On January 6, 2021, the Internal Revenue Service and Treasury Department released final regulations (T.D. 9944; RIN: 1545-BP42) on the Internal Revenue Code Section 45Q carbon capture and sequestration (“CCS”) credit to implement changes made to that credit by the Bipartisan Budget Act of 2018. These regulations follow the release of proposed regulations on May 28, 2020 and have been highly anticipated by developers, investors, and practitioners hoping to unlock this space and move the market forward. The regulations were preceded by two related items of IRS guidance under Section 45Q: (i) Notice 2020-12, 2020-11 I.R.B. 495 (addressing the beginning of construction requirement for CCS projects) and (ii) Revenue Procedure 2020-12, 2020-11 I.R.B. 511 (providing a safe harbor under which the IRS will treat a partnership as properly allocating the Section 45Q credit in accordance with Section 704(b) and partnership flip structures).¹ The final regulations also follow changes made in December 2020 to Section 45Q in the Taxpayer Certainty and Disaster Relief Act of 2020 extending the Section 45Q credit by two years such that construction of CCS facilities must begin before January 1, 2026, rather than January 1, 2024.

The Section 45Q credit offers potentially large-dollar tax credits for industrial facilities that capture and sequester or use the carbon oxide (including carbon dioxide (CO₂)) they generate, including carbon oxide used in connection with enhanced oil recovery (“EOR”). For industrial facilities – such as petrochemical, power generation, and manufacturing plants – that generate large amounts of carbon oxide, capturing that carbon oxide and sequestering it underground or, for example, selling it to oil producers for EOR may result in a significant economic boost through the Section 45Q tax credit. For example, if a qualifying facility generates, captures, and sequesters one million metric tons of CO₂ in 2026, which would be common for a methanol, ethanol, or coal-fired power plant, it could be eligible for a $50 million tax credit. Section 45Q was amended in 2018 to provide uncapped tax credits to facilities – including direct air capture projects – that either capture and sequester or capture and use carbon oxide. The tax credit is generally available for facilities either under construction or placed in service for tax purposes on or after February 9, 2018 through January 1, 2026 and lasts for 12 years following the placed-in-service date. The value of the credit for carbon oxide captured and sequestered (but not used) increases linearly from $22.66 per metric ton in 2017 to $50 per metric ton in 2026. For carbon oxide captured and used, such as for EOR, the value of the credit increases linearly from $12.83 per metric ton in 2017 to $35 per metric ton in 2026. Following 2026, the credit will be adjusted for inflation. The amount of the credit thus depends on the date the carbon capture equipment is placed in service and whether the captured carbon oxide is used or permanently sequestered.

Section 45Q has enjoyed bipartisan support. In connection with the release of the final regulations Treasury Secretary Steven T. Mnuchin said, “These final regulations provide taxpayers and the American energy sector with needed clarity on utilizing the section 45Q credit…These regulations are an essential step toward harnessing the entrepreneurial spirit of Americans to further modernize the American energy sector, while ensuring American energy producers maintain their competitive edge around the world.” President-Elect Joe Biden’s energy plan says his new administration will “double down” on tax incentives for technology that captures carbon and then permanently sequesters or uses the captured carbon.

The final regulations provide various guidance for taxpayers, including:

- Procedures to determine adequate security measures for the geological storage of qualified carbon oxide;
- Rules for determining to whom the credit is attributable;
- Guidance on the definition of carbon capture equipment;
- Standards for measuring utilization of qualified carbon oxide;
- Rules to allow smaller carbon capture facilities to be aggregated into one project for purposes of claiming the credit when certain factors are present, such as common ownership and location;
- Clarification that carbon capture equipment that is originally placed in service at a qualified facility on or after February 9, 2018 may be owned by a taxpayer other than the taxpayer that owns the industrial facility at which the carbon capture equipment is placed in service;
- Procedures related to submitting a life cycle analysis;²
- Reduction of the recapture period from five years under the proposed regulations to three years;³
- Details regarding the requirements of parties to a contract related to the disposal of qualified carbon oxide or use of qualified carbon oxide as a tertiary injectant in EOR;⁴

² A life cycle analysis is a report that must be prepared by taxpayers claiming credits for “utilization” projects under Section 45Q(f)(5)(A). The provision allows credits to taxpayers who capture carbon and then use it to grow algae, convert it to a material or chemical compound in which the qualified carbon oxide is securely stored, or use it for any other purpose “for which a commercial market exists” as determined by the Treasury secretary. This life cycle analysis is required to demonstrate the level of carbon emissions that will be reduced through the projects. It is expected that the IRS will issue separate procedural guidance providing further details on the submission and review process, including the length of time necessary for review.

³ Under these rules, credits must be repaid if previously sequestered carbon oxide leaks into the atmosphere during a three-year period after the initial storage or injection, or carbon oxide for which a credit was claimed ceases to be disposed of in secure geological storage or used as a tertiary injectant during the recapture period.

⁴ The final regulations also provide taxpayers with existing contracts that were signed before the date the final regulations are published in the Federal Register 180 days from such date to conform their contracts to the requirements of the regulations.
Confirmation that the final regulations do not deviate from well-established guidance regarding the economic substance doctrine;

Circumstances and procedures under which owners of carbon capture and sequestration equipment may transfer the value of a tax credit to third parties; and

Clarification that equipment owners may transfer the credit’s value only to the final disposers, injectors, or users of carbon, with whom those owners have entered into contracts.\(^5\)

These regulations could bring much-needed clarity to the requirements of Section 45Q and help unlock the industry, which has struggled to realize projects due to previously insufficient guidance on key risks related to the credits, including around secure geologic storage, recapture, and who can qualify for the credit.\(^6\) Of particular interest to investors should be the reduction in the recapture period from five years to three years as this was one area of the proposed regulations that received significant comments.

The IRS noted that “a three-year recapture period sufficiently accounts for risk and reduces the compliance burden that would be imposed by a five-year recapture period.” Market participants had pushed for a shorter period following the release of the proposed regulations viewing the five-year period as too long and creating a longer term risk than investors seemed comfortable accepting. The IRS acknowledged these concerns saying, “The risk of qualified carbon oxide leakage leading to a recapture event is greatest in the years in which the qualified carbon oxide is injected, and the likelihood decreases over time as the qualified carbon oxide becomes stable and the likelihood of leakage decreases.”

Despite the regulations being in final form, they remain subject to potential changes until publication in the Federal Register, and that publication date is not yet known. President-Elect Joe Biden has said his administration will halt and review any regulations that have been released but not yet published in the Federal Register at the time of his inauguration. Given the bipartisan nature of Section 45Q, significant changes seem unlikely.

Carbon capture and use or sequestration projects are believed to be needed to help prevent global temperatures from reaching potentially unmanageable or catastrophic levels. They are one of many possible solutions for reducing greenhouse gases (“GHGs”) in light of renewed global urgency to combat climate change, as recently highlighted in the International Energy Agency World Energy Outlook 2020 Report. Combined with the expectation that the United States will recommit to the Paris Agreement once President-Elect Biden takes office on January 20, 2021, and investors’ growing expectations that companies will adopt environmental, social, and corporate governance (“ESG”) initiatives to usher in a

\(^5\) The IRS noted, “If such disposer, injector, or utilizer enters into a subcontract with a third-party to carry out the disposal, injection, or utilization, then the subcontractor may not be a credit claimant.”

\(^6\) There have also been recent legislative proposals to further enhance the Section 45Q credit. For example, on December 3, 2020, U.S. Representatives Marc Veasey (D-TX) and David B. McKinley (R-W.Va) introduced bipartisan legislation entitled the Accelerating Carbon Capture and Extending Secure Storage through 45Q Act (the “ACCESS 45Q Act”) as H.R. 8858. If enacted, the bill would include a direct pay election allowing taxpayers to treat tax credits that they have earned as a payment of taxes against their tax liability. This election would allow a taxpayer to treat the tax credits as a payment of taxes, including estimated tax payment obligations, or as an overpayment of taxes in cases in which the taxpayer does not have a tax liability. In theory, this election might allow participants to utilize the credit in a structure that avoids the complexities of various tax equity structures.
new era of corporate behavior aimed at sustainability, CCS projects will likely continue to be incentivized.

Environmental regulatory and permitting requirements for CCS projects are complex and evolving, and CCS projects are subject to multiple layers of regulatory jurisdiction at the federal, state, and local levels. For instance, CCS projects must comply with U.S. Environmental Protection Agency (“EPA”) GHG reporting regulations, and EPA regulations for Class VI carbon sequestration injection wells contain extensive site characterization, construction, operating, well integrity and post-injection care monitoring, financial responsibility, and reporting requirements. Only two states—North Dakota and Wyoming—currently have primacy (i.e., implementation and enforcement authority) for the Class VI well program. The EPA directly implements the Class VI well program in all other states, territories, and on tribal lands. CCS projects may also trigger other regulatory programs such as air permitting, stormwater, waste management and disposal, siting (e.g., endangered species), emergency planning and response, and pore space ownership, the applicability of each of which is highly project- and location-specific, and may involve significant lead times for planning and compliance. In many states, new legislation may be needed to build out a comprehensive regulatory framework for the efficient development, construction, and operation of CCS projects as well as to address the potential risks and liabilities associated with them.

Time will tell how big a push forward toward unlocking the industry these Section 45Q final regulations will ultimately serve to be, but the clarification they seek to establish along with the significant financial incentives the Section 45Q tax credits offer could prove to be an industry game changer.

For more information or if you would like to stay updated on further developments (including any further Treasury or other regulatory guidance), please contact one of the attorneys listed below.

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