

U.S. Incentives to Capture and Store CO₂ **Fact Sheet**

Section 45Q of the U.S. Internal Revenue Code was introduced in 2008 as part of the Energy Improvement and Extension Act. This section, referred to as the 45Q tax credit, incentivizes investment and development in carbon capture, utilization, and storage (CCUS) projects. Since 2008, the code has been updated and expanded, allowing more projects to qualify for the tax credit.

2008 Energy Improvement and Extension

Act offered \$20/tonne of stored CO₂ for dedicated geologic storage projects and \$10/tonne for CO₂ utilization projects with associated storage. Dedicated storage projects include injection into a saline aguifer or acid gas disposal. Associated storage projects most often reference enhanced oil/gas recovery operations.

2018 Bipartisan Budget Act (BBA) expanded Section 45Q to provide \$50/tonne of stored CO₂ (the Internal Revenue Code uses carbon oxide [CO_x], which includes CO₂) for dedicated storage and \$35/tonne for associated storage. BBA removed the 75-million-tonne CO₂ storage cap from the 2008 act but specified that the 45Q tax credit must be claimed over a 12-year period and that construction or operation must begin prior to 2026.

2022 Inflation Reduction Act (IRA) expanded on BBA and raised the credit available to \$85/tonne of carbon oxide stored for dedicated storage and \$60/tonne for associated storage. IRA also implemented a direct-pay option for qualifying facilities, reduced the carbon capture threshold requirements for eligible projects, and extended the deadline to begin construction by January 1, 2033.

2025 One Big Beautiful Bill Act (OBBBA)

created parity for utilization and sequestration projects by raising the credit available for associated storage to the same value as dedicated storage—\$85/tonne of carbon oxide stored. OBBBA also implemented restrictions on taxpayers with ties to China, Russia, Iran, and North Korea from claiming the 450 credit. These restrictions include "specified foreign entities" and "foreign-influenced entities."

What Is the Tax Credit?

Under OBBBA, the value of the 45Q tax credit, which is based on where the CO_x is sourced and how it is stored, is as follows:

- \$85/tonne for dedicated storage from carbon capture on power or industrial facilities
- \$180/tonne for dedicated storage from direct air capture

When Is the Tax Credit Available?

The modified associated storage credit values are available for projects placed into service following OBBA July 4, 2025, enactment date. Qualified projects that have entered the construction phase by January 1, 2033, may access the 45Q tax credit. The credit may be claimed by a qualified facility over a 12-year period once the facility is placed into service. This period reduces to 5 years if the credit is transferred.

Who May Receive the Tax Credit?

Operators must report stored CO_x volumes under the U.S. Environmental Protection Agency (EPA) Greenhouse Gas Reporting Program Subpart RR or UU. Subpart RR reporting is required for operators with dedicated storage projects who may self-certify stored CO_x volumes through an EPA-approved monitoring, reporting, and verification (MRV) plan (https:// www.ecfr.gov/current/title-40/chapter-I/ subchapter-C/ part-98/subpart-RR).

Operators with associated storage projects can report under Subpart RR or UU. Operators who report under Subpart RR are allowed to self-certify stored CO_x volumes through an approved MRV plan. Under Subpart UU, operators must use ISO 27916:2019, which includes a third-party review process, to certify the stored CO_x volumes in the taxable year.

Who Receives the Tax Credit?

The 45Q tax credit is granted to the taxpayer (generally the operator) who owns the capture equipment and physically or contractually ensures secure geologic storage of the CO_x. After the first 5 years of receiving the tax credit under direct pay, taxpayers may transfer the credits to an unrelated party in exchange for only cash.

The PCOR Partnership, funded by the U.S. Department of Energy's National Energy Technology Laboratory, the North Dakota Industrial Commission's Oil and Gas Research Program and Lignite Research Program, along with nearly 260 public and private partners, is accelerating the deployment of CCUS technology. The PCOR Partnership is focused on a region comprising 10 U.S. states and four Canadian provinces in the upper Great Plains and northwestern regions of North America. It is led by the University of North Dakota Energy & Environmental Research Center (EERC), with support from the University of Wyoming and the University of Alaska Fairbanks.

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Visit the PCOR Partnership website at www.undeerc.org/PCOR. New members are welcome.







