

February 24, 2023

Read GPI's Legislative Digest and register for our upcoming Direct Air Capture Atlas Webinar

RDI has partnered with another of Great Plains Institutes' other initiatives – the Industrial Innovation Initiative – to expand our legislative tracking in a comprehensive, biweekly in-depth digest. Our second digest was sent earlier this afternoon, containing summaries of over 30 carbon management, hydrogen, and procurement bills and linking to our legislative tracker of over 90 bills. Not seeing the digest in your inbox? Check your organization's spam filter.

Join the Great Plains Institute on March 2 at 12 PM ET for a webinar marking the launch of our upcoming report: *An Atlas of Direct Air Capture: Opportunities for Negative Emissions in the United States.* Register here: Direct Air Capture Atlas Webinar.

University of Wyoming announces intent to apply for direct air capture hubs funding

The University of Wyoming in partnership with the Wyoming Business Council announced this week it has submitted a Letter of Intent for the US Department of Energy's Direct Air Capture Program. Through this program, the federal government has provided \$3.5 billion for four regional DAC hubs, with a goal for each facility to capture one million metric tons of CO2 per year. This funding will be provided at various stages of project development. The two organizations plan to develop a Wyoming Direct Air Capture (DAC) Hub Pilot-Center. This Letter Intent follows efforts from the organizations late last year to solicit input from stakeholders.

The proposal deadline is March 13, 2023.

Hydrogen hub updates

DOE is likely to make final selections for their regional clean hydrogen hubs program in the Summer of 2023, with up to 7 billion in funding available for 7-10 regional hubs and we continue to see updates from applicants as the application deadline approaches.

Midwest Alliance For Clean Hydrogen (MachH2) and the Midwest Hydrogen Corridor Consortium (MHCC) recently announced that they are joining forces to apply for this federal funding. Last week, Leading in Gulf Coast Hydrogen Transition (LIGH₂T) hydrogen hub, a collaborative effort including the Southern States Energy Board, Linde, INEOS, and MPLX LP (MPLX) and others also shared that DOE has encouraged them to submit a full application before April 7, 2023.

LSB Industries and Lapis Energy file class VI permit with EPA

LSB Industries and Lapis Energy announced that they have filed a Class VI well permit application with the US Environmental Protection Agency this week for an upcoming carbon capture and storage project in Arkansas. The project, at LSB's El Dorado facility, is estimated to store 450,000 tons of CO₂ annually and produce low-carbon ammonia. Construction of the project is pending, awaiting approval of the permit from the Environmental Protection Agency.

DOE announces \$2.5 billion in BIL carbon management FOAs

On Thursday, February 23, the U.S. Department of Energy (DOE) announced \$2.52 billion in funding opportunity announcements (FOAs) for two carbon management programs enacted as part of the Bipartisan Infrastructure Law. The two programs, the Carbon Capture Large-Scale Pilots and the Carbon Capture Demonstration Projects Program, aim to significantly reduce carbon dioxide (CO₂) emissions from power and industrial operations. The two funding opportunity announcements are:

- Carbon Capture Large-Scale Pilots: This FOA includes up to \$820 million for up to 10 projects focused on de-risking carbon capture technologies and catalyzing significant follow-on investments for commercial-scale demonstrations on carbon emission sources across the power and industrial sectors.
- Carbon Capture Demonstration Projects Program: This FOA includes up to \$1.7 billion for approximately six projects to demonstrate commercial-scale carbon capture technologies integrated with CO₂ transportation and geologic storage infrastructure.

Read DOE's full announcement on the FOAs here, and the Coalition's statement on the announcement here.

DOE's Utilization Procurement Grants (UPGrants) website is now active

This week, the U.S. Department of Energy's (DOE) Office of Fossil Energy and Carbon Management (FECM) and the National Energy Technology Laboratory (NETL) have launched the utilization procurement grants (UPGrants) website. This is following up on a notice of intent for the program which was funded through the BIL and will establish a demonstration grant program for eligible entities to procure and use carbon conversion products.

Eligible entities are defined by the program as states, local governments, or public utilities and agencies. Eligible entities can learn more about the Utilization Procurement Grants (UPGrants) Program by visiting the Eligible Entities information page. Additional supporting information can be found by visiting the UPGrants Resources page.

View the full website here.

DOE invests \$2.7 million in carbon capture and storage technologies

On Tuesday, February 21, the Department of Energy's (DOE) Office of Fossil Energy and Carbon Management (FECM) announced nearly \$2.7 million for five research and development projects focused on accelerating domestic and international deployment of carbon management technologies. FECM will be granting funding to three CO₂ storage projects and two CO₂ conversion projects which were selected under the Accelerating Carbon Capture and Storage Technologies (ACT) initiative's fourth call for projects.

Read more on the funding announcement here.

News roundup

- Joint Letter Regarding the Implementation of the IRA 45V Clean Hydrogen Tax Credits | NRDC
- Leilac and Heirloom partner to bring lime-based Direct Air Capture technology to market, Business Wire, February 20
- BP aims to transform carbon into cash with limestone play, BNN Bloomberg, February
 23
 - Denbury inks two eFuel deals as part of expanded CCUS efforts, Gasworld, February 23
- The House Democrat trying to move his party on permitting reform, Politico Long Game, February 22

- LSB partners with Lapis Energy for carbon capture at ammonia site, Carbon Herald, February 22
- Pathways Alliance carbon capture and storage network moves to design stage, BOE Report, February 22
- Carbon capture project aims to remove one million tonnes of CO₂ from distilleries,
 Gasworld, February 22
- Kita secures £4 million to launch CO₂ insurance products, Carbon Herald, February 22
- Patch & EcoEngineers partner to ensure integrity of CO₂ removal tech, Carbon Herald, February 22
- TGS licenses Carbon AXIOM platform and associated well data products to a major energy company for CCUS, Oilfield Technology, February 22
- BPA applauds \$1.4M DOE grant for bioenergy carbon capture project, Biomass Magazine, February 20
- New carbon capture methods offer hopeful outlook for addressing climate change,
 Marketplace, February 20
- Will this new carbon capture technology help solve the climate crisis?, CTV News, February 19
- DOE Announces \$2.5B for Carbon Capture Projects | RTO Insider
- Current climate: Funding for carbon-reduction tech hits \$4.2 billion, Forbes, February 18

Global news

- Trio targeting Norway's first commercial CSS project as model for European drive, Upstream, February 20
- Cross-border CO₂ transport and storage proposed for Dutch North Sea, Maritime Executive, February 22
- New cross-border carbon storage project to explore potential for ship transport and industrial clusters across Europe, Offshore Energy, February 22
- Carbon Capture Scotland to capture 1m tons of CO₂, Carbon Herald, February 23
- EU carbon price tops €100 a tonne for first time, Financial Times, February 21
- Energy partners ink major European carbon capture deal, Gasworld, February 20
- CapeOmega and Neptune Energy announce new CCS project, Hydrocarbon Engineering, February 23
- Horisont, Neptune and E.ON pledge to work on European CCS value chain, Rigzone, February 21
- Carbonova to receive \$1.5 million from Sustainable Development Technology Canada, Carbon Herald, February 22
- Indonesia introduces carbon trading for its coal power plants, Carbon Herald, February
 22

- Pathways Alliance awards pipeline contract for potential \$16.5bn CCS network, Gasworld, February 23
- Australian hydrogen offers massive potential MCA (miningweekly.com)

New podcasts, reports, statements & blogs

- Researchers tap into world's largest sink of CO₂ for carbon capture, Interesting Engineering, February 20
- Carbon Capture and Storage (CCS): Frequently Asked Questions Center for International Environmental Law (ciel.org)
- Hydrogen is having a moment | Breakthrough Energy
- POWERGEN International begins: Here are a few sessions to note this week (power-eng.com)
- Carbon Capture Magazine's Podcast: Advancing CCS Projects Across the Value Chain with Better Data - YouTube
- Carbon Capture Magazine Podcast: Talking CDMA's and Blue Hydrogen with California Resources Corp. - YouTube
- Existing Clean Power and Eligibility for Hydrogen Production Tax Credits: "Additionality"
 Doesn't Add Up | Jenner & Block JDSupra
- Interactive Tracker For State Action On Carbon Capture, Utilization And Storage Launched By Arnold & Porter And Columbia's Sabin Center - Climate Change - United States (mondag.com)
- Denbury Announces New CCUS Agreements and Provides 2023 CCUS Goals | Barron's (barrons.com)

News in the States

Alaska

- Alaska Journal | Gov. Dunleavy says his carbon storage bills could bring Alaska 'billions,' but many unknowns remain
- Alex Gimarc: Carbon capture 101 (Alaska style) Must Read Alaska
- OPINION: Carbon capture and sequestration is no con (adn.com)

Colorado

 Colorado lawmakers advance climate bill but strip pension system measure - Colorado Newsline

Illinois

Rep. Sorensen wants strict controls for carbon dioxide pipelines | NPR Illinois

Indiana

- Bill Seeking More Local Input on Carbon Capture and Sequestration Projects Defeated |
 IER Indiana Environmental Reporter
- Local hyrdogen plant could begin new project if Senate bill passes | News | wthitv.com

Iowa

- New study: Iowa ethanol production dependent on carbon pipelines, Carbon Herald, February 18
- Opinion: The future of Iowa ethanol production depends on carbon capture, Des Moines Register, February 19
- Bremer Co. supervisors OK second reading of pipeline ordinance, hear concerns |
 Waverly Newspapers | communitynewspapergroup.com
- GOP advances setting high thresholds for CO2 pipelines | The Gazette
- Wolf CO2 pipeline won't seek eminent domain, petition states | The Gazette
- Regulators plan to hear comments in October on Summit pipeline plan (desmoinesregister.com)
- New pipeline bill gets quick, early support in Iowa House | Successful Farming (agriculture.com)
- Lee County organizes opposition to proposed CO2 pipeline (tspr.org)
- IUB to Hold Technical Conference on Summit Carbon Pipeline Mix 107.3 KIOW

Minnesota

 Arrowhead Electric CEO explains how and when Minnesota carbon-free law will impact local power bills | WTIP

Nebraska

- Joint planning commission gets chance to learn more about proposed pipeline | News | norfolkdailynews.com
- Ethanol forum in Omaha invites national speakers to highlight emerging issues | Morning Ag Clips

Oklahoma

 Louisiana, Oklahoma and Arkansas Compete for Clean Hydrogen Hub Federal Grant (kuaf.com)

Pennsylvania

 Senator Yaw reintroduces legislation to promote CCUS in Pennsylvania, Gasworld, February 22

South Dakota

 Summit Carbon Solutions Staying Active Ahead Of Application Hearings Later This Year | KCCR-AM (kccrradio.com)

Texas

- TGS adds offshore Galveston aquifer analysis to carbon storage service, Offshore, February 22
- Ozona CCS considers Class II, Class VI CO2 wells in Permian (houstonchronicle.com)
- Honeywell carbon capture technology to be used at ExxonMobil's Texas facility -Offshore Energy (offshore-energy.biz)
- UT researching the role salt has in lower carbon, geothermal energy | kvue.com
- Air Products, AES to build the US' largest green hydrogen facility in North Texas | S&P Global Commodity Insights (spglobal.com)
- Still not dead- Petra Nova's new lease on life, a critical test for carbon-capture technology, RBN Energy, February 22
- Second Shot At Carbon Capture From Coal Burner To Revive Oil Reservoir In Texas -Petra Nova Do-Over. (forbes.com)

Utah

Carbon Capture Utilization and Storage - Utah Geological Survey

Upcoming events

February 28

• Two Years of Justice 40: How the Initiative is Delivering Solutions to the Climate Crisis Join World Resources Institute for a conversation with Matthew Tejada, Deputy Assistant Administrator for Environmental Justice at the Office of Environmental Justice and External Civil Rights, and Carla Walker, Director for Environmental Justice and Equity at WRI United States. Speakers will examine how the Justice 40 Initiative is transforming the climate landscape and the environmental justice movement, discuss how benefits are reaching disadvantaged and historically marginalized communities, and explore what more can be done to fully realize an equitable clean energy economy for all. The conversation will be followed by a panel of experts working to ensure environmental justice at state and local levels and the non-profit sector.

March 2

 Great Plains Institute virtual event: Direct Air Capture Atlas Webinar See featured stories.

March 6-10

CERAWeek S&P Global

CERAWeek brings together global leaders to advance new ideas, insight and solutions to the biggest challenges facing the future of energy, the environment, and climate. CERAWeek is widely considered to be the most prestigious annual gathering of CEOs

and Ministers from global energy and utilities, as well as automotive, manufacturing, policy and financial communities, along with a growing presence of tech.

March 9

• NETL Energy 101 Webinar: Point Source Carbon Capture | netl.doe.gov Join NETL Thursday, March 9, from 10-11 a.m. (ET) for a discussion with a point source carbon capture expert and learn about the regional economic and workforce development opportunities this technology is expected to generate. The webinar will begin with comments from Anthony Armaly, coordinator of NETL's Regional Workforce Initiative (RWFI), followed by a presentation by Ron Munson, technology manager, Point Source Carbon Capture, and an economic and workforce development roundtable discussion.

About the Regional Carbon Capture Deployment Initiative: The Regional Carbon Capture Deployment Initiative brings together state officials with diverse industry, NGO, labor, and other stakeholders to promote broad scale deployment of infrastructure for carbon management. The Initiative is staffed by the Great Plains Institute (GPI), a nonpartisan nonprofit working to transform the energy system to benefit the economy and environment.

Subscribe or request to add an event, news story, report, blog, or job posting to the update by reaching out to Emma Thomley. Looking for more carbon management updates, studies, and fact sheets? Visit us at Carbon Capture Ready and read previous newsletters in our Action Alliance's newsletter archive.