

June 10, 2022

DOE releases NOI on \$8 Billion Program for Clean Hydrogen Hubs

DOE released a Notice of Intent this week to issue a Funding Opportunity Announcement (FOA) for an \$8 billion program, funded through the Bipartisan Infrastructure Law to develop regional clean hydrogen hubs (H2 Hubs) throughout the US. H2 Hubs are networks of hydrogen producers, consumers, and connective infrastructure located in proximity to enable the efficient transportation and deployment of clean energy.

DOE will select proposals that prioritize employment opportunities and address hydrogen feedstocks, end uses, and geographic diversity. The NOI provides a high-level draft plan for DOE's current vision to meet the BIL requirements for the H2Hubs, which will be supported by DOE's Office of Clean Energy Demonstration and Hydrogen and Fuel Cell Technologies Office.

Associated News Coverage

- POLITICO Pro | Article | DOE fleshes out plans for hydrogen hubs
- US Launches USD 8 Billion Regional Clean Hydrogen Hub Programme | Offshore Wind
- DOE moves forward with H2Hub funding (pemedianetwork.com)

DOE Finalizes Loan Guarantee for Utah Clean Hydrogen Storage Project

The U.S. Department of Energy (DOE) announced Thursday that they closed on a \$504.4 million loan guarantee to the Advanced Clean Energy Storage project in Utah. This loan guarantee is the first for a new clean energy technology project from DOE's Loan Programs Office since 2014.

The Advanced Clean Energy Storage project, a joint venture between Mitsubishi Power Americas and Magnum Development, will develop the world's largest industrial green hydrogen facility in Delta, Utah. The hub will store green hydrogen in geological salt domes. The longduration energy storage capability of the salt caverns will help improve grid stability and decrease costs by capturing excess renewable power and dispatching it back to the grid when needed. The project is expected to create up to 400 construction and 25 operations jobs.

Navigator to Provide Carbon Management Services to POET

Navigator CO2 Ventures LLC announced on Tuesday that they have signed a Letter of Intent to provide carbon capture, use, and storage services to POET, the world's largest producer of biofuel and a global leader in sustainable bioproducts, on Navigator's Heartland Greenway system.

Navigator plans to transport 5 million metric tons of carbon dioxide annually from 18 POET facilities in Iowa, Nebraska, and South Dakota. With the addition of POET, the Navigator system is planned to provide carbon management services for 33 facilities across the Midwest.

Associated News Coverage

- NAVIGATOR CO2, POET SIGN LETTER OF INTENT TO CAPTURE, TRANSPORT, AND STORE FIVE (5) MILLION TONS OF CO2 ANNUALLY (prnewswire.com)
- Sioux Falls-based POET, Texas company make initial agreement on carbon capture and storage project | KELO-AM
- Navigator CO2, POET sign deal for carbon capture storage, offset marketplace | S&P Global Commodity Insights (spglobal.com)
- Ethanol producer Poet joins Navigator CO2 pipeline project (desmoinesregister.com)
- POET, world's largest biofuel producer, signs on to Navigator carbon capture pipeline project Agweek | #1 source for agriculture news, farming, markets
- South Dakota based Poet signs on with carbon dioxide pipeline project (aberdeennews.com)
- Navigator to Provide Carbon Services for POET Plants | Energy (agwired.com)

Honeywell to Team up with Enlink Midstream to Offer Carbon Management Solutions

Honeywell and EnLink Midstream, LLC announced yesterday a collaboration to deliver carbon management solutions to industrial-scale carbon dioxide (CO2) emitters along the Mississippi River Corridor and within the U.S. Gulf Coast area, which holds facilities with large, concentrated sources of industrial CO2 emissions.

The companies will jointly market Honeywell's carbon capture technologies and hydrogen purification technologies for lower-carbon hydrogen production and EnLink's planned CO2 pipeline transportation network.

Associated News Coverage

- HONEYWELL AND ENLINK MIDSTREAM WILL COLLABORATE TO DELIVER CARBON CAPTURE SOLUTION (prnewswire.com)
- Honeywell, EnLink partner to grow carbon capture in region (businessreport.com)
- Honeywell and Enlink Midstream will join to deliver a carbon capture solution BIC Magazine
- EnLink Midstream to develop Barnett Shale carbon capture project (NYSE:ENLC) | Seeking Alpha

Senate Democrats introduce Clean Competition Act to Create Carbon Border Adjustment

Sen. Sheldon Whitehouse introduced the "Clean Competition Act" on Tuesday to create a carbon border adjustment—an environmental trade policy that includes charges on imports from particularly carbon-intensive manufacturers.

The Clean Competition Act would impose a carbon border adjustment on energy intensive imports, while incentivizing decarbonization of domestic manufacturing. Starting in 2024, the adjustment would apply to energy intensive industries, including fossil fuels, refined petroleum products, petrochemicals, fertilizer, hydrogen, adipic acid, cement, iron and steel, aluminum, glass, pulp and paper, and ethanol.

In 2026, the adjustment would be expanded to include imported finished goods containing at least 500 pounds of covered energy intensive primary goods. In 2028, the threshold for coverage would be lowered to 100 pounds.

The legislation is cosponsored by Senators Chris Coons (D-DE), Brian Schatz (D-HI), and Martin Heinrich (D-NM).

Associated News Coverage

- E&E News | Article | Senate Democrats introduce carbon border fee bill (politicopro.com)
- Whitehouse and Colleagues Introduce Clean Competition Act to Boost Domestic Manufacturers and Tackle Climate Change (senate.gov)
- What's in the carbon border adjustment bill introduced by Senator Whitehouse? -Niskanen Center
- Q&A: Whitehouse on carbon tariffs, reconciliation bill E&E News (eenews.net)

State Carbon Management Legislative Highlights

Read RDI's weekly legislative update to see all tracked bills related to carbon management.

News Roundup

- After years of tension, oil, clean energy find common ground in Washington (ampproject.org)
- ExxonMobil Sees a \$4 Trillion Opportunity to Make Oil Cleaner | Hellenic Shipping News Worldwide
- ARPA-E chief on DOE changes, tech and her 'cold dead hands' E&E News (eenews.net)
- POLITICO Pro | Article | Cornstalks might power planes with low-carbon fuel
- POLITICO Pro | Article | DOE adds data tool to climate justice fight
- Google, GE, ClearPath have joined a new Princeton research consortium focusing on low-carbon technology

- POLITICO Pro | Article | Energy companies reveal new model to ramp up CO2 air capture
- Statement by Energy Secretary Granholm on The Confirmation of Shalanda Baker | Department of Energy
- Meet the world's first CO2 battery for long-duration energy storage (electrek.co)
- Three companies apply for CO2 storage permit off Norway Offshore Energy (offshoreenergy.biz)
- Chevron and KazMunayGas join forces on lower carbon opportunities (NYSE:CVX) | Seeking Alpha
- 1PointFive and Carbon Engineering Announce Direct Air Capture Deployment Approach to Enable Global Build-Out of Plants (streetinsider.com)
- Carbon-Removal Industry Draws Billions to Fight Climate Change WSJ

Global News

- Seismic companies eye a future in CCS | Upstream Online
- HyNet North West The CCUS Hub (ogci.com)
- Thai PTTEP to debut nation's first carbon capture project by 2026 Nikkei Asia
- Mitsubishi Plans Carbon Capture Testing In Gas Engine Generator Sets | Gas Compression Magazine
- Emerson Joins Carbon Capture and Storage Program Led by Carbon Management Canada | Emerson US | MarketScreener
- Carbon capture part of solution to decarbonize European steel industry: webinar | S&P Global Commodity Insights (spglobal.com)
- ACCELERATING THE B.C. HYDROGEN ECONOMY (newswire.ca)
- ABS, HHI, RMI to develop world's largest LCO2 carrier Offshore Energy (offshoreenergy.biz)

New podcasts, reports, statements & blogs

- WATCH: Direct air capture documentary | News | gasworld
- Is carbon removal a realistic climate solution? (yahoo.com)
- Grey Rock Forms Partnership With Vault to Grow Their Carbon Capture and Sequestration Platform | Business | The Daily News (galvnews.com)
- Fuel of the Future: How the World Can Build a True Hydrogen Economy (powermag.com)
- From shale to carbon storage, Microseismic finds its foothold | Upstream Online
- Scrubbing CO2 From Ambient Air Through Direct Air Capture Technology (burnsmcd.com)
- Sequestering In Place | EthanolProducer.com

News in the States

California

- Hydrogen Innovation: SoCalGas Awarded \$750,000 California Energy Commission Grant to Develop Renewable Hydrogen from Biogas (prnewswire.com)
- Critics Tear into CARB Draft Climate Change Plan | RTO Insider

Colorado

• Geothermal and carbon capture – a natural synergy (thinkgeoenergy.com)

Illinois

• Springfield city council considers climate action (news-leader.com)

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- Group seeks end of carbon pipeline 'harassment' | News, Sports, Jobs Times Republican
- Carbon Pipeline Project Close to 50% Voluntary Easements in Chickasaw County 95.1 The Bull (951thebull.com)

Kentucky

 LG&E attorneys dismiss public comments on 15-year plan as 'not constructive' – 89.3 WFPL News Louisville

Louisiana

- Louisiana is bracing for an LNG boom. The projects will emit millions of tons of greenhouse gases. | Business | theadvocate.com
- Honeywell, EnLink to market carbon capture solutions to Louisiana industrial sector | Business | theadvocate.com

Nebraska

• Carbon pipelines needed to help keep ethanol viable, supporters say | News | norfolkdailynews.com

North Carolina

• The Engineer - Textile filter could advance carbon capture tech

North Dakota

- Can captured carbon and geothermal energy generate electricity? North Dakota could provide the answer. InForum | Fargo, Moorhead and West Fargo news, weather and sports
- CO2 pipeline debate represents divide within NDGOP (kxnet.com)
- Hoeven continues efforts to ramp up N.D. leadership as energy powerhouse Ripon Advance

Pennsylvania

• Pennsylvania: Ready for selection as an H2Hub - Pennsylvania Business Report (pennbizreport.com)

South Dakota

- Landowners unite against Summit Carbon Solutions pipeline (dakotanewsnow.com)
- Gubernatorial candidates attend CO2 pipeline rally (aberdeennews.com)
- S.D. regulators could extend date to decide CO2 permit | KELOLAND.com
- Smith, Haugaard Share Landowner Concerns About Eminent Domain for Pipeline; Noem Uninterested – Dakota Free Press
- South Dakota utilities commissioners won't dismiss application for CO2 pipeline | South Dakota | thecentersquare.com

Texas

- Council to discuss grant for carbon capturing facility (yahoo.com)
- POLITICO Pro | Article | Texas has paths to reach net zero by 2050 report
- 1PointFive and Carbon Engineering Announce Direct Air Capture Deployment Approach to Enable Global Build-Out of Plants Digital Journal
- Houston is the Low-carbon, Energy-abundant Future
- McKinsey: Texas Could Become Global Clean-Hydrogen Hub | Rigzone
- Milestone Carbon to study Permian land for carbon capture project (houstonchronicle.com)

Utah

• US DOE Closes \$504.4 Million Loan to Advanced Clean Energy Storage Project for Hydrogen Production and Storage | Business Wire

Wyoming

• Kemmerer Gazette | 'New Naughton' plant aims to convert coal to ammonia

Upcoming events

June 13

• Navigator CO₂ Ventures/Fireside Chat on Heartland Greenway CCS System Featuring: Matt Vining - CEO and co-founder of Navigator Energy Services

June 14

Carbon Conversion/Utilization Procurement Grant Workshop - Construction Materials |
USEA

To assist the Carbon Conversion/Utilization program, the USEA cordially is hosting a virtual workshop on durable materials derived from carbon oxides

June 14 - 16

• Registration North America 2022 - Carbon Capture Technology Conference & Expo North America 2022 (ccus-expo.com)

The conference will bring together international speakers and delegates to debate and discuss the latest technologies and solutions, strategies, innovations, current and future regulations, by-products and strategies for captured CO2 and the latest and next-generation techniques and models to help foster a truly sustainable, cost-effective and resource-efficient CCUS sector

June 16

• 10th Annual D.C. Forum on Carbon Capture and Storage

The Global Carbon Capture and Storage Institute is hosting a full day gathering (in person and virtual) on June 16th which will explore CCS topics such as the role of finance, the importance of environmental justice, recent U.S. policy developments, and the latest on global carbon markets.

- o In Person Registration: https://www.eventbrite.com/e/320773150127
- o Virtual Registration: https://www.eventbrite.com/e/327341305657
- Indian Energy Minerals Forum 2022 Webinar Series 3, Webinar #4: Tribal Hydrogen Hubs The webinar will feature a discussion of hydrogen hubs and the inclusion of tribes. The U.S. Department of Energy aims to accelerate breakthroughs of more abundant, affordable, and reliable clean energy solutions within the decade to addressing the climate crisis, and more quickly reach the Biden–Harris Administration's net-zero carbon emissions goal by 2050.

June 21

Carbon Conversion/Utilization Procurement Grant Workshop - Fuels, Chemicals & Bioproducts.

The theme of the USEA's second virtual workshop will be on fuels, chemicals, and bioproducts

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

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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