utah

- [Could Carbon Capture Secure a Future for Coal? - ETV News](#)

Wyoming

- [Gov. Gordon Tells Congressional Committee Wyoming Will Continue Leading Natural Gas Production - SweetwaterNOW](#)
 - [New 416-mile transmission project could support Wyoming nuclear, carbon capture - Casper, WY Oil City News](#)
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Upcoming events

June 26 - 30

- [19th Annual International Conference on Carbon Dioxide Utilization | Princeton University](#)
Chemists, engineers, and environmental policy planners will come together and discuss the latest developments in the field of CO2 capture and utilization

June 27 - 29

- [2022 Technical Group Mid-Year Meeting | CSLForum](#)
The workshop will explore the various CDR technologies available to abate elevated atmospheric CO2 levels

June 30

- [Direct Air Capture Summit, hosted by Climeworks](#)
Climeworks' Direct Air Capture Summit is a one-of-a-kind platform featuring business, technology, and policy experts. Key players collaborating and discussing high-quality carbon removal solutions help drive the scale-up the industry needs. The third edition of the summit will highlight the roles that the public and private sectors play in driving climate solutions and meeting global net-zero goals

July 21 - 22

- [Carbon Negative Shot Summit | U.S. Department of Energy \(DOE\)](#)

The Carbon Negative Shot Summit will convene a diverse set of perspectives to discuss the development and deployment of CDR in the United States, as well as explore justice and equity principles and workforce development opportunities. The nascent nature of CDR provides an imperative to integrate equity and justice from the start

To subscribe or request to add an event, news story, report, blog, or job posting to the update please reach out to Emma Thomley at ETHomley@gpisd.net Want to read more carbon management updates, studies, and fact sheets? Visit us at [Carbon Capture Ready](#).

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