

April 8, 2022

IPCC Report Emphasizes Need for Carbon Management

This week the Intergovernmental Panel on Climate Change (IPCC) released the third installment of its Sixth Assessment Report, *Climate Change 2022: Mitigation of Climate Change Report* from Working Group III to guide international efforts to limit warming. The report notes the importance of carbon management technologies, including carbon capture and removal, in fulfilling our climate obligations, stressing that countries will need to drastically cut emissions across all sectors, including transportation, energy, and heavy industry

Offsetting emissions in the industrial sector is necessary to reach net-zero emissions and will require a range of mitigation approaches. The mitigation solutions proposed by the report can be applied to various industry types. However, to achieve emissions reductions at the scale necessary, global greenhouse gas emissions need to fall by almost 50 percent over the next decade. To make progress on this goal, clean electricity and hydrogen, recycling programs, carbon management, and any associated infrastructure must scale up quickly and efficiently.

News coverage of the report has been extensive. Below, find the Carbon Capture Coalition's (CCC) and the Industrial Innovation Initiative's (I3) statements about the report and other associated news coverage.

Carbon Capture Coalition Statement (CCC):

 World's Scientists Once Again Reaffirm the Essential Importance of Carbon Capture and Removal in Meeting Midcentury Climate Goals

Industrial Innovation Initiative Statement (I3):

 Challenging But Possible: New IPCC Report Cites Industry as Key Player in Meeting Net-Zero Targets – Industrial Innovation Initiative

Associated News Coverage:

- New IPCC report underscores 'critical' role of carbon capture in meeting climate goals |
 News | gasworld
- IPCC: Politics, Not Tech or Money, Blocking Climate Action | Time
- UN climate report: Carbon removal is now "essential" | MIT Technology Review
- IPCC's starkest message yet: extreme steps needed to avert climate disaster (nature.com)

- IPCC report: Oil, renewables and 'stranded assets' E&E News (eenews.net)
- Intergovernmental Panel on Climate Change report calls on cement industry to promote use of secondary cementitous materials and encourage carbon capture - Cement industry news from Global Cement
- Carbon Removal 'Unavoidable' as Climate Dangers Grow, New IPCC Report Says -Scientific American
- Carbon removal now 'unavoidable' part of fighting... | Canary Media
- What the latest IPCC report says about carbon removal | by Carbon180 | Apr, 2022 |
 Medium

DOE's FECM to Hold Carbon Management Applicant Education Workshops

This Thursday, the Department of Energy's Office of Fossil Energy and Carbon Management (FECM) hosted the first in its series of Regional Carbon Management Applicant Education Workshops, which provide information on how to initiate various carbon capture and storage (CCS) projects.

Following this virtual workshop, FECM will now host a three-week series of in-person, day-long workshops. The workshops will bring together stakeholders of large-scale Carbon Management-related infrastructure projects and are intended for potential applicants interested in supporting decarbonization and developing commercial-scale storage facilities, point-source carbon dioxide (CO₂) capture demonstration projects, direct air capture hubs, hydrogen production hubs with CCS, carbon utilization, and CO₂ transport required by Bipartisan Infrastructure Law provisions

Matt Fry, Great Plains Institute's (GPI) senior policy manager on carbon management, will present GPI's Transport Infrastructure for Carbon Capture and Storage analysis and Carbon and Hydrogen Hubs Atlas at the first in-person workshop in Columbus, OH, on April 13.

The remaining in-person events will be held in New Orleans, LA, on April 19; and Salt Lake City, UT on April 26.

DOE to Invest \$2.4 Million in Next-Generation Energy Storage Technologies

The US Department of Energy's Office of Fossil Energy and Carbon Management (FECM) announced in late March that they would invest 2.4 million in next-generation energy storage technologies. The funding will be invested in three projects to advance novel thermal and hydrogen energy storage technologies toward increased duration, reliability, and affordability.

Funded projects:

- Sand Thermal Energy Storage (SandTES) Pilot Design Electric Power Research Institute (Palo Alto, California)
- Hydrogen Storage for Load-Following and Clean Power: Duct-firing of Hydrogen to Improve the Capacity Factor of NGCC Gas Technology Institute (Des Plaines, Illinois)

• Economically Viable Intermediate to Long Duration Hydrogen Energy Storage Solutions for Fossil Fueled Assets — WE New Energy Inc. (Knoxville, Tennessee)

Join GPI's Carbon Management Team!

The Great Plains Institute is currently seeking applications for an Action Network Manager, Public Relations and Communications Strategist, Research Manager, and Labor Engagement Manager for its Carbon Management Program. For additional information, please see the job postings below.

- Carbon Management Action Network Manager
- Carbon Management Public Relations and Communications Strategist
- Carbon Management Research Manager
- Carbon Management Labor Engagement Manager

Reminder: Register for the Upcoming RDI Conference

Join the Regional Carbon Capture Deployment Initiative in Louisville, Kentucky on May 25 and 26 for a national leadership event focused on accelerating carbon management deployment: Turning Federal Investment into Action: Scaling Carbon Management Technologies and Infrastructure. A list of confirmed speakers for the event will be shared next Wednesday!

Register here

State Carbon Management Legislative Highlights

Arizona's SB 1396, *hydrogen study committee*, has moved to the first chamber. The bill establishes a hydrogen study committee to investigate and evaluate existing laws and regulations and recommend legislation related to the production, distribution, and storage of hydrogen. The committee will submit a report with recommendations by Sept. 2023.

Bills previously referenced in the update include:

Introduced

- California: SB 1399, Carbon capture and storage pilot program: industrial facilities,
- Colorado: SB 22-193, Air Quality Improvement Investments,
- Maryland: HB 1366, Zero–Emission Energy Resources and Carbon Capture, Use, and Sequestration Renewable Energy Portfolio Standard and Study,
- Pennsylvania: HR 183, A Resolution urging the Biden Administration and the Congress of the United States to designate this Commonwealth as a hydrogen hub

First Committee

• California: SB 905, Decarbonized Cement and Geologic Carbon Sequestration Demonstration Act. Geological Carbon Sequestration Amendments,

• Minnesota: SF 3661, State policy supporting the deployment of carbon capture and sequestration technologies establishment (passed committee, March 14)

First Chamber

 lowa: HF 2565, A bill for an act relating to and making appropriations involving certain state departments, agencies, funds, and certain other entities, providing for regulatory authority, and providing for other properly related matters, and including effective date provisions

Enacted

- Alabama: SB 36, Oil and Gas Board, underground gas storage facilities, regulation, gas further defined to include abandonment of underground storage facilities, performance bonds, fees by board, Secs. 9-17-150, 9-17-151 am'd.
- Indiana: HB 1209, Carbon sequestration projects,
- Mississippi: HB 1218, Carbon dioxide geologic sequestration; revise laws regarding,
- Nebraska: LB 1099, Create the Nebraska Hydrogen Hub Industry Work Group,
- **South Dakota:** HB 1120, Include carbon dioxide and carbon dioxide capture companies in certain provisions regarding pipeline taxation,
- **Utah**: HB 244, Geological Carbon Sequestration Amendments,
- West Virginia: HB 4491, To establish requirements for carbon dioxide sequestration
- Wyoming: SF 47, Carbon storage and sequestration-liability.

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

News Roundup

- What is carbon capture and storage? | The Week UK
- What is carbon capture and storage, and could it help halt the climate crisis? | The Independent
- Direct air capture expert Climeworks raises CHF 600m in equity funding (renewablesnow.com)
- Grassley Urges EPA to Update Biofuel Emissions Modeling (senate.gov)
- Midstream Leveraging Current Assets in the Energy Transition | Nasdaq
- Final warning: what does the IPCC's third report instalment say? | Climate crisis | The Guardian
- Enbridge looking at carbon capture and storage opportunities in Gulf Coast, Ontario (yahoo.com)
- Lone Cypress Energy Services Announces First of its Kind Helium Exploration, Carbon Capture and Storage Project in Southwestern U.S. (prnewswire.com)
- DOE-funded energy storage projects could help transition fossil systems (powereng.com)
- Southwest Airlines Commits \$10 Million for Climate Change Initiatives | Meeting Spotlight\

- How climate investors are getting ready for the carbon removal boom ImpactAlpha
- Companies race to count CO2 ahead of SEC climate rule E&E News (eenews.net)

Global News

- International companies join forces to tackle climate change and the degradation of ecosystems on a global scale (fox59.com)
- Aker Carbon Capture, Sintef To Further Develop CCUS Tech | Rigzone
- Norway approves CO2 storage capacity exceeding Northern Lights | IHS Markit
- CGG: CGG and Kent Announce Strategic Carbon Capture & Hydrogen Partnership to Accelerate Global Decarbonisation - Bloomberg
- Air Liquide, EQIOM collaborate on €150m carbon-neutral cement plant | News | gasworld
- Wolf's Alberta Carbon Trunk Line Shows Viability of Carbon Capture (napipelines.com)
- Canada creates carbon-capture incentives, critical mineral plan to cut emissions |
 Reuters
- Norway awards two offshore CO2 storage licenses | Offshore (offshore-mag.com)
- Genesis lands plum FEED study for BP-led carbon capture project | Upstream Online

New podcasts, reports, statements & blogs

- POLITICO Pro | Article | Your next bottle of vodka could be made from captured carbon
- "Our Climate is our Future. Our Future is in our Hands". IPCC Report on Mitigation of Climate Change - BLOG (ieaghg.org)
- Room to grow: Mapping carbon capture projects in the Middle East and North Africa Clean Air Task Force (catf.us)
- The future of energy: Is it turning carbon dioxide into fuel? Fuels Fix
- Mixed-salt processes target lower-cost CO2 capture Chemical Engineering | Page 1 (chemengonline.com)
- Summit Carbon Solutions Announces Investment from Tiger Infrastructure Partners (yahoo.com)
- Why Germany needs a carbon management strategy Clean Air Task Force (catf.us)

News in the States

Alabama

 DOE funds project to convert Alabama gas plant to run partially on hydrogen - Hydrogen Forward (hydrogenfwd.org)

Arizona

• The latest international climate change report calls for quick action (azcentral.com)

Arizona State And Carbon Collect Bring Innovation To Sustainability (forbes.com)

California

- Occidental is Eyeing California's Clean Fuels Market to Fund Texas Carbon Removal Plant - Inside Climate News
- Stanford expert on climate report: Energy technology is ready, but time is short
- Soaking up CO2 from the air underway in California Gas To Power Journal
- California must quadruple power capacity, add hydrogen, to decarbonize SDG&E | S&P Global Market Intelligence (spglobal.com)
- SDG&E Releases Decarbonization Roadmap With First Utility Industry Standard Reliability Analysis | Business | The Daily News (galvnews.com)

Colorado

- Sarah Jensen: Colorado must employ carbon capture technology (dailycamera.com)
- Report highlights affordable, available ways to mitigate climate change now | CU Boulder Today | University of Colorado Boulder

Connecticut

 Connecticut Neighborhood Pushes Back Against Planned Fuel Cell Power Plant | Connecticut Public (ctpublic.org)

Delaware

Delaware benefits from Infrastructure Investment and Jobs Act (delawareonline.com)

Illinois

 Data from landmark Illinois Basin carbon storage project are now available – Environmental News Bits (envnewsbits.info)

Indiana

News from 2nd & State | Buchanan Government Relations

lowa

- Federal rules for CO2 pipelines outdated, 'could threaten safety,' watchdog report says |
 The Gazette
- Farmers and environmentalists protest 3 carbon capture pipelines in the Midwest : NPR
- Landowners feel powerless as lawmakers fail to resolve their eminent domain concerns | lowa Public Radio
- Jeff Angelo: Iowa Landowners And The Carbon Capture Pipelines | NEWSRADIO 1040
 WHO | Need to Know with Jeff Angelo (iheart.com)
- Last week at the Iowa Legislature | Iowa Public Radio
- Jeff Angelo: A High Stakes Iowa Eminent Domain Debate | NEWSRADIO 1040 WHO (iheart.com)

- Commissioners get update on proposed CO2 pipeline project | Latest News | yorknewstimes.com
- Carbon capture pipeline in Iowa could get \$23 billion in tax credits (desmoinesregister.com)

Louisiana

- Occidental, Weyerhaeuser considering Louisiana for carbon capture hub (businessreport.com)
- Cutting-Edge Technologies Safeguard Old and New Energy Sources (Isu.edu)
- Weyerhaeuser gives first CCS lease to Occidental subsidiary | Upstream Online
- B&W, Kiewit to develop major BECCS project in Louisiana | Bioenergy Insight Magazine (bioenergy-news.com)
- Proposed Louisiana Senate Bills Could Secure Up To \$200M In Federal Funds For Orphan Well Restoration | The Energy Law Blog

Minnesota

• Navigator carbon pipeline project joins Minnesota Bio-Fuels Association - Agweek | #1 source for agriculture news, farming, markets

North Dakota

- Carbon capture pipeline meeting set in Casselton Agweek | #1 source for agriculture news, farming, markets (grandforksherald.com)
- North Dakota Hydrogen Hub has its name in \$8 billion hat for federal funds | Oil And Energy | willistonherald.com
- Sen. Cramer Announces \$21.6 Million from the Bipartisan Infrastructure Law for North Dakota's Transit Systems (senate.gov)
- Mitsubishi Heavy taps U.S. partner for \$2bn hydrogen project Nikkei Asia

Pennsylvania

 Pennsylvania court halts publication of RGGI rule, legislative activity continues | S&P Global Commodity Insights (spglobal.com)

Rhode Island

Caterpillar Acquires CarbonPoint Solutions (aftermarketnews.com)

South Dakota

- CO2 projects may benefit ethanol, but worry landowners | | siouxcityjournal.com
- Brown Co., South Dakota wants party status for Summit Carbon pipeline (aberdeennews.com)

Texas

 New Houston company HIF Global unveils plans for 12 efuels plants (houstonchronicle.com)

Wisconsin

• UW team competes in Elon Musk's carbon removal competition · The Badger Herald

Wyoming

- Gov. Mark Gordon's past, present and future in Wyoming politics. (wyomingnewsnow.tv)
- April 7, 2022 WY Public Service Commission Notice | News Letter Journal (newslj.com)
- Public Notice | Public Notices | buffalobulletin.com
- Carbon capture provides great potential for energy industry Green River Star

Upcoming events

April 13

- IEAGHG Webinar: Current State of Knowledge Regarding the Risk of Induced Seismicity at CO2 Storage Projects
- Columbus, Ohio Regional Carbon Management Applicant Education Workshop | USEA | United States Energy Association

April 15

CEJST Public Listening Session #2 | Council on Environmental Quality

April 19

New Orleans, LA Regional Carbon Management Applicant Education Workshop | USEA | United States Energy Association

April 21

• Spring 2022 Conference Ticket - Appalachian Hydrogen Carbon Capture Conference (appahydrogencarbon.com)

April 26

Salt Lake City, Utah Regional Carbon Management Applicant Education Workshop | USEA | United States Energy Association

May 10

Hydrogen Hubs: Decarbonizing Industry, Transport and Power Generation

May 16

 Charting an Energy Transition Path Towards Economic Growth: ACCD and Team PA Event

May 25 - 26

 Turning Federal Investment into Action: Scaling Carbon Management Technologies and Infrastructure 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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