Inflation Reduction Act of 2022 Enhances 45Q Tax Credit

On Wednesday, Senate Majority Leader Schumer (D-NY) and Senator Manchin (D-WV) announced that they have come to an agreement on budget reconciliation legislation – the Inflation Reduction Act of 2022 – that includes $369B in funding for climate and energy policies. The package proposes transformative enhancements to the 45Q tax credit, all of which are top priorities of the Coalition this Congress, including:

- **Multiyear Extension of the Commence Construction Window:** Moving forward, any carbon capture, direct air capture or carbon utilization projects that commence construction before January 1, 2033 will qualify for 45Q.
- **Direct Pay:** For profit projects will have the option of direct pay for the first 5 years after the carbon capture equipment is placed in service with a full phaseout for the remaining 7 years of the credit.
  - Any tax-exempt organizations, i.e. nonprofits, rural electric cooperatives, municipalities, among others, have the option for direct pay for all 12 years of the credit.
- **Expanded transferability:** As an alternative to direct pay, the bill allows the owner of the carbon capture equipment to transfer the credit to any other taxpaying entity. Under this option, the capture owner could receive a cash payment to transfer those credits and the cash payment would not be included in the capture owner’s taxable income.
- **Enhanced Credit Values for Industry and Power:** The bill increases 45Q credit values for any capture equipment placed in service after December 31, 2022 to $85 per metric ton for industrial facilities and power plants that store capture CO2 in saline geologic formations, $60 for utilization of captured CO2 and its precursor carbon monoxide to produce low and zero-carbon fuels, chemicals, building materials and other products, and $60 for EOR storage.
- **Enhanced Credit Values for Direct Air Capture:** the bill increases 45Q credit values for any capture equipment placed in service after December 31, 2022 to $180 per metric ton for Direct Air Capture facilities that store CO2 in saline geologic formations, $130 per metric ton for Direct Air Capture-utilization, and $130 per metric ton for DAC-EOR storage.
- **Dramatically Lower Capture Thresholds:**
  - Direct Air Capture: 1000 metric tons/taxable year
  - Electric Generating Facility: 18,750 metric tons/taxable year and paired with design capacity requirement below
  - Any other facility: 12,500 metric tons/taxable year
For more information, please see the Carbon Capture Coalition’s statement on the Inflation Reduction Act of 2022.

Associated News Coverage:

- How Manchin-Schumer would change energy, from oil to solar - E&E News (eenews.net)
- Energy Security, Climate Change Initiatives Endure with Surprise U.S. Senate Deal (powermag.com)
- Manchin, Dems reach deal on climate legislation | Grist
- Senate Inflation Reduction Act packed with bioenergy incentives | Biomassmagazine.com
- Senate Deal Breaks Logjam on Billions for Decarbonization and Energy Infrastructure | 2022-07-28 | Engineering News-Record (enr.com)
- Senate Democrats Produce a Far-Reaching Climate Bill, But the Price of Compromise with Joe Manchin is Years More Drilling for Oil and Gas - Inside Climate News

Senate Environment & Public Works Committee Held Hearing on Carbon Management

Also on Wednesday, the Senate Environment & Public Works Committee held a hearing titled “Examining the Development of Projects and Implementation of Policies that Support Carbon Capture, Utilization, and Storage (CCUS) Technologies” to discuss current challenges and opportunities in deploying carbon capture, utilization, and storage. The Carbon Capture Coalition submitted a statement for the record which you can read: here.

House passes CHIPS and Science Act

On Thursday, the House passed the CHIPS and Science Act of 2022 by a bipartisan margin, following the Senate’s action on Wednesday. While the bill focuses on decreasing American reliance on computer chips manufactured in China and other countries, the legislation also authorizes funding for a myriad of science and technology research to bolster American competitiveness, including $1 billion in carbon dioxide removal RD&D over four years. The bill now sits with President Biden awaiting his signature.

CEQ to Form Two Regional Tax Forces

The Council for Environmental Quality (CEQ) is moving forward with the formation of two regional task forces to improve the performance of the permitting process for carbon management projects on federal and non-federal lands.

“The task forces, which are required by the Utilizing Significant Emissions with Innovative Technologies (USE IT) Act, will provide recommendations to the Federal government on how to ensure that CCUS projects, such as carbon dioxide pipelines, are permitted in an efficient manner, reflect the input and needs of a wide range of stakeholders, and deliver benefits rather than harms to local communities.”

Read the rest of the CCC’s statement here.
News Roundup

- Carbon Capture Technology's Moment Has Arrived As Climate, Energy Crises Grow | Engineering News-Record (enr.com)
- Can EPA cut CO2 from gas plants in regulatory 'new world'? - E&E News (eenews.net)

Global News

- Work begins in Brazil on world's largest green hydrogen plant | Business | English edition | Agencia EFE
- Inpex teams up for Australia carbon capture hub | Upstream Online
- Report urges government support to develop UK carbon capture capabilities | Offshore (offshore-mag.com)
- Wolf Carbon Solutions and Chart Industries sign MOU to collaborate on Carbon Capture Utilization and Storage (CCUS) Projects along Mt. Simon Hub System (yahoo.com)

New podcasts, reports, statements & blogs

- Carbon capture technology and how it works | National Grid Group
- Minimizing Carbon Dioxide Emissions From Cement Production (azocleantech.com)
- Green Hydrogen for Steel Production (azocleantech.com)
- Pore Space 101: Carbon Capture Can't Rock and Roll Without Storage – ClearPath

News in the States

California
- California Governor Ramps Up Energy, Carbon Goals (environmentalleader.com)
- Newsom pushes for 20 GW offshore wind goal by 2045, says California must ‘up our game’ on climate | Utility Dive
- Newsom Calls for ‘Bolder’ Climate Action in Calif. | RTO Insider
- Governor Newsom requests aggressive action in California’s 2022 Scoping Plan « Carbon Pulse (carbon-pulse.com)

Colorado
- Colorado plans to develop hydrogen distribution hub with 3 other states | Subscriber-Only Content | denvergazette.com

Illinois
• Details revealed for proposed ‘Heartland Greenway’ CO2 pipeline in Illinois | Govt-and-politics | pantagraph.com
• Illinois, US energy firm introduces green hydrogen to its portfolio (h2-view.com)
• NSF, DOE grants fund UIC research to decarbonize cement manufacturing | UIC Today

Iowa
• Iowa’s ‘Plausible’ Net-Zero Pathway Calls for Surge in Natural Gas Generation - Natural Gas Intelligence
• Pipeline meeting slated in Clinton on Aug. 30 | Local News | clintonherald.com
• Nuclear option? What's next for 'clean' hydrogen - E&E News (eenews.net)

Kentucky
• Could Carbon Capture Be The Region's Next Big CleanTech Trend? This Founder Thinks So - Hypepotamus

Louisiana
• Strategic Biofuels to benefit from Louisiana law supporting CCS - Canadian Biomass Magazine
• State of Louisiana Passes Parish-Specific Law Benefiting Strategic Biofuels Project | Business Wire
• CapturePoint proposes new carbon capture facility for Louisiana | Reuters

Montana
• Senate's $280 billion tech bill benefits Montana businesses | News | billingsgazette.com

Nebraska
• Plan to convert natural gas pipeline to CO2 in Lincoln County raising concerns | Nebraska | norfolkdailynews.com

New Mexico
• New Mexico Inno - New Mexico, three other states seek hydrogen proposals for federal money (bizjournals.com)

North Dakota
• Sen. Cramer Introduces EERC’s John Harju at EPW Hearing on CCUS (senate.gov)
• Sen. Cramer, EERC’s John Harju Highlight ND Class VI Primacy at EPW Hearing on CCUS (senate.gov)
• North Dakota lawmakers hear ESG concerns from state treasurers | Govt-and-politics | bismarcktribune.com

Pennsylvania
• Gubernatorial Candidate Shapiro Unveils Economic Plan To Grow Businesses, Train workers & Expand Energy Industry - LevittownNow.com
• CNX, California company sign agreement to capture methane - Pennsylvania Business Report (pennbizreport.com)
• Penn study: Changing fuel for cement kilns could cut CO2 emissions. But cost is an obstacle | 90.5 WESA
South Dakota
• Landowners unhappy with carbon capture pipeline (kfyrtv.com)

Texas
• NextDecade Announces 1.0 MTPA LNG Sale and Purchase Agreement with ExxonMobil | Business Wire
• Concrete Ideas - The Texas Observer
• Sempra, Entergy Aiming to Shore Up Low-Carbon Energy Supply for Port Arthur LNG - Natural Gas Intelligence

Washington
• Better materials needed for storing hydrogen for a clean energy future | Tacoma News Tribune (thenewstribune.com)

Wyoming
• Congress Democrats appear ready to pass new legislation with focus on climate change | Wyoming Public Media
• KelTec set to open local facility - Green River Star

Upcoming events

August 15-19
• 2022 Carbon Management Project Review Meeting | netl.doe.gov
  Researchers will provide updates on research and development (R&D) projects funded by the following FECM R&D programs: Point Source Carbon Capture, Carbon Dioxide Removal, Carbon Conversion, and Carbon Storage.

August 17
• DOE Justice40 Kickoff
  This virtual event will introduce how the Department of Energy is implementing the Justice40 Initiative and announce its J40 covered programs, including those funded by the historic Bipartisan Infrastructure Law. It will feature representatives from offices across the Department of Energy highlighting how their programs are already working toward J40. This will take place on August 17th, from 2:00 – 3:30 pm EST and is open to all.

August 23
• IEAGHG Webinar: Low-carbon hydrogen from natural gas: Global roadmap
  A webinar to discuss the IEAGHG Technical Report, Low-carbon hydrogen from natural gas: Global roadmap.

September 21 - 23
• Global Clean Energy Forum (gceaf.org)
Directly following the UN General Assembly, the Global Energy Forum will convene governments representing most of the world’s GHG emissions and 90% of public investment in clean energy, international organizations, clean energy financiers, industry leaders, unions, non-governmental organizations, young professionals and tech innovators. The purpose of this is to spur concrete action to implement clean energy deployment commitments that build on historic advancements in innovative technologies.

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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