

CCS in the Infrastructure and Reconciliation Bills



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HUNTON
ANDREWS KURTH

Congress, the Administration, and CCS

► Biden Administration

- Where's the "U"?
- De-emphasize power sector
- Emphasize DAC

► Congress

- Clear evolution from a side issue to climate response essential pillar
- Democratic climate hawks resisting environmental advocate pressure
- Republicans highlighting efficient, secure, lower cost, lower emission, American energy

Energy Act of 2020

Key CCS Provisions

- ▶ **Section 45Q Extension**
- ▶ **USE IT Act**
- ▶ **EFFECT Act**

USE IT Act

Two objectives

- **Accelerating permitting**
 - Adds “carbon capture” to covered projects for FAST Act permitting streamlining
 - Covered project - \$200 million project size, subject to NEPA, not subject to other permitting streamlining
 - FAST Act – FPISC, lead agency to coordinate permitting across agencies, performance schedule, regular reporting
- **Promoting direct air capture**
 - Authorizes (but does not require) an EPA technology prize program within 1 year
 - >10,000 tpy capture
 - Applies to technology to be commercial “in the foreseeable future”
 - At least 1 coastal State and 1 rural State project
 - Authorizes a 9-member Direct Air Capture Technology Advisory Board
 - Report to Congress within 1 year on the risks and benefits of saline storage

EFFECT Act

Amends DOE's fossil fuel and CCUS RD&D programs to modernize the authority, broaden the program purposes, increase attention on CCUS for natural gas, focus spending on large-scale pilots, and align the program with U.S. carbon reduction commitments.

EPACT 2005

Sec. 961 – Fossil Energy

Sec. 962 – Coal and Related Technologies Program

Sec. 963 – Carbon Capture and Sequestration RD&D Program

Energy Act 2020

Sec. 961 – Fossil Energy

Sec. 962 – Carbon Capture Technology Program

Sec. 963 – Carbon Storage Validation and Testing

From Authorization to Funding

CCS-Related Energy Act of 2020 Funding in Bipartisan Infrastructure Bill

| Program | U.S. Code Section | Common Reference | Energy Act of 2020 | Infrastructure Bill 2021 - H.R. 3684 |
|---------------------------------------|-------------------|--------------------|---|---|
| Fossil Energy | 42 USC 16291 | EPACT '05 Sec. 961 | Sec. 4001 – No specific funding authorization | |
| Carbon Capture Technology Program | 42 USC 16292 | EPACT '05 Sec. 962 | Sec. 4002 – Multiple authorizations: <ul style="list-style-type: none"> • R&D – 2021-22 - \$230 million/year; 2023-25 - \$150 million/year • Large-scale pilots – 2021-22 - \$225 million/year; 2023-24 - \$200 million/year; 2025 - \$150 million • Demonstration projects - 2021-24 - \$500 million/year; 2025 - \$600 million • FEED studies - 2021-24 - \$50 million/year | Sec. 40303 – FEED studies authorization AND appropriation: <ul style="list-style-type: none"> • Authorization - 2022-26 - \$100 million/year (up from \$50 million in Energy Act 2020) • Appropriation - 2022-26 - \$20 million/year appropriated |
| Carbon Storage Validation and Testing | 42 USC 16293 | EPACT '05 Sec. 963 | Sec. 4003 – Funding authorization: <ul style="list-style-type: none"> • 2021-22 - \$200 million/year • 2023-24 - \$150 million/year • 2025 - \$100 million | Sec. 40305 – Funding authorization AND appropriation <ul style="list-style-type: none"> • 2022-26 - \$2.5 billion total authorized • 2022-26 - \$500 million/year appropriated |

Bipartisan Infrastructure Bill – H.R. 3684

Other Key CCS Provisions

- **Sec. 40302. Carbon Utilization Program.** Amends the carbon utilization program enacted at the end of 2020 to make explicit that it is a grant program. The program is to **demonstrate the commercialization of carbon utilization technologies** – e.g., manufacture of cement from captured carbon oxides. \$310 million appropriated to DOE Office of Fossil Energy and Carbon Management for program.
- **Sec. 40303. Carbon Capture Technology Program.** Creates a **FEED program for CO₂ transport infrastructure** such as pipelines. \$100 million appropriated to DOE Office of Fossil Energy and Carbon Management for program.
- **Sec. 40304. Carbon Dioxide Transportation Infrastructure Finance and Innovation.** Establishes a program to provide **federal financial assistance in a variety of forms for the construction of common carrier carbon dioxide pipelines costing in excess of \$100 million**. \$2.1 billion appropriated for the program, to be overseen by the DOE Office of Fossil Energy and Carbon Management in coordination with DOE's Loan Program Office.
- **Sec. 40305. Carbon Storage Validation and Testing.** Amends the federal carbon storage validation and testing funding program to **extend it from a RD&D program to include commercialization of large-scale carbon storage**, prioritizing facilities accepting CO₂ from multiple capture facilities. **\$2.5 billion appropriated** to DOE Office of Fossil Energy and Carbon Management for program.
- **Sec. 40308. Carbon Removal.** Establishes a program to **create up to four regional direct air capture hubs** with the capacity to capture at least 1 million tpy, with special consideration for areas that have closed carbon-intensive fuel production or industrial capacity in the last ten years. Projects would be selected not later than three years after enactment. \$3.5 billion appropriated to DOE Office of Fossil Energy and Carbon Management for program.
- **Sec. 80402. Carbon Dioxide Capture Facilities.** **Makes carbon dioxide capture facilities eligible for financing through private activity bonds**, to lower the cost of borrowing. Private activity bonds are used for a variety of private facilities that have a public purpose, such as airports, hospitals, higher education facilities, and many others.

Infrastructure Bill Implementation

Politico, December 6

- **DOE SEEKS CARBON MANAGEMENT INPUT:** The Energy Department is taking the first steps to implement initiatives of [the recently enacted bipartisan infrastructure law](#), which includes more than \$10 billion for DOE for carbon capture, direct air capture and industrial emission reduction. The Office of Fossil Energy and Carbon Management will publish a request for information today to gather insight from the public on carbon management technologies that are ready to be demonstrated.
- **The document seeks input** on potential carbon management demonstration and deployment projects, as well as point source carbon capture technologies and integrated projects; validation of carbon storage resources for commercial development; carbon dioxide pipeline infrastructure; direct air capture; opportunities for the recovery of critical minerals and to reclaim abandoned mine lands for clean energy. It also seeks information on the potential benefits to underserved communities related to the demonstration projects. **Responses are due by Jan. 24, 2022.**

Build Back Better Bill – H.R. 5376

Key CCS and Other Provisions

- Section 45Q increase and extension (136106)
- Makes projects with CCS eligible for publicly traded partnership tax treatment (136107)
- \$3.6 billion for DOE loan guarantee program (30441)
- Clean electricity PTC/ITC (136801/02)
- Clean fuel PTC based on lifecycle emissions (136805)
- Clean hydrogen PTC (136204)
- Title VII Subtitle N O&G fees
 - Offshore royalty rates, minimum bids, onshore rental rates, shortened lease term, expression of interest fee, non-competitive leasing prohibition, per acre fees, inspection fees, severance fees, idled well fees, offshore pipeline owner fees, elimination of royalty relief
- \$775 million to EPA for methane reduction grants (30114)

Will Build Back Better Be Enacted?

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