



**REGIONAL
CARBON
CAPTURE
DEPLOYMENT
INITIATIVE**

UPDATE

July 15, 2022

Carbon Capture Coalition Releases Statement on the Importance of Federal Action on Carbon Management Technology Policy

The Carbon Capture Coalition released the following [statement](#) in response to the latest revelations about action on reconciliation priorities in Congress. This statement may be attributed to Coalition External Affairs Manager Madelyn Morrison:

"We are aware of multiple press reports regarding budget reconciliation negotiations in Congress and will continue to monitor developments with our stakeholders. While there is uncertainty about next steps with the reconciliation process, it remains clear that there is broad, bipartisan support for Congress to provide robust investments in carbon management policies to deliver an essential down payment on deployment to meet critical emissions reduction targets, while retaining and creating high-wage jobs and fostering domestic energy and industrial production.

"The International Panel on Climate Change and the International Energy Agency, among many others in the global scientific community, have repeatedly reaffirmed the essential role that carbon management technologies must play in any serious effort to meet mid-century emissions reductions targets. That said, to achieve carbon capture and removal at climate scale, Congress must deliver the full portfolio of federal policy support for carbon management in any moving legislative vehicle, including a direct pay option for the 45Q tax credit, a ten-year extension of the commence construction window, increased credit values for industry, electric power and direct air capture technologies, and reduced annual CO₂ capture thresholds to boost innovation and expand eligibility.

"Failure to enact a comprehensive carbon management agenda, including vital enhancements to the federal Section 45Q tax credit, risks undoing the significant policy and emissions reductions gains made by the bipartisan Infrastructure Investment and Jobs Act. When paired with unprecedented technology demonstration and recent infrastructure investments, these transformative and bipartisan enhancements to the 45Q program would, if implemented, result in an estimated 13-fold increase in carbon management capacity and annual CO₂ emissions reductions of 210-250 million metric tons by 2035.

"We now find ourselves at a critical nexus. Congress must seize the opportunity to enact the most comprehensive and meaningful climate and energy policy in U.S. history, build upon the investments made in the Bipartisan Infrastructure Law, and in turn ensure economywide deployment of carbon capture, direct air capture, and carbon utilization technologies and associated CO₂ transport and storage infrastructure."

You can find a comprehensive overview of critically needed enhancements to the 45Q program here: [Congress Must Pass Pending Carbon Management Tax Policies to Achieve Net-Zero by Midcentury](#)

DOE Issues Two Notices of Intent for Carbon Demonstration and Transport Programs

The U.S. Department of Energy (DOE) issued Notices of Intent for two programs that will advance six carbon capture demonstration projects and expand regional pipeline networks to transport carbon dioxide (CO₂) for permanent geologic storage or for conversion into valued end uses, such as construction materials. These two programs – Carbon Capture Demonstration Projects Program and the Carbon Dioxide Transport/Front-End Engineering Design (FEED) Program – are funded by a more than \$2.6 billion investment from the Bipartisan Infrastructure Law.

Carbon Capture Demonstration Projects Program

- The \$2.54 billion program will focus on integrated carbon capture, transport, and storage technologies that can be readily replicated and deployed at fossil energy power plants and major industrial sources of CO₂.
- Projects will address technical, environmental, permitting, and financing challenges for commercial deployment. Projects will be advanced in multiple phases with a competitive down-selection between Phase 1 and Phase 2.
- In the first phase, front-end engineering design studies will be completed in parallel with National Environmental Policy Act and permitting compliance. Phases 2-4 call for the detailed design, construction, and operation of six facilities using integrated carbon capture and storage demonstration systems. These demonstration systems must meet specific project goals including the demonstration of at least 95% carbon capture efficiency and verification of secure geologic carbon storage.
- *More information on the DOE OCED Carbon Capture Demonstration Projects Notice of Intent can be found [here](#). A funding opportunity announcement (FOA) will follow in the coming months.*

Carbon Dioxide Transport/Front-End Engineering Design Program

The \$100 million Carbon Dioxide Transport/Front-End Engineering Design Program will design regional carbon dioxide pipeline systems to safely transport CO₂ from sources to centralized locations.

- Projects will expand DOE's knowledge of carbon transport costs, transport network configurations, and technical and commercial considerations to support the country's broader efforts to develop and deploy carbon management removal technologies, carbon conversion, and storage at fully-commercial scale.
- *More information on the DOE FEED Carbon Dioxide Transport/Front-End Engineering Design Program Notice of Intent can be found [here](#).*

Office of Fossil Energy and Carbon Management Releases “Carbon Matchmaker”

The Office of Fossil Energy and Carbon Management recently released “[Carbon Matchmaker](#),” an online information resource to connect users across the carbon capture, utilization, and storage (CCUS) and carbon dioxide removal (CDR) supply chains.

This tool is intended to strengthen public-private partnerships in advancing the carbon management technologies funded through the bipartisan infrastructure law, as well as increasing awareness and cross-collaboration between carbon management hubs and hydrogen hubs, where relevant.

Additionally, the Office is actively looking for project developers to submit information on carbon management activities through the matchmaker.

View DOE’s New Carbon Management Interactive Diagram

The [Carbon Management Interactive Diagram](#) is an online tool that highlights carbon management programs in the Bipartisan Infrastructure Law and through other DOE funding opportunities and educates users about resources that fall under each program.

Read the Great Plains Institute’s Hydrogen 101 Primer

Hydrogen has the potential to play a vital role in the clean energy transition. Due to its versatility, hydrogen can help tackle critical energy challenges and meet midcentury climate goals. It can reduce emissions in areas where other solutions like electrification, energy efficiency, or renewables are infeasible.

- Hydrogen is a clean energy solution to help decarbonize critical sectors of the economy such as transportation, power generation, and manufacturing.
- Hydrogen’s versatility as an energy carrier distinguishes its long-term potential to contribute to meeting midcentury climate goals.
- Hydrogen production is flexible, with some production pathways capable of achieving low, zero, or net-negative emissions.

Read the primer: [here](#)

ITIF launches New OCED Observatory Newsletter

This newsletter is the first, provisional product from the “OCED Observatory,” a project of ITIF’s Center for Clean Energy Innovation that seeks to track and assess the work of the U.S. Department of Energy’s recently-established [Office of Clean Energy Demonstrations](#). The latest issue focused on hydrogen hubs, as a core use case for OCED activities. Future issues may expand to other OCED programs.

Please see an excerpt from the newsletter’s overview below:

Hub activity. The emerging hydrogen proto-hubs are demonstrating significant differences. Some are state-led (NY, WV, OH). Some are industry-led (LA, SoCal, OH). Some focus on an extended network (Houston), others on a specific project (UT). Some have detailed rollout plans (Houston), others are barely a paper framework (WV, GA). Some focus on feedstocks, others on hydrogen production, or storage, or end-uses.

Power sources for hydrogen production are varied (though the MNHH (Midwest) proto-hub has a free lane on nuclear right now). Coalition development varies considerably – some appear to be well advanced with a crowd of private sector and technical partners (NY, HETI, UT, MNHH). Others have no significant partners at all yet (WV). Some already appear committed to DEI (NY) but most have at best verbal nods.

June news highlights: CA formally [announces](#) hub plan. Chevron drops out of ACES (UT) immediately after LPO announces loan guarantee. New GA [hub activity](#). Several new [states](#) show interest, ranging from WA legislation to KY exploration.

Please email Hannah Boyles at ITIF, who works with Robin Gaster of [Incumetrics](#) and [David Hart](#) of ITIF to produce the newsletter, if you are interested in being added to their distribution list.

CATF Questionnaire on Clean Energy Technology Project Development

The [Clean Air Task Force](#) has developed a [questionnaire](#) to improve knowledge of the benefits and impacts of specific low and zero carbon technology project development to affected communities and workers. The survey is aimed at clean energy project developers and is broader than carbon management project deployment. Survey results will be **anonymized** prior to publication.

The results of this questionnaire will inform the Clean Air Task Force project, *Climate Equity and the Clean Energy Transition*, which explores how the clean energy transition can limit global warming to 1.5° C by mid-century while contributing to justice and equity for communities in the U.S. Specifically, the project seeks to investigate the challenges of disenfranchised and underserved communities in the U.S., identify the benefits of clean energy projects, and provide a foundation for policies and best practices to promote a truly just transition.

Here is the link to the questionnaire: <https://www.surveymonkey.com/r/JQ7GZQD>.

If you have any questions on the survey or its use, please reach out to Jeanette Pablo at jpablo@catf.us.

Job Postings

- [Executive Director, Carbon Capture Coalition \(GPI\)](#)
- [Coordinator, Carbon Capture Coalition \(GPI\)](#)
- [Specialist, Carbon Removal and Conversion Technologies, Carbon Capture Coalition \(GPI\)](#)

- [Carbon Management Action Network Public Relations and Communications Strategist \(GPI\)](#)
 - [Direct Air Capture, Policy Manager – Clean Air Task Force \(catf.us\)](#)
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News Roundup

- [Microsoft and Climeworks sign carbon dioxide removal deal - Protocol](#)
 - [Microsoft Expands Carbon Removal with Climeworks Direct Air Capture System \(environmentalleader.com\)](#)
 - [E&E News | Article | McKinley bill would ease permitting for carbon capture \(politicopro.com\)](#)
 - [Ingenza awarded funding to develop carbon capture technology - News - The Chemical Engineer](#)
 - [Biden-Harris Administration Launches \\$2.6 Billion Funding Programs To Slash Carbon Emissions | Department of Energy](#)
 - [Carbon capture projects, regional CO2 pipeline design to get \\$2.6B in DOE funding proposal | Utility Dive](#)
 - [Inside Frontier, the fund pioneering a new model for carbon removal investments | Greenbiz](#)
 - [3 Week Sprint: Dems Eye Deal on Clean Energy | RealClearEnergy](#)
 - [Biggest CCS failure clouds Supreme Court ruling - E&E News \(eenews.net\)](#)
 - [We visited the world's biggest carbon capture plant, which just signed a 10-year deal with Microsoft – GeekWire](#)
 - [Getech supporting definition of UK offshore carbon storage sites | Offshore \(offshore-mag.com\)](#)
 - [Senate Energy Subcommittee Hearing on Pathways to Lower Energy Prices | Rhodium Group \(rhg.com\)](#)
 - [Carbon capture comes of age - CompressorTECH² \(compressortech2.com\)](#)
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Global News

- [Drax submits plans to build world's largest CCS project | Biomassmagazine.com](#)
- [INCE Bio Power secures funding for carbon capture project | Bioenergy Insight Magazine \(bioenergy-news.com\)](#)
- [Mitsubishi installing carbon capture plant in Canada - Diesel & Gas Turbine Worldwide \(diesलगasturbine.com\)](#)
- [Carbfix's Coda Terminal awarded large EU grant](#)
- [Canada calls for increased carbon capture investments | News | gasworld](#)
- [Carbon Capture, Utilization and Storage \(CCUS\) Technologies Vital for Africa's Sustainable Hydrocarbon Development \(tdpelmedia.com\)](#)
- [Over \\$40 million investment to kickstart \\$20 billion in \(globenewswire.com\)](#)
- [RGU study finds low carbon tech could generate 26,000 UK jobs \(energyvoice.com\)](#)
- [Australia's first solar-powered carbon capture project \(smh.com.au\)](#)

New podcasts, reports, statements & blogs

- [We need to draw down carbon—not just stop emitting it | MIT Technology Review](#)
 - [Blue hydrogen a key part of CCS targets – ETC \(pemedianetwork.com\)](#)
 - [Global Analysis on Carbon Capture and Storage Market With The Linde Group, Alstom, Abu Dhabi National Oil Company, GE Power, Saudi Arabian Oil|2022 – The Nelson Post](#)
 - [Honeywell Invests in Development of Electric Hydrogen Tech to Speed Cost-Effective | OUR GREAT MINDS \(theogm.com\)](#)
 - [Carbon capture faces an unexpected hurdle in renewables \(axios.com\)](#)
 - [What is green steel and how can it help us reach net zero? | World Economic Forum \(weforum.org\)](#)
 - [Can the DOE spur carbon capture innovation in time to aid climate crisis? | S&P Global Commodity Insights \(spglobal.com\)](#)
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News in the States

Alabama

- [Denbury Inc - Denbury Enters Into CO2 Sequestration Agreement With Natural Resource Partners L.P.](#)

Arizona

- [World's First 'MechanicalTree' Stands Tall at Arizona State University | Phoenix New Times](#)

California

- [Aemetis Acquires 24 Acre Site in Riverbank, California for \(globenewswire.com\)](#)
- [Podcast: California's carbon-capture controversy \(yahoo.com\)](#)

Colorado

- [Green Hydrogen to Pilot as Long Duration Energy Storage in US - World-Energy](#)

Illinois

- [ISTC leads extensive portfolio of carbon capture projects | Illinois](#)

Iowa

- [IUB Approves Public Informational Meetings for Proposed Wolf Carbon Solutions Pipeline - EIN Presswire \(einnews.com\)](#)[Iowans ask state regulators to reject three carbon capture pipelines \(amestrib.com\)](#)
- [Brown County likely to consider CO2 pipeline moratorium resolution \(aberdeennews.com\)](#)
- [IA Group: Exchange for carbon pipelines not worth the risk | News | kmland.com](#)
- [Iowa farmers, land owners rally against carbon pipeline projects \(kcci.com\)](#)
- [Where a carbon capture pipeline could run through Johnson County \(press-citizen.com\)](#)

- Carbon capture pipeline meetings set for August, September in Iowa - Agweek | #1 source for agriculture news, farming, markets
- Wolf, ADM plan public meetings on eastern Iowa carbon capture pipeline (desmoinesregister.com)
- Proposed carbon pipeline in Bremer County to be reviewed at Aug. 23 meeting in Waverly | Waverly Newspapers | communitynewspapergroup.com

Louisiana

- U.S. regulators suspend review of planned LNG export terminal in Louisiana | Hellenic Shipping News Worldwide
- Louisiana climate task force eyes hydrogen energy for federal dollars - Louisiana Illuminator (lailluminator.com)

Missouri

- In its revised strategy, Ameren Missouri will increase its use of renewable energy sources and fracked gas – magviral

Nebraska

- Jacobson: Ethanol production critical to Nebraska ag | Columnists | nptelegraph.com

New Hampshire

- New Report Highlights How Climate and Clean Energy Policies Benefit (nature.org)

New Mexico

- Clean Hydrogen Interest Builds in New Mexico | RTO Insider

North Carolina

- A battle of the experts: implementing energy solutions for North Carolina (carolinajournal.com)

Ohio

- Newlight and Long Ridge Sign Agreement to Build Aircarbon Production Facility in Ohio (prnewswire.com)

Pennsylvania

- Judge halts Pa. power plant carbon dioxide rule | Pittsburgh Post-Gazette
- Judge Temporarily Halts Pennsylvania's Cap and Trade Plan (1) (bloomberglaw.com)
- Pennsylvania law-makers may address carbon capture and sequestration in upcoming legislation | Perspectives | Reed Smith LLP
- Pennsylvania's budget includes historic investment in conservation
- Appalachian Hydrogen & Carbon Capture Speaker KeyState's Project Moves Forward - EIN Presswire (einnews.com)

Tennessee

- Federal utility seeks proposals for big carbon-free push - KOB.com
- Tennessee Valley Authority seeks proposals for up to 5GW of carbon-free power - PV Tech (pv-tech.org)

Texas

- [ConocoPhillips, Semptra Infrastructure In Deal For LNG Projects And Carbon Capture Activities | Nasdaq](#)

Wyoming

- [UW Study Examines Economic Incentives for Deploying Carbon Capture, Sequestration in Wyoming | News | University of Wyoming \(uwyo.edu\)](#)
 - [Economic incentives for deploying carbon capture, sequestration in Wyoming - News Azi](#)
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Upcoming events

July 20 - 21

- [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.

July 21 – 23

- [68th Annual Natural Resources and Energy Law Institute](#)
The Institute will feature 34 talks with 57 speakers from private practice, academia, government, industry, associations, and other organizations. There are sessions focusing on oil and gas and landman's issues, including carbon capture, mining law, public lands and Indian law, water law, environmental law, corporate counsel legal issues, international resources issues, and a session on renewable energy and electricity.

July 25-27

- [CCS / Decarbonization Project Development, Finance & Investment - Presented by Infocast \(infocastinc.com\)](#)
Infocast's CCS/Decarbonization Project Development, Finance & Investment Summit will bring together project developers, emitters, providers of tax equity, development capital and cash equity to explain the latest developments, showcase critical market information, provide an "inside view" from the perspectives of all the players in these deals, to let you know how to take maximum advantage of available federal and state programs and incentives and other potential revenue streams and to get what you need to make actual projects in the exciting new CCS/CCUS space actually happen.

July 26

- [Carbon Business Council, What's Ahead for Carbon Management](#)
Hear from leading carbon management startups about what is ahead for the industry and upcoming initiatives of the Carbon Business Council. Speakers will be announced prior to the webinar.

August 15-19

- [2022 Carbon Management Project Review Meeting | netl.doe.gov](#)

Researchers will provide updates on research and development (R&D) projects funded by the following FECM R&D programs: Point Source Carbon Capture, Carbon Dioxide Removal, Carbon Conversion, and Carbon Storage.

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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