TAXPAYERS for COMMON SENSE

FACT SHEET

Section 45Q: Carbon Oxide Sequestration Credit

Carbon capture and sequestration (CCS) is a suite of technologies that capture carbon emissions from large industrial sources—such as power plants and factories—or directly from the ambient air and then store or utilize the carbon instead of releasing it into the atmosphere. The 45Q tax credit provides a per-ton credit for carbon oxide that is captured and either stored or utilized.

Legislative History

Established in the Energy Improvement and Extension Act of 2008 (P.L. 110-343), the 45Q tax credit was originally designed to incentivize early adoption of CCS and was capped at 75 million metric tons of sequestered carbon. Since then, Congress has extended and expanded the credit four times.

In 2018, the Bipartisan Budget Act:

- removed the cap, making 45Q available for an unlimited volume of captured carbon,
- set a deadline for qualifying facilities to begin construction before 2024,
- increased the maximum credit amount, with scheduled increases over time,
- and broadened eligibility to additional types of facilities.

In 2020, the FY2021 Omnibus extended the deadline for qualifying facilities to begin construction by two years to the start of 2026.

In 2022, the Inflation Reduction Act (IRA):

- lowered minimum capture thresholds, making more facilities eligible,
- allowed tax-exempt and governmental entities—as well as private companies—to receive the credit as a cash payment and allowed credit transfer to unrelated third parties,
- extended eligibility to facilities that begin construction before 2033,
- increased the maximum credit value for all end uses, including geological sequestration and utilization, when prevailing wage and apprenticeship requirements are met.

In 2025, the One Big Beautiful Bill Act (OBBBA):

- created parity among end uses by raising the credit value for enhanced oil recovery (EOR) and other uses to match the maximum $180-per-ton rate previously reserved for geological sequestration,
- imposed new “foreign entity of concern” (FEOC) restrictions across several energy tax credits, including 45Q, prohibiting operators related to or controlled by adversary nations from receiving credits.

Eligibility

Eligibility for 45Q has changed over time, mainly through lower annual capture thresholds that allow more operators to claim the credit. Currently, to qualify for the 45Q credit, a project must be a "qualified facility" that captures carbon either from an industrial source using carbon capture equipment or from ambient air through Direct Air Capture (DAC). A qualified facility must begin construction before January 1, 2033, and meet annual CO_2 capture requirements based on its type. The original 500,000-ton annual threshold was reduced for certain facilities in 2018 and lowered again for all facilities in 2022. As of July 4, 2025, the new FEOC restrictions prohibit certain foreign-controlled or influenced entities from claiming the credit.

The credit can be claimed for up to 12 years after the facility is placed in service. The owner of the carbon capture equipment must ensure, directly or contractually, that the carbon is properly stored or used. That entity may transfer the credit to another party responsible for storage or utilization. Eligible credit recipients may also transfer their credit to an unrelated third party, provided the recipient is not an FEOC.

Credit Amount (as amended most recently in OBBBA)

<table>
<tr><th></th><th>Equipment in Service 10/3/2008 – 2/9/18</th><th>Equipment in Service 2/9/18 – 12/31/22</th><th>Equipment in Service 1/1/23 – 7/4/25</th><th>Equipment in Service after 7/4/25, Construction Begins Before 1/1/33</th></tr>
<tr><td>Claim Period</td><td>75 million cap already reached</td><td>12 years</td><td colspan="2">12 years (5 years if credit is transferred)</td></tr>
<tr><td colspan="5">Credit Amount (per metric ton)</td></tr>
<tr><td>Geologically Sequestered CO_2</td><td>$20</td><td>2018 base credit $25.70, increasing annually to $50 in 2026</td><td>$17 ($36 DAC), or $85 ($180 DAC) if prevailing wage & apprenticeship (PWA) requirements are met</td><td rowspan="2">$17 ($36 DAC), or $85 ($180 DAC) if PWA requirements are met</td></tr>
<tr><td>Enhanced Oil Recovery & Other Uses of CO_2</td><td>$10</td><td>2018 base credit $15.29, increasing annually to $35 in 2026</td><td>$12 ($26 DAC), or $60 ($130 DAC) if PWA requirements are met</td></tr>
<tr><td>Annual Capture Requirements</td><td>Capture ≥ 500,000 metric tons</td><td>Power plants that emit > 500,000 metric tons: Capture ≥ 500,000 metric tons.</td><td colspan="2">Power Plants: Capture ≥ 18,750 metric tons, and ≥ 75% baseline carbon oxide production.</td></tr>
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		Facilities that emit ≤ 500,000 metric tons: Capture ≥ 25,000 metric tons. *DAC and other facilities:* Capture ≥ 100,000 metric tons.	*Other Facilities:* Capture ≥ 12,500 metric tons. *Direct Air Capture:* Capture ≥ 1,000 metric tons.

Taxpayer Costs

After Congress expanded 45Q in the IRA, the U.S. Treasury estimated the credit would cost taxpayers $36.2 billion from FY2024 through FY2033. The Joint Committee on Taxation (JCT) projects that the OBBBA expansion will add another $14.2 billion from FY2025 through FY2034, driven largely by higher credit value for EOR. This comes on top of the credit's original ten-year cost of $36 billion.

Taxpayer Concerns

Congress first created 45Q to promote emissions reductions by incentivizing early deployment of carbon capture technologies. Yet as of 2023, CCS projects captured only 0.4 percent of U.S. annual carbon emissions, and most of that CO_2 was used onsite at oil and gas wells to boost oil production. There are no scalable commercial uses for captured carbon beyond EOR, emissions-reduction benchmarks, no third-party verification of how much CO_2 is captured and injected and if that injected CO_2 actually stays underground.

Despite repeated expansions, the 45Q tax credit continues to fail the American public on many fronts:

- **Lacks transparency and oversight**: 45Q has a documented history of abuse. Nearly $1 billion in claims from 2010 to 2019 failed to meet Environmental Protection Agency (EPA) monitoring, reporting, and verification (MRV) requirements. The full results of that investigation were never made public. Current Internal Revenue Service (IRS) rules still lack basic taxpayer safeguards like third-party verification of captured and stored carbon, publicly accessible records, and stronger clawback rules. Operators are allowed to self-certify how much carbon they capture and store.

- **Faces widening data gaps and regulatory uncertainty**: In September 2025, the EPA proposed repealing the Greenhouse Gas Reporting Program (GHGRP), which provides the data the IRS uses to verify 45Q claims. Operators injecting carbon underground must report injected and stored volumes to EPA, and IRS rules require certain 45Q claimants—including all geological sequestration projects and some EOR operators—to comply with GHGRP requirements to demonstrate secure storage of carbon. Without GHGRP, there would be no publicly available accounting of stored carbon. The result is a regulatory vacuum that invites waste, fraud, and abuse. The IRS has not announced any plans to update its rules if the repeal proceeds.

- **Does not ensure emissions reduction:** CCS remains prohibitively expensive and difficult to scale. Because most captured carbon is used for EOR, the climate value is limited at best. With OBBBA payout boost, EOR becomes even more attractive financially. And because 45Q is not

benchmarked against emissions reduction targets, it effectively rewards oil and gas companies for every ton of carbon they produce and then capture and reinject to produce more oil—a practice in use since the 1970s.

- **Provides unnecessary corporate welfare:** Although CCS is often promoted as a tool for hard-to-abate sectors like cement and steel, fossil fuels remain the primary beneficiary. Most existing CCS projects are tied to coal and natural gas plants, and the oil and gas sector holds the largest share of current and planned capture capacity. Lobbying records tell the same story. Over the last decade, close to $1 billion was spent lobbying Congress and the White House on CCS and related technologies, with roughly 90% coming from fossil fuel and adjacent industries. Fossil fuels are mature, profitable industries that already benefit from extensive federal support; 45Q adds another subsidy at the expense of taxpayers.

- **Creates long-term liability:** There is no federal framework to manage the long-term risks of underground carbon storage. If CO_2 leaks, the consequences for public health, the environment, and the climate could be severe. Taxpayers have no assurance that operators receiving generous subsidies will be held responsible.

- **Poses risks to communities:** CCS infrastructure can pose serious safety threats. In 2020, a Denbury Resources pipeline ruptured near Satartia, Mississippi, releasing CO_2 that sickened dozens and forced evacuations. ADM's Decatur, Illinois, storage facility suffered two leaks that raised contamination concerns for the Mahomet Aquifer, which supplies drinking water to nearly one million people. As more projects come online, oversight and emergency response capacity remain far behind.

- **Threatens private property rights:** CCS developers are increasingly claiming "common carrier" status to justify the use of eminent domain for pipelines and storage sites, often seizing private land with minimal compensation. Landowners are frequently left without meaningful recourse. Given the scale of federal subsidies flowing to CCS, taxpayers should not be financing projects that undermine property rights and disproportionately impact rural communities.