Stakeholder Response to Request for Information

Energy Credits & Incentives
Carbon Capture Coalition Response

CARBON CAPTURE COALITION

Introduction

The Carbon Capture Coalition (the Coalition) appreciates the opportunity to submit this response to the House Ways and Means Committee Supply Chains Tax Team's request for information on energy and manufacturing credits. Carbon management technologies include carbon capture, removal, reuse, transport, and storage from industrial facilities, power plants, and ambient air. These technologies are essential tools in a broader federal strategy to provide reliable American energy, reduce greenhouse gas emissions, and preserve and create jobs that families and local economies depend upon while spurring investment in domestic energy, industry, and manufacturing sectors.

The Section 45Q Tax Credit

Over the past several decades, global energy demand has increased significantly, reinforcing the need and urgency for a comprehensive, robust strategy to address planet-warming emissions. Carbon management is a crucial tool for balancing the need for reliable energy with the imperative to reduce carbon emissions. In providing cost-effective solutions for heavy-emitting sectors on which our modern world depends, carbon management plays a vital role in meeting global energy demand sustainably. Multiple international scientific climate assessments have continued to emphasize the need for a wide range of technological solutions, including carbon management, to achieve the greenhouse gas emissions reductions necessary to avoid the worst impacts of climate change.

Congress has, in turn, heeded this call, investing in significant policy support to incentivize the economywide deployment of the full suite of these technologies, including recent transformative enhancements to the federal Section 45Q tax credit. 45Q is the foundational policy mechanism for incentivizing carbon management projects aimed at reducing the cost and risk to private capital of investing in the deployment of carbon capture technologies. Carbon management refers to a suite of technologies that capture and remove carbon dioxide (CO_2) across a range of industries and subsequently transport CO_2 for permanent storage or reuse. While the 45Q tax credit is an essential policy lever for carbon management projects, the value of the credit goes well beyond being a key driver of private investment—it serves as the anchor to ensuring these projects fulfill their full emissions reduction potential while protecting and creating family-sustaining jobs and bolstering America's global competitiveness.

Thanks to robust and sustained bipartisan congressional support, the United States now provides the most forward-looking policies in the world for deploying carbon management technologies. The positive impact of that policy portfolio on the carbon management industry is clear—historic federal investments will translate into real-world projects. This is reflected by the fact that 59 of more than the 200 projects that have been announced publicly were announced in 2023 alone. These projects cross the carbon management value chain, spanning from necessary engineering and design studies to commercial-scale projects.

That said, remaining small-scale gaps in federal policy threaten to impede the economywide deployment of these technologies – imperiling American jobs, economic development, energy security, and the prospect of urgently needed – and achievable – greenhouse gas emissions reductions. Congress now has the immediate opportunity to provide a set of targeted, pragmatic adjustments to the 45Q tax credit to underpin and grow the role of American leadership in developing

and deploying these technologies throughout the remainder of this crucial decade of deployment and beyond.

Necessary Enhancements to the 45Q Tax Credit

By 2030, it is crucial to see further deployment of carbon management technologies in lower-cost industrial sectors and to see significant demonstrations and further cost reductions in critical-to-decarbonize sectors. These include heavy industrial sectors, such as steel, cement, and basic chemicals production, electric power generation, and direct air capture. The revised 45Q tax credit will help close the cost gap between financing available for project deployment and the necessary financing needed to develop first-of-a-kind projects in several sectors. However, further adjustments to the tax credit will be necessary to ensure investment certainty and business model flexibility.

Indexing 45Q for Inflation and Utilization Parity

The 117th Congress provided consequential modifications to the federal Section 45Q tax credit necessary to see the adoption of carbon management technologies in numerous sectors, ranging from heavy industry to power and direct air capture. However, further adjustments outlined below would maximize the number of sectors able to access the credit, retain the US' global leadership in deploying these technologies, and provide the greatest possible amount of greenhouse gas emissions reductions, as Congress intended.

- Indexing 45Q for Inflation: Increased credit levels for power, industry, and direct air capture were the cornerstone of enhancements to the 45Q tax credit in 2022 and have since provided a strong market signal and incentive to begin deploying these technologies to address greenhouse gas emissions. However, as the tax package was being negotiated, some of the highest inflation rates in four decades dramatically shifted the economic feasibility of clean energy project deployment. As a result, the value proposition for carbon management technologies, even with higher 45Q credit levels, changed rapidly over a short period. In fact, according to a report and analysis published by the Energy Futures Initiative, inflation rates between 2020 and 2022 had already consumed about half of the value increase of the credit for carbon capture retrofits in power and industry with geologic sequestration. Furthermore, the Great Plains Institute projected that the credit will see further erosion – an additional 14 percent by 2026 if inflation rates ease to 3 percent by 2026. Under the current statute, unlike other low- and zero-emissions technology tax credits reformed in 2022, which adjusts for inflation beginning in 2022 and 2023, the federal Section 45Q tax credit does not begin adjusting the credit value for inflation until 2027, when it begins to be annually adjusted with a base index year of 2025.

  Even as the economy continues to rebound following the high inflation rates of the past several years, 45Q credit levels will continue to erode before the credit begins adjusting for inflation in 2027, chilling the deployment of carbon management technologies across emitting sectors. **To prevent further reduction of the credit value, 45Q should be adjusted immediately for inflation, using 2022 as the base index year for the dollar figure.** Altering the base year to adjust for inflation can have a measurable impact on the value of the credit over time and allow CO_2 capture to become economical in more sectors. Adjusting the base index year to 2022 would provide a 14 percent value increase to the credit, compared to using 2025 as the base index year, as is in the current statute. **Importantly, this would be consistent with the automatic inflation adjustments made to many other clean energy and industrial tax credits amended or created in 2022, including the hydrogen production tax credit.**

- Creating Parity Between Credit Levels for Carbon Storage and Carbon Reuse: The US is uniquely positioned to lead the globe in reusing captured carbon emissions. Today, innovative companies are engineering sustainable processes for converting millions of tons of captured carbon in the United States each year into valuable products such as plastics, concrete, and fuels, among many others. To achieve this, they will need to invest billions of dollars in private capital to construct new manufacturing facilities. Section 45Q of the tax code is the foundational tax credit used to help make carbon management projects economical. Under the current statute, there is a $25 per ton disparity between those projects that reuse carbon emissions versus those that securely and permanently store the captured carbon. This disparity effectively disincentivizes the development and deployment of relatively nascent carbon reuse technologies, acting similarly to a tax on such operations. This disparity rises to $50 per ton in relation to direct air capture projects.

Luckily, bipartisan support already exists to create parity between these two credit levels in the 118th Congress. In February 2023, the bipartisan Captured Carbon Utilization Parity Act was introduced by Representatives David Schweikert (R-AZ-01) and Terri Sewell (D-AL-07), aiming to increase the credit levels provided for carbon utilization to $180/ton for products sourced from direct air capture and $85/ton for those products sourced from industry and power – thereby matching credit levels provided for permanent geologic storage of CO_2 and making the carbon reuse sector more economically competitive. Current estimates on the potential uptake of CO_2 reuse to make valuable products range from 5 to 10 percent of global emissions, or several billion metric tons per year. Put simply, carbon reuse is an important, complementary effort to storing captured CO_2 in secure geologic formations and will bolster American competitiveness.

Direct Pay and Transferability Provisions

Since 2023, the Department of Treasury (Treasury) and the Internal Revenue Service (IRS) have issued final guidance on direct pay election under section 6517 and the transferability election under section 6418. We wish to offer the following highlights of our recommendations to the Treasury and IRS.

- Direct Pay: In comments filed with the IRS in August 2023, the Coalition made several suggestions on how direct pay could be used most effectively to facilitate much-needed investment in carbon capture technology.
    - Final regulations should allow taxpayers to whom a credit is attributable under section 45Q(f)(3)(B) to make a direct pay election. **(not contained in the final guidance, see below)**
    - Allow for an annualization principle to apply to direct pay elections so taxpayers can receive direct pay for a full 5-year window and prevent unnecessary project delays. **(not contained in final guidance)**
    - Address direct pay timing issues and allow taxpayers to claim direct pay against estimated taxes. **(not contained in final guidance)**
    - Confirm that the tax credit eligible for direct pay is treated as a "payment" and that other credits not eligible for direct pay, to the extent available, are to be used to reach the section 38(c) general business credit limit, and credits eligible for direct pay can be used to generate a refund. **(contained in final guidance)**
    - Clarify that the section 45Q credit amount is not reduced by tax-exempt bonds used to finance transportation and storage equipment not owned by the taxpayer. **(not contained in final guidance)**

- Transferability: In the same August 2023 comment, the Coalition made several recommendations on transferability provisions, including, among others:
    - Streamline the registration process by clarifying the definition of a facility and clarify that taxpayers do not need to provide full documentation for annual registrations if the facts from the previous taxable year are unchanged. **(not contained in final guidance)**
    - Affirm that the scope of section 6418(b) is limited only to the consideration transferred among the parties for the value of the tax credit for a transferability election and affirm that taxpayers can deduct transaction costs related to a transferability election as ordinary and necessary business expenses. **(not contained in final guidance; to be addressed by future guidance)**
    - Final regulations should allow taxpayers to whom a credit is attributable under section 45Q(f)(3)(B) to make a transfer election **(not contained in the final guidance, see below)**.

Final Regulations Disallow Those Parties that Contractually Dispose, Utilize or Inject CO_2 under 45Q(f)(3)(B) to Elect Direct Pay or Transfer the Tax Credit

Regrettably, the final guidance on direct pay and transferability did not adopt most of the Coalition's recommendations. Most notably, final guidance does not allow taxpayers that have contractually disposed of, utilized, or injected qualified carbon oxide to make a direct pay or transferability election. These activities, necessary to claim section 45Q credits, involve separate facilities, equipment, and processes. Prior 45Q regulations issued in 2021 wisely recognize that a single taxpayer may not be in a position to complete both required activities on their own and give taxpayers the flexibility to contract with others to undertake these activities.[1] Thus, in the case of an election under section 45Q(f)(3)(B), the credit is "allowed" to a person who undertakes one of the activities essential to generating the credit.

However, final guidance on direct pay and transferability issued earlier this year determined that "**a taxpayer that is transferred a section 45Q credit as a result of an election under section 45Q(f)(3) is not the taxpayer with respect to which the section 45Q credit is determined**. Under section 45Q(f)(3)(A)(ii), a section 45Q credit is attributable to the person who owns the carbon capture equipment and physically or contractually ensures the capture and disposal, utilization, or use as a tertiary injectant of such qualified carbon oxide (emphasis added)." This restriction does not recognize the realities of the emerging carbon management sector, where separate entities may be contractually off-taking carbon oxides from a carbon capture equipment owner for storage or utilization. Ultimately, this disallowance diminishes overall potential investment in carbon management technologies, not to mention the number of carbon capture and direct air capture projects.

Additionally, the final guidance on transferability left open the matter of the tax treatment of transaction costs in a transfer election, instead stating that the IRS would address this issue in future guidance; the Coalition plans to comment. As for streamlining the registration process by clarifying the definition of a facility and clarifying that taxpayers do not need to provide full documentation for annual registrations if the facts from the previous taxable year are unchanged, the final guidance was

[1] Section 45Q(f)(3)(B) provides that a person that is entitled to claim the credit under section 45Q(f)(3)(A)(i) or section 45Q(f)(3)(A)(ii) may elect to allow the person that disposes of the qualified carbon oxide, utilizes the qualified carbon oxide, or uses the qualified carbon oxide as a tertiary injectant to claim the section 45Q credit (section 45Q(f)(3)(B) election).

more ambiguous, stating only that "IRS will consider ways outside of the final regulations to make the pre-filing registration process more streamlined for eligible taxpayers."

Enacting a direct pay mechanism was the Coalition's top priority in the 117th Congress. While we appreciate the Treasury issuing final guidance to provide clarity to project developers and investors on how to elect direct pay and transferability, we see the omissions of our recommendations above as both undermining existing regulations on 45Q and creating further complexity for financing these projects, ultimately diminishing the utility of these groundbreaking provisions.

Necessary Regulatory Adjustments to Ensure the Effectiveness of the 45Q Tax Credit

Challenges with the Lifecycle Analyses (LCAs) Review Process

LCA Guidance

In early 2021, the Treasury issued regulations for claiming 45Q, outlining steps taxpayers must take to elect the utilization pathway under Section 45Q. As part of the FUTURE Act, which made sweeping changes to the 45Q tax credit, those taxpayers wishing to claim 45Q for the utilization or reuse of valuable products must perform a cradle-to-grave Lifecycle Analysis (LCA) of the project to demonstrate the permanent displacement or storage of qualified carbon oxides as compared to an incumbent product or process.[2]

Pre-Approval

Additionally, under the 2021 45Q regulations, carbon utilization project developers must use retrospective or real-world operating data to prepare and submit the LCA in parallel to IRS and DOE for approval. *The regulation requires taxpayers to receive LCA approval before claiming Section 45Q credits. However, the requirement of pre-approval of the LCA does not appear in the statute*. This pre-approval requirement effectively disincentivizes utilization technologies from scaling and significantly diminishes the incentive the tax credit intends to offer utilization project developers. It creates a considerable barrier for utilization projects to even claim the credit, preventing the statute from working as Congress intended.

The taxpayer must make significant investments to undertake carbon utilization activities, complete the LCA, and receive prior approval before knowing if they will be able to claim the credit, which puts these technologies at a significant disadvantage. It also puts project execution in a precarious position, as developers need up-front financing to provide certainty to move forward with building a project. *Put simply, most project developers will need to know if they will qualify for 45Q to secure project financing.* To avoid this issue, Treasury should issue guidance to eliminate the current pre-approval requirement in Treas. Reg. § 1.45Q-4(c)(6) and instead give taxpayers an option to obtain pre-approval of the LCA before claiming section 45Q credits. This option could use estimates of future data as inputs, giving taxpayers confidence in the soundness of the LCA methodology.

This methodology could then be applied each year using actual data in taxpayer returns, with any residual issues with the LCA addressed during an audit. Audit review would then normally be limited to issues with input data. Such an approach would reduce the uncertainty associated with annual

[2] For carbon reuse projects, the 45Q tax credit is only available for the volume of carbon oxide demonstrated to be stored permanently as a carbon-based product or displaced compared to the incumbent product, not the total amount of carbon dioxide captured.

reviews of each taxpayer's entire LCA methodology and limit impediments to taxpayers placing utilization projects into service.

Conclusion

The Carbon Capture Coalition appreciates the opportunity to comment on these important topics and appreciates the House Ways and Means Committee's support in advancing federal tax policies, and 45Q in particular, to enable greater deployment of carbon management technologies and associated transport and storage infrastructure. Carbon management technologies can deliver benefits to regional economies through jobs for workers with a broad range of skill sets, reducing emissions from existing facilities, capturing CO_2 from the ambient air, and supporting domestic manufacturing and industry. We look forward to working with members of the House Ways and Means Committee to capitalize on this momentum in the industry and improve upon existing tax incentives to ensure they continue to deliver the highest return on investment possible from both a financial and environmental standpoint. Should you have any questions about anything outlined in this comment, please contact Madelyn Morrison, Director of Government Affairs, Carbon Capture Coalition, at mmorrison@carboncapturecoalition.org.

About Us

The Carbon Capture Coalition is a nonpartisan collaboration of more than 100 companies, unions, and conservation and environmental policy organizations building federal policy support to enable economywide, commercial-scale deployment of carbon management technologies. Coalition members recognize that economywide adoption of carbon management technologies is critical to achieving net zero emissions to meet midcentury climate goals, strengthening and decarbonizing domestic energy, industrial production and manufacturing, and retaining and expanding a high-wage jobs base. Successful commercial deployment of these technologies requires prioritizing meaningful engagement and consultation with local communities as well as associated education and workforce development.