

CARBON SEQUESTRATION PROVES A COSTLY ENDEAVOUR

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As the Senate steps up in the reconciliation process, there are opportunities for savings before the [One Big Beautiful Bill](#) is enacted into law. The House's version of the reconciliation bill makes good progress in [reducing](#) the cost of some energy tax credits through construction requirements and shorter phase out times. However, the Credit for Carbon Oxide Sequestration (45Q) was not changed from its original phase out schedule.

The House's current version of the reconciliation bill includes changes to many of the Inflation Reduction Act's (IRA) [green energy tax credits](#), but not the 45Q tax credit. The 45Q tax credit is still available until 2044 and is one of the biggest cost drivers of the IRA's [nearly 1 trillion dollar](#) price tag.

Understanding the 45Q Credit

Carbon sequestration is the process of capturing and then storing carbon dioxide (CO₂) in order to prevent it from remaining in the atmosphere. The IRA dramatically expanded federal subsidies for a range of carbon sequestration technologies including capturing CO₂ from the source or from the air using chemical filters.

The 45Q tax credit offers a [per-ton payment](#) for captured CO₂, with the value depending on how and where the CO₂ is captured. If CO₂ is captured before it enters the atmosphere and stored permanently underground through geological sequestration, the credit provides \$85 per metric ton. If the CO₂ is instead used for manufacturing or other purposes before it is stored, the credit drops to \$60 per metric ton. These amounts reflect increases over the pre-IRA credit amounts which were \$50 and \$35 per metric ton respectively.

If facilities capture CO₂ directly from the air, the credit increases. Facilities can receive \$180 per metric ton for geologic storage and \$130 per metric ton when the CO₂ is utilized and then stored.

To qualify for these credits, projects must [begin construction](#) before January 1, 2033. Once a facility is placed in service, it can receive the full value of the credit for a 12-year period. Beginning in 2027, the credit amounts will also be adjusted annually to account for inflation.

The IRA also revised the original 45Q eligibility thresholds downwards. Prior to the IRA, electricity-generating facilities had to capture a minimum of 100,000 metric tons of CO₂ annually to qualify. That threshold has since been reduced to 18,750 metric tons. For industrial and manufacturing facilities, the minimum requirement was lowered from 25,000 to 12,500 metric tons per year.

Carbon Credits and the Bottom Line

The 45Q cost estimates have increased dramatically from an initial \$3.23 billion over ten years per CBO to \$835 billion over the next decade. The current bill text repeals the credit for foreign producers or “foreign-influenced entities”; however, the phase out date for domestic producers remains untouched along with the construction requirements.

Carbon capture technologies are expensive and have not been proven to effectively reduce CO₂ emissions at scale. By subsidizing carbon capture, the federal government lowers costs artificially for less efficient technologies, allowing them to remain in operation despite limited impact. Public funds are better spent on technologies and infrastructure that are economically viable and environmentally sound without perpetual taxpayer support.

Congress should improve upon this by including a phase out date that is sooner and adjusting the construction requirement to mandate projects break ground sooner than 2033 to qualify. They should use reconciliation to push for further energy reforms while protecting the House’s good work in order to promote energy reliability and affordability for future generations.