MANUFACTURING DEEP DIVES

Carbon Sequestration Tax Credit

Overview

Section 45Q is a federal tax credit that helps advance the market for carbon capture and technological carbon removal in the United States. The 2018 budget deal increased the financial incentives for carbon removal projects via 45Q: the updated tax credit provides \$50/metric ton of CO_2 captured for geological storage and \$35/metric ton of CO_2 captured for enhanced oil recovery or other uses. Despite this boost, the policy as it exists today is still not enough to incentivize the large-scale deployment of clean technologies such as carbon capture and direct air capture (DAC).

Principles

Credit Reform: It is common for early-stage deployment projects to have little to no tax liability because they are not yet profitable. The 2018 changes to 45Q made the credit transferable, allowing developers to use tax equity partnerships to take advantage of the economic incentive. Since the developer pays a high premium in this structure, however, they lose a large portion of the incentive. Making the credit refundable would allow developers to monetize the credit directly, avoiding costly tax equity and complicated project finance structures.

Deadline Extension: Deadlines to begin construction with short time horizons discourage investors from pursuing carbon capture projects because of their long lead times. Extending the commence-construction deadline will dramatically increase the number of carbon capture projects incentivized by 45Q.

Additional Support for New Technologies: The deployment of carbon capture technologies for high, low, and atmospheric concentration levels of CO_2 is critical for economy-wide decarbonization. Lower concentration streams of carbon dioxide are more costly to capture. Therefore, the 45Q credit should be increased for certain emerging technologies.

No Minimum Threshold: 45Q currently has minimum capture thresholds for carbon capture projects: 500,000 tons a year in the power sector, 100,000 tons in the manufacturing sector, and 25,000 for carbon utilization projects. This limits the number of carbon capture projects that can take advantage of the tax credit and has the potential to stifle early-stage deployment efforts for smaller-scale projects.

Clarify Guidance for LCA Requirements: The current 45Q statute states that the amount of carbon dioxide removal a project qualifies for will be based upon a life cycle analysis (LCA) of greenhouse gas emissions. However, guidance on how the LCA will be determined remains unclear. Because the goal of an expanded 45Q credit at this stage is technology deployment, it is important to ensure that LCA guidance is clear and verifies that projects have climate benefits, but is not overly burdensome in a way that will stifle early projects.