

January 13, 2023

## Newly Introduced Colorado Bill Mentions Class VI Primacy

Colorado Senator Chris Hansen (D) introduced SB23-016, Greenhouse Gas Emission Reduction Measures this Tuesday, which would establish a few considerations related to Class VI wells used for the geologic storage of carbon dioxide.

After approval from the state governor and Colorado Oil and Gas Conservation Commission (COGCC) that the state has the resources needed to safely regulate the storage of greenhouse gases, the bill would give COGCC authority over Class VI injection wells. The bill will also allow COGCC to seek federal Class VI primacy if the state has the proper resources, allowing the agency to issue permits for Class VI wells. Finally, the bill would require COGCC to ensure that Class VI well operators "maintain adequate financial assurance" until it has approved the closure of the injection well site.

## More Regional Clean Hydrogen Hubs Share "Encouraged by DOE Status"

Following the US Department of Energy's Office of Clean Energy Demonstrations (OCED) notice of encouragement to 33 of 79 applicants to the Regional Clean Hydrogen Hubs program two weeks ago, more applicants have begun to share their status. As of this week, the Great Lakes Clean Hydrogen Coalition and the Appalachian Regional Clean Hydrogen Hub (ARCH2) have shared that DOE has encouraged them to submit a full application before April 7, 2023.

OCED is likely to make final selections on hubs in the Summer of 2023, with up to 7 billion in funding available for 7-10 regional hubs. Although OCED did not publicly share which applicants were encouraged to apply, all applicants are free to share their status.

At least 10 other applicants have also shared their "encouraged" status.

- Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES H2): statement
- Decarbonization Network of Appalachia (DNA): statement
- HALO Hydrogen Hub: statement
- Hawaii Pacific Hydrogen Hub: statement
- HyVelocity Hub: statement
- Midwest Alliance For Clean Hydrogen (MACHH2): statement

- Obsidian Pacific Northwest Hydrogen Hub: statement
- Pacific Northwest Hydrogen Association (PNWH2): statement
- Trans Permian H2Hub: statement
- Western Interstate Hydrogen Hub: (Western Interstate Hydrogen Hub concept receives DOE support Casper, WY Oil City News)

Interested in more information about the hydrogen hubs application process? OCED held an H2Hubs Applicant Informational Webinar yesterday that provided information on expectations for applicants, and Community Benefits Plans guidance.

# Upcoming Event Spotlight: NETL's Webinar on Cost Of Capturing CO<sub>2</sub> from Industrial Sources

Register now for NETL's Cost of Capturing CO2 from Industrial Sources and Industrial Carbon Capture Retrofit Database on January 24, 2023 1:00 PM ET. The event will cover The National Energy Technology Laboratory's (NETL) report released this September that examines nine different industrial facilities to estimate the cost of capturing CO<sub>2</sub>.

## Congressional Research Service releases U.S. Greenhouse Gas Emissions Trends and Projections from the Inflation Reduction Act

The Congressional Research Service releases a report on U.S. Greenhouse Gas Emissions Trends and Projections from the Inflation Reduction Act yesterday. The report discusses U.S. goals to reduce GHG emissions and provides considerations for policymakers. Although the report is broadly focused on US greenhouse gas emissions and trends, carbon management is briefly mentioned.

After summarizing components of the Inflation Reduction Act and the Infrastructure Investment and Jobs Act that could have direct or indirect effects on US Greenhouse gas emission levels, the report listed out recommendations for the 118<sup>th</sup> Congress, which included a few takeaways on carbon management. The report described how several models estimate that carbon management activity is expected to increase substantially after 2030. To incentivize emissions reductions, including carbon management, the Congressional Research Service suggested that policymakers could:

- Increase the funding amounts or tax incentives in provisions within the Inflation Reduction Act and the Infrastructure Investment and Jobs Act,
- In subsequent legislation, employ market-based approaches or regulatory standards for types of facilities or specific sectors.

The report noted that regulatory action from the Biden administration could also bolster emissions reductions.

## ICYMI: Bice, Tonko Introduce Bill to Strengthen Clean Hydrogen Development

Representatives Stephanie Bice (R-OK) and Paul D. Tonko (D-NY) introduced the DOE Clean Hydrogen and Fuel Cell Research, Development, and Demonstration Act of 2022, bipartisan legislation that would empower DOE to strengthen its efforts to support R&D of clean hydrogen and fuel cell technologies.

## ICYMI: White House Council on Environmental Quality seeks applicants for CCUS Permitting Task Forces

As required by the Utilizing Significant Emissions with Innovative Technologies (USE IT) Act, the White House's Council on Environmental Quality (CEQ) is seeking additional member nominations from a diverse range of qualified candidates to serve on the "Carbon Dioxide Capture, Utilization and Sequestration (CCUS) Federal Lands and Outer Continental Shelf Permitting Task Force" (Federal and OCS Task Force) and "Carbon Dioxide Capture, Utilization and Sequestration (CCUS) Non-Federal Lands Permitting Task Force" (Non-Federal Task Force). CEQ must receive nominations by January 27, 2023, and vacancies are expected to be filled by February 17, 2023.

### **News Roundup**

- US Strategy Sees Onboard Carbon Capture as 'Promising Technology' for Shipping Decarbonisation Ship & Bunker (shipandbunker.com)
- Mountain West states court federal money to create regional hydrogen hub | Wyoming
   Public Media
- There Are Fortunes to Be Made in the Carbon Capture Gold Rush, Bloomberg, January 11
- 3 ways to accelerate financing for clean hydrogen projects | World Economic Forum (weforum.org)
- Is Recycled Carbon The Answer To Decarbonising The Industrial Sector? (forbes.com)

## **Global News**

- Germany makes significant progress in advancing carbon capture Clean Air Task Force (catf.us)
- With six players in pursuit of previous carbon storage acreage, Norway invites applications for another CO2 area, Offshore Energy
- Swiss company Climeworks has removed CO2 from air, put it underground (cnbc.com)
- Watershed joins Frontier; Climeworks delivers on its promises | Greenbiz
- A possible carbon-capture milestone in the fight against climate change CBS News
- Provaris and Norwegian Hydrogen Sign MoU to Develop Green Hydrogen Export Supply Chains SolarQuarter
- Air Liquide's technology chosen for low-carbon hydrogen test in Japan (gasworld.com)

- Invoking The Engineering Ambition Of The Past To Create A Carbon Dioxide Removal Industry For The Future (forbes.com)
- Climate Startup Removes Carbon From Open Air in Industry First WSJ

### New podcasts, reports, statements & blogs

- An Analysis of the Potential and Cost of the U.S. Refinery Sector Decarbonization | Environmental Science & Technology (acs.org)
- New Technology Creates Carbon-Neutral Chemicals Out of Thin Air, SciTech Daily, January 6
- How Does Carbon Capture and Utilization Work?, CarbonCredits.com, January 10
- Researchers Use Machine Learning To Forcast Amine Emissions From A Carbon Capture Plant, MarTech Post, January 11
- DESMI: Selecting the Best Pump for CCS Applications, The Maritime Executive, January 11
- Denbury CEO on the Inflation Reduction Act and carbon capture tax credits YouTube
- Blue hydrogen: The future of certified gas? | S&P Global Commodity Insights (spglobal.com)
- New integrated, net-negative system captures carbon and produces ethylene News The Chemical Engineer
- Irregular Is What's Regular for CO2 Storage Plumes (spe.org)

## **News in the States**

Alaska

- Alaska governor pitches plan to capitalize on carbon markets | Business | timesargus.com
- Dunleavy says carbon management could bring millions to Alaska | Alaska | thecentersquare.com

Colorado

- New climate bill targets net-zero emissions in Colorado by 2050 Colorado Newsline
- Occidental CEO eyes enhanced oil recovery, CO2 capture in Colorado Denver Business Journal (bizjournals.com)

Illinois

• Officials Gather for Carbon Capture Project Groundbreaking at City, Water, Light, and Power Site | American Public Power Association

Indiana

 4th developer seeks to capture, store carbon from ethanol plants in US Midwest | S&P Global Market Intelligence (spglobal.com)

lowa

• Waverly joins other agencies in opposing carbon pipeline (wcfcourier.com)

- Floyd County to hire legal representation to deal with carbon pipelines KCHA News upjobsnews
- Linn supervisors approve letter opposing carbon capture pipeline (corridorbusiness.com)
- Lyon County permits Summit pipeline | News | nwestiowa.com
- Iowa lawmakers avoid taking sides on CO2 pipelines | The Gazette

Kentucky

• Kentucky joins Appalachian Regional Hydrogen Hub, the second in less than six months. Here's what it means. (lpm.org)

#### Louisiana

- Power poll respondents skeptical of carbon capture | Crime/Police | nola.com
- Capturing Louisiana's future: Carbon capture and storage, BIC Magazine, January 6

#### Minnesota

- Minnesota Orders A Review For Summit's Carbon Pipeline Project (carbonherald.com)
- Environmental groups invite west central Minnesotans to Carbon Pipelines 101 meeting Jan. 23 - West Central Tribune | News, weather, sports from Willmar Minnesota (wctrib.com)
- MN Sets Application Rules for Carbon Pipeline Review | State News | mykxlg.com
- Minnesota's first possible carbon pipeline clears hurdle (beaumontenterprise.com)

#### New Mexico

• New Mexico hydrogen investments (krqe.com)

#### New York

- A carbon capture process moves forward in New York City, Building Design + Construction, January 8
- More NYC high-rises to be outfitted with novel carbon-capture system, Yahoo Finance, January 10
- Carbon Capture Becomes Reality in NYC Apartment Buildings Commercial Observer

#### North Dakota

• EDITORIAL: Act now so North Dakota can be a leader in the soon-to-boom carboncapture industry (yahoo.com)

#### Pennsylvania

• Lancaster research facility testing carbon capture technology - Central Penn Business Journal (cpbj.com)

#### South Dakota

- PUC sets September hearing date for Summit Carbon pipeline | SDPB
- Landowners react favorably to September carbon pipeline hearing date (mitchellrepublic.com)

#### Texas

- Q&A: University of Houston's Joe Powell Talks Energy Transition | Hart Energy
- Texans to buy carbon offsets from Occidental (houstonchronicle.com)
- CVR Partners and CapturePoint Close Section 45Q Tax Credit Transaction (yahoo.com)

Utah

• Fibernet and Enchant Energy see bid to purchase Utah coal plant for data center rejected - DCD (datacenterdynamics.com)

Wyoming

• Gov. Gordon envisions Wyoming as a national leader | Local News | wyomingnews.com

### **Upcoming events**

January 18

Wisconsin's Circular Bioeconomy – Carbon Management Workshop | Wisconsin Energy
Institute

This is the second of three workshops exploring the development of a circular bioeconomy ecosystem in which renewable and waste resources are used as raw materials, substituting biomass-based and recycled carbon for fossil carbon in energy and products. Developing these bio-based production chains and businesses could create jobs, help decarbonize Wisconsin industries, and promote statewide rural economic development.

#### January 19

 The State of Carbon Dioxide Removal - Report launch Registration, Thu 19 Jan 2023 at 16:00 | Eventbrite

Join the Smith School of Enterprise and the Environment at the launch of a significant new report, The State of Carbon Dioxide Removal – a first-of-its kind, independent, scientific assessment, tracking the development of Carbon Dioxide Removal (CDR) globally. At this launch event, lead authors will discuss key findings from the report. They will present the global state of CDR development, tracking progress on its scale up, public perceptions, policies and innovation.

#### January 24

 NETL's Cost of Capturing CO2 from Industrial Sources and Industrial Carbon Capture Retrofit Database Webinar

(Described in 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.

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