

March 3, 2023

Great Plains Institute Releases Direct Air Capture Atlas

During a launch event on Thursday, the Great Plains Institute released the report, 'An Atlas of Direct Air Capture, Opportunities for Negative Emissions in the United States.' The Atlas examines key factors that impact regional suitability for developing direct air capture (DAC) technology and associated infrastructure, including transporting and storing carbon dioxide, powering a DAC facility, and technology efficiency. Through this analysis, seven regions emerged as prime locations to develop regional DAC hubs, each with a unique set of advantages: California, Rockies & Northern Plains, Permian, Midcontinent, Gulf, Midwest, and Mid-Atlantic & Great Lakes.

To identify optimal areas for regional DAC hubs, GPI commissioned Carbon Solutions LLC analysts to collect geographic data across feasibility and performance considerations to rank regions of the United States for DAC siting suitability.

View GPI's announcement of the Atlas release here, and Atlas in its entirety here.

GPI's Carbon Action Alliance Launches First Newsletter

On Wednesday, GPI's Carbon Action Alliance (CAA) published the first edition of their monthly newsletter. The newsletter highlighted GPI's new blog post, 'Get Involved in GPI's Newly Launched Carbon Action Alliance,' introduced CAA staff, and provided an overview of planned CAA staff activities over the coming months.

To subscribe to CAA's newsletter, you can sign up for their mailing list here. You can view the first edition of CAA's newsletter which was released Tuesday here. GPI's blog, on getting involved with CAA can be read here.

Federal Bipartisan Hydrogen Infrastructure Initiative Reintroduced

This week U.S. Senators Chris Coons (D-DE) and John Cornyn (R-TX) reintroduced a package of four bills to support the adoption of hydrogen technologies in key end-use sectors, providing

important demand-side support as the United States builds and scales its hydrogen economy. This legislation would fund best-use applications in Maritime, Heavy Industry, and Heavy-Duty Trucks, while supporting the infrastructure investments necessary to retrofit, transport, and store this versatile resource. Accelerating the demonstration and deployment of clean hydrogen will help build this nascent economy to the scale necessary to achieve United States emission reduction goals.

Read a summary of this package here.

The Hydrogen for Industry Act: This bill would support demonstration and commercialization of industrial applications for hydrogen. Hydrogen is a promising decarbonization solution in difficult-to-abate industries, including steel, cement, glass, and chemical production. Read *The Hydrogen for Industry* bill text here.

The Hydrogen for Ports Act: This bill would support the demonstration of maritime applications for hydrogen. The use of hydrogen- and ammonia-fueled equipment in shipping and multi-modal transportation are ideal early applications, making ports a centralized opportunity for shared infrastructure. Read *The Hydrogen for Ports* bill text here.

The Hydrogen for Trucks Act: This bill would support the demonstration of heavy-duty fuel cell vehicles and hydrogen fueling stations, lowering the risk for fleet operators and incentivizing private investments. Read *The Hydrogen for Trucks* bill text here.

The Hydrogen Infrastructure Finance and Innovation Act (HIFIA): This bill would create a pilot financing program, modeled after the TIFIA, WIFIA and CIFIA programs, for retrofitted or new hydrogen transport infrastructure, storage projects, and refueling stations. Read The Hydrogen Infrastructure Finance and Innovation Act bill text here.

Read more of Industrial Innovation Initiative's press release here.

Captured Carbon Utilization Parity Act

Last week, U.S. Senators Sheldon Whitehouse (D-RI) and Bill Cassidy along with Representatives David Schweikert (R-AZ-01) and Terri Sewell (D-AL-07) introduced the bipartisan Captured Carbon Utilization Parity Act, which addresses a key gap in tax-based carbon management policy for carbon reuse projects. The bill, which demonstrates Congress's continued commitment to bolstering carbon management policy, was subsequently endorsed by the Carbon Capture Coalition.

Read the bill summary here.

Read the Carbon Capture Coalition's press release here.

Watch the Recap of the Industrial Innovation Initiative's Webinar "Centering Solutions for States"

In February 2023, the Industrial Innovation Initiative (I³) hosted an introductory webinar on industrial decarbonization for states, given the critical role they will play in reducing US industrial

emissions. Supported by recent federal funding, namely from the Bipartisan Infrastructure Law and the Inflation Reduction Act, states are positioned to create a regulatory and policy landscape that spurs local implementation of this unprecedented funding and drives private investment.

Industrial decarbonization is a multifaceted challenge that will require a whole suite of policy solutions at the state level. It is also important to remember that states and facilities each have unique needs when decarbonizing. While there is no one-size-fits-all solution, a few key policies cut across industrial sectors and can be mixed and matched to greatly reduce a state's industrial emissions.

Read more here.
Watch the webinar here.

White House Environmental Justice Advisory Council Hosting Upcoming Virtual Meeting

The White House Environmental Justice Advisory Council (WHEJAC) is hosting a virtual public meeting on March 1, 2023. Among other topics including The Climate and Economic Justice Screening Tool, WHEJAC is interested in hearing more about "the core elements of a multiagency strategy apart from Carbon Capture Utilization and Sequestration (CCUS) that can address the potential use of carbon management while protecting communities?"

- Register for the meeting here.
- View the agenda here.

Attendees' remarks will be limited to three minutes and they are encouraged to submit written comments for the record.

Carbon Management Project Updates

CapturePoint Announces Investment into Louisiana Hub

CapturePoint, a carbon capture, transport, and permanent sequestration solutions company, has announced they have made a final investment decision in their Central Louisiana Regional Carbon Storage Hub. CaturePoint has applied for a Class VI permit in June of 2022 for the hub, which, based on local geology, has the potential to store several hundred million tons of carbon dioxide underground annually.

Fervo Energy Will Design Geothermal Direct Air Capture Hub

Fervo Energy announced that it plans to design a direct air capture facility powered by geothermal technology with funding from the Chan Zuckerberg Initiative.

Read more here

Oxy and 1Point5 Progress on Gulf Coast Hub Project

Oxy Low Carbon Ventures and 1Point 5 announced progress this week on their plans to develop a carbon hub along the Texas Gulf Coast. 1PointFive has leased over 55,000 acres to build the hub which could potentially store 1.2 billion metric tons of carbon dioxide captured from

local facilities. Several assessments of the storage site have been completed, and 1PointFive plans to apply for two Class VI permits for their project in 2023.

The hub is expected to begin operations in 2026.

DOE Releases Notice of Intent: Applied RD&D Projects to Drive Industrial Decarbonization

On Thursday, DOE announced its intent to issue a funding opportunity for approximately \$156 million to advance research, development, and demonstration projects to reduce greenhouse gas emissions from the US industrial sector. This funding opportunity is to be led by the new Industrial Efficiency and Decarbonization Office (IEDO).

The FOA will focus on cross-sector approaches to industrial decarbonization and is expected to include the following topics:

- Topic 1: Decarbonizing Industrial Heat
- Topic 2: Low-Carbon Fuels Utilization RD&D
- Topic 3: Exploratory Cross-Sector R&D
- Topic 4: Decarbonizing Chemicals
- Topic 5: Decarbonizing Iron and Steel
- Topic 6: Decarbonizing Food and Beverage Products
- Topic 7: Decarbonizing Cement and Concrete
- Topic 8: Decarbonizing Forest Products

View the full notice of intent here.

Carbon Capture Coalition's Executive Director Jessie Stolark Interviewed on Evolution of the Carbon Management Industry

This week, Jessie Stolark, executive director for the Carbon Capture Coalition shared her insights on what's next for the carbon management industry, speaking about the current landscape for carbon management, lessons learned, and the Coalition's upcoming priorities.

"It's like the cake has been baked for us," she said. "But it's still super important that the [Department of the] Treasury and IRS promulgate guidance in a timely manner, that it's clear, that it's workable so that project developers have access to financing and start to develop those projects."

Read more here

News Roundup

- POLITICO Pro | Article | Q&A: CCS coalition chief on industry's 'dramatic' shiftMidwest CO2 pipeline rush creates regulatory chaos - E&E News (eenews.net)POLITICO Pro | Article | EPA puts state climate planning funds on tap
- The Race To Dominate The Green Hydrogen Industry | OilPrice.com

- DOE \$2.5B Funding to Advance Carbon Capture Projects at Power Plants and Industrial Facilities – Power & Pipes | Morgan Lewis
- Occidental raises spending budget, delays direct air capture launch | Reuters
- POLITICO Pro | Article | Occidental delays landmark CO2 removal project
- Scientists Are Trying to Pull Carbon Out of the Ocean to Combat Climate Change -Scientific American
- Federal Legislation Introduced to Create Parity for Carbon Capture Credit for Use, Sequestration | Novogradac (novoco.com)
- 'Drill Baby Drill' 2.0: The EPA Needs To Start Permitting Wells For Carbon Dioxide Sequestration (forbes.com)
- Deployment of Carbon Capture Technology Likely to Explode in Coming Years (powermag.com)
- A new alliance for 'high quality' carbon removal highlights tensions within the industry |
 Grist
- Bipartisan Southeastern senators push for hydrogen hub E&E News (eenews.net)

Global News

- Net-Zero Roadmap for China's Steel Industry Global Efficiency Intelligence
- Neptune Energy, partners apply for carbon capture and storage license in Norwegian North Sea (worldoil.com)
- Petrobras sets carbon capture record with world's largest CCUS initiative | Upstream Online
- GLE Commences Engineering on Major Carbon Sequestration Project (prnewswire.com)
- BP earmarks \$2 billion to build Spanish green hydrogen hub | Reuters

New podcasts, reports, statements & blogs

- CCS in the Midwest | What we do | Home (bp.com)
- Carbon capture: What is it and how does it fight climate change? BBC News
- Opportunities and Risks of Scaling Up Carbon Dioxide Removal, with Gregory Nemet (resources.org)
- Carbon Direct | How Clean Ammonia Adoption May Reduce Greenhouse Gas... (carbon-direct.com)
- Enbridge CEO hopes for more carbon capture support in upcoming federal budget -Alaska Highway News

News in the States

Alaska

• GOP governors eye green projects | Alaska | ketchikandailynews.com

California

• Pipeline debate at center of California carbon capture plans | The Kansas City Star

Illinois

- A battle simmers in Illinois over plans to pipe in and store millions of tons of planetwarming carbon dioxide underground – Chicago Tribune
- Candidates in 2023 race for Springfield mayor answer SJ-R questions
- Navigator CO2 Expands Scope of Heartland Greenway with Updated ICC Permit Filing | Illinois | wsiltv.com

Indiana

- Cleveland-Cliffs remains committed to blast furnaces, pursuing carbon capture trial at Burns Habor (nwitimes.com)
- Indiana Votes Down Bill Seeking More Local Input On CO2 Capture (carbonherald.com)

lowa

- lowa lawmakers advance pipeline, drug death bills | The Gazette
- County asks to intervene in Summit pipeline docket | Dickinson County News
- Montgomery County residents quiz supervisors on pipeline ordinance | News | kmaland.com
- Wolf CO2 pipeline projects submits permits; won't use eminent domain | KGAN (cbs2iowa.com)
- Local News: Anti-CO2 pipeline bill advances in Iowa (3/1/23) | Le Mars Daily Sentinel (lemarssentinel.com)
- Pipeline opponent speaks on bill to restrict eminent domain authority for CO2 pipelines |
 clintonherald.com
- Senators on subcommittee shelve bill on pipeline development Radio Iowa
- Sioux City legislators take questions about eminent domain, teen labor and books at League of Women Voters forum (siouxcityjournal.com)

Louisiana

 CapturePoint Announces Intent to Proceed With Central Louisiana Carbon Capture and Sequestration Infrastructure Investments | Business Wire

Minnesota

 Minnesota group files appeal on Summit Carbon pipeline environmental review -Agweek | #1 source for agriculture news, farming, markets

North Dakota

PSC holding 4 public hearings for proposed carbon pipeline project - Jamestown Sun |
 News, weather, sports from Jamestown North Dakota

Texas

- DOE Encourages Gulf Coast-Focused Regional Clean Hydrogen Hub Proposal -University of Houston (uh.edu)
- Occidental to launch US carbon capture hub in Texas | Upstream Online

West Virginia

- Manchin Applauds \$2.52 Billion in Funding for Innovative Carbon Management Progr... (senate.gov)
- VIDEO: Capito Discusses Cost Impacts of Low-Carbon Fuel Standard, Lifecycle Emissions of EVs, Appalachian Hydrogen Hub (senate.gov)

Upcoming events

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

March 16

Looking Ahead: Unpacking the EIA 2023 Annual Energy Outlook (rff.org)
 The U.S. Energy Information Administration (EIA) will release its 2023 Annual Energy
 Outlook (AEO2023) at a live event hosted by Resources for the Future (RFF). The
 AEO2023 models domestic energy markets through 2050 to explore a variety of different
 assumptions about economic growth, world oil and gas prices, and technological
 innovation.

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.