

EPA's Greenhouse Gas Reporting Program & Carbon Management

The federal Section 45Q tax credit is the foundational domestic policy mechanism to promote nationwide commercial deployment of carbon management technologies. The Greenhouse Gas Reporting Program (GHGRP), administered by the US Environmental Protection Agency (EPA), is an essential regulatory program that underpins the Section 45Q tax credit. Facilities geologically storing captured carbon dioxide (CO₂) must report the amount of CO₂ sequestered to the GHGRP to claim the 45Q tax credit.

Additionally, companies increasingly use the GHGRP to quantify emissions abated, demonstrating that their products are often cleaner and less emissions-intensive than similar products from other countries. The GHGRP is critical for US producers of energy and industrial products to capture additional economic value in global markets that increasingly value cleaner products, such as through programs like the EU's Carbon Border Adjustment Mechanism (CBAM) or California's Low Carbon Fuel Standard (LCFS), which require emissions data to verify carbon intensity reductions.

EPA'S GREENHOUSE GAS REPORTING PROGRAM

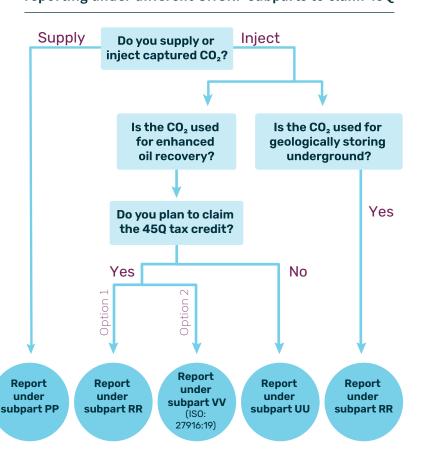
The GHGRP requires certain facilities to report greenhouse gas (GHG) emissions data and other relevant information to the EPA. The program includes reporting requirements for direct emitters (facility-level) and upstream suppliers. The GHGRP covers 41 categories of reporters, four of which directly relate to carbon management project deployment, including CO₂ capture and CO₂ injection into appropriate geologic formations. Facilities and suppliers determine

whether they are required to report based on the types of industrial operations, their emission levels, or other factors. EPA has audit and enforcement authority over volumes of GHGs reported under the GHGRP to ensure the integrity of the program.

GHGRP AND THE 45Q TAX CREDIT

As a tax credit, 45Q is unique because it is explicitly tied to a regulatory reporting program, the EPA's GHGRP. The GHGRP provides transparency to the public on amounts captured and stored by providing facility-level information about supplies and geologic storage of captured CO₂. Taxpayers also use data reported to EPA's GHGRP to claim 45Q credits for volumes of CO₂ sequestered for permanent geologic storage, and agencies have audit enforcement over this information. Taxpayers subsequently use the information reported to the GHGRP to fill out Form 8933 on their tax returns to the US Internal Revenue Service. After the bipartisan reform of the 45Q tax credit in 2018, guidance issued in 2021 by the US Department of the Treasury and the Internal Revenue Service (IRS) reaffirmed that the GHGRP must be used to verify the amount of CO₂ stored when claiming the credit.

FIGURE 1: Flowchart to demonstrate the needs for reporting under different GHGRP subparts to claim 45Q



GHGRP'S ROLE IN ENSURING THE US REMAINS GLOBALLY COMPETITIVE

Consumers and US trade partners are increasingly demanding goods and power produced with less carbon-intensive processes. Staying competitive on the global stage means leading the charge in commercializing innovative, sustainable energy technologies and meeting the demand for less carbon-intensive products. Increasingly, companies rely on the GHGRP to demonstrate GHG reductions for these markets.

CONFIDENCE IN SECURE GEOLOGIC STORAGE IS FUNDAMENTAL TO SCALING THE CARBON MANAGEMENT INDUSTRY

EPA also separately manages the Underground Injection Control (UIC) program, which provides oversight of the injection of CO₂ into the subsurface through the Class VI program. The Class VI program is a robust regulatory program that supports geologic storage of CO2 and is designed to protect human health and underground sources of drinking water, as well as the long-term integrity of storage sites. Taxpayers wishing to claim the 45Q credit levels for carbon storage in saline aquifers must comply with the UIC Class VI program and reporting requirements under the GHGRP. These programs work together to ensure the integrity of Congress's investments in carbon management technologies.

181 individal 62 carbon

are pending for

Class VI well permits storage projects

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The GHGRP plays a critical role in verifying and transparently reporting the volumes of CO₂ captured and stored. One hundred seventy individual Class VI well permits are currently pending at the EPA for 58 carbon storage projects. These projects will require the GHGRP to verify the CO₂ captured and stored amount to claim the 45Q tax credit.

The carbon management industry has garnered bipartisan support throughout its history, as a wide array of lawmakers understand that these technologies are essential to providing reliable, affordable, abundant supplies of domestic energy while reducing emissions. Carbon management project developers have already invested an estimated \$77.5 billion in capital expenditures across the nation. The GHGRP is a regulatory program essential to the carbon management industry and a crucial component to electing the 45Q tax credit and ensuring that these announced projects and investments translate into operating carbon management projects, corresponding jobs, and additional economic benefits.

> See our FAQ for more detailed information on GHGRP and how it is used by taxpayers electing the Section 45Q tax credit.

