

## Final Carbon Sequestration Tax Credit Regulations Shorten Recapture Period, Provide Guidance on “Utilization”

12 January 2021

The U.S. Department of the Treasury (“Treasury”) and the Internal Revenue Service (the “IRS”) [issued final regulations](#) for the carbon sequestration tax credit under section 45Q of the Internal Revenue Code on January 6, 2021. The regulations make a number of important clarifications and technical changes, including by (1) shortening the tax credit recapture period from five years to three, and (2) providing needed guidance on tax credit eligibility for carbon oxide that is “utilized” in a chemical process or put to commercial use. The regulations finalize, with modifications, an initial set of proposed regulations that was issued in May 2020 and leave project sponsors and investors with a much clearer and complete set of rules than they had in January 2020.<sup>1</sup>

### Background — What are Carbon Sequestration Tax Credits?

Carbon sequestration tax credits provide a dollar-for-dollar reduction in federal income tax liability for each metric ton of “qualified carbon oxide” captured at a qualifying plant and then permanently buried, used as a tertiary injectant in an enhanced oil or natural gas recovery project, or used in another process that would result in the permanent disposal of the carbon oxide.

For projects placed in service after February 8, 2018, the credits are available annually over a 12-year period beginning in the year in which the carbon capture equipment is placed in service. (Credits are also available for projects that were

placed in service earlier, but at a reduced rate and subject to a national cap of 75 million metric tons.) The construction of the facility that includes the carbon capture equipment must begin by the end of 2025 to qualify for tax credits.<sup>2</sup>

The credit value ranges from \$10–50 per metric ton, depending on when the carbon capture equipment is placed in service and what is done with the carbon oxide after it is captured. The credit is worth more if the carbon oxide is permanently buried as opposed to put to use in an enhanced oil or natural gas recovery project or other process.

## The Final Regulations

Highlights of the final regulations are described below.

### Recapture Rules

Section 45Q(f)(4) of the Internal Revenue Code specifically directs Treasury to provide regulations for recapturing the benefit of carbon sequestration tax credits if the previously captured carbon oxide “ceases to be captured, disposed of, or used as a tertiary injectant.” A “recapture event” occurs when carbon oxide for which a tax credit was previously claimed ceases to be captured, disposed of or used as an injectant (“leaks”) during a three-year “recapture period.” The proposed regulations included a five-year recapture period, but the Treasury Department shortened the period to three years based on evidence submitted by industry groups suggesting that the likelihood of a leak is greatest in the year of injection, and that a three-year recapture period was sufficient to account for the risk.

The final regulations confirm that recapture is measured on a net basis, so a recapture event only occurs to the extent the aggregate amount of carbon oxide that leaks into the atmosphere in a particular year exceeds the amount that was stored or used as an injectant in that year. Therefore, a recapture event does not necessarily occur simply because a portion of the carbon oxide intended for storage in a year leaks during that year. When a taxpayer, operator or regulatory agency determines that carbon oxide has leaked into the atmosphere, the taxpayer is required to quantify the leak using a methodology provided in Environmental Protection Agency regulations, and obtain a supporting certification from an independent engineer or geologist.

The recapture amount is calculated by multiplying the net amount of leaked qualified carbon oxide against the tax credit rate in the applicable year using a last in, first out (“LIFO”) methodology that looks back up to three years.

When a leak occurs that is attributable to carbon oxide with respect to which multiple taxpayers claimed tax credits, the recapture amount is allocated on a pro rata basis among each of the taxpayers in proportion to the tax credits that they claimed. If a partnership is one of the taxpayers that claimed credits, the partnership (and not its partners) is allocated its share of the recapture amount, and the partnership then allocates the recapture amount to its partners in accordance with their interests in the partnership. If the partnership is terminated prior to the recapture event, the partners of the partnership at the time the credits were claimed will be directly allocated their share of the recapture amount based on their prior credit allocations.

## Utilization Guidance

“Utilization” – an alternative under section 45Q to disposing of captured carbon oxide in secure storage or injecting it in an enhanced oil or natural gas recovery project – generally requires the carbon oxide to be permanently isolated or displaced from being emitted into the atmosphere. Though this concept was included in the proposed regulations, the final regulations add significant detail and outline the process through which utilization projects qualify for tax credits.

The “permanent isolation” or “displacement” of carbon oxide for purposes of 45Q can be achieved through (i) photosynthesis or chemosynthesis, such as through the growing of algae or bacteria, (ii) the chemical conversion of the carbon oxide into a chemical compound in which the carbon oxide is securely stored, or (iii) the use of the carbon oxide for any other purpose for which a commercial market exists.

Previously undefined, the final regulations clarify that a “commercial market” is a market in which a product, process or service that utilizes carbon oxide is sold or transacted on commercial terms. Treasury and the IRS rejected numerous comments attempting to delineate specific products and markets. Instead, the regulations settled on a broad definition that allows for the inclusion of new and emerging technologies as well as developing and future markets.

Taxpayers claiming a 45Q credit are required to demonstrate the amount utilized

through a written analysis of lifecycle greenhouse gas emissions (an “LCA”) verified by a professionally licensed third party (e.g., a certified life cycle analysis professional).<sup>34</sup> The final regulations provide that an LCA must demonstrate that the proposed process results in a net reduction of carbon dioxide equivalents when compared to a baseline use case.

Any taxpayer seeking to claim tax credits based on a utilization model must submit the LCA (and accompanying verification statement from a third-party reviewer) to the IRS and the Department of Energy. The Department of Energy will conduct an initial technical review, the results of which will be transmitted to the IRS. The IRS will then determine whether to approve the LCA and will notify the taxpayer of its decision. The taxpayer must obtain pre-approval of the LCA before claiming tax credits.

Anticipating the uncertainty created by a pre-approval requirement for LCAs both in terms of process and approval timing, the final regulations note that the IRS will issue separate procedural guidance that provides additional details regarding the LCA submission and review process, including the length of time necessary for an LCA review. The regulations do not give an estimate of when that additional guidance will be released.

## Other Clarifications

In addition to the points above, the regulations clarify a number of other areas in response to written comments to the proposed regulations from 2020. These include:

- ***Carbon Capture Equipment:*** Streamlining the definition of “carbon capture equipment” to include all components of property that are used to capture or process carbon oxide until the carbon oxide is transported for disposal, injection or utilization, and clarifying that all components that make up an independently functioning process train capable of capturing, processing and preparing carbon oxide for transport will be treated as a single unit of carbon capture equipment.
- ***“Economic Substance Doctrine” Applies:*** Confirming that the regulations “do not deviate from well-established guidance regarding the economic substance doctrine,” which several commentators had requested not apply to carbon capture projects given the possibility of project structures (e.g., storage-only

projects) in which the entity claiming tax credits would not expect to generate revenues from its activities, thereby making it more difficult to show economic substance.<sup>5</sup>

- **“Binding Written Contract” Damages Threshold:** Harmonizing the definition of “binding written contract” with IRS Notice 2020-12 and similar guidance for renewable energy projects to clarify that a contractual provision that limits damages to an amount equal to at least 5% of the total contract price (e.g., in the event of a termination for convenience) will not cause the contract to fail to be treated as binding.
- **Use of Subcontractors:** Clarifying that the owner of the carbon capture equipment may enter into a binding written contract with a general contractor that hires subcontractors to physically carry out the capture, disposal, injection or utilization of the qualified carbon oxide, but the contract must bind the subcontractors to the requirements of the regulations applicable to binding written contracts.
- **Aggregation of Facilities:** Clarifying that multiple carbon capture facilities can be aggregated into one project for purposes of meeting minimum carbon capture thresholds under aggregation rules similar to those in IRS Notice 2020-12, which permits the aggregation of facilities with common characteristics, such as common ownership and location, for purposes of determining when the construction of a project begins.
- **No Sub-Allocation of Credits to Subcontractors:** Confirming that tax credits allocated from the carbon capture equipment owner to a contractor who disposes of, injects or utilizes the captured carbon oxide cannot be further allocated to a subcontractor.

## Looking Ahead

Treasury and the IRS have made tremendous progress in building out the tax rules for carbon capture projects in the last 12 months, and the final regulations are another step forward. The shortened tax credit recapture period, in particular, may move tax equity investors off the sidelines by decreasing the investment risk. The technical clarifications in the final regulations provide helpful clarity and should also facilitate the deployment of new capital into the carbon capture market. Although additional guidance is still needed around the LCA submission and review process and approval timeline for utilization projects, the rules for deploying capital and claiming tax credits for carbon capture projects are now largely set.

- 
1. Read [here](#) for our June 2020 blog post analyzing the proposed regulations.[↩](#)
  2. The 2025 deadline was initially a 2023 deadline, but it was recently extended by two years as part of the coronavirus relief legislation that was enacted on December 27, 2020. Read [here](#) for additional information about this and other tax credit extensions.[↩](#)
  3. Comments to the proposed regulations suggested there was confusion over whether the section 45Q tax credits would be computed based on all greenhouse gases described in the LCA, but the final regulations confirm that the tax credits are only computed based on carbon oxide that is captured and utilized.[↩](#)
  4. The final regulations require that the LCA include a statement documenting the qualifications of the independent third party, including proof of appropriate U.S. or foreign professional license, and an affidavit from the third party stating that it is independent from the taxpayer (and if different, the credit claimant). The preamble to the regulations notes that “[t]his requirement provides flexibility to the taxpayer and recognizes that there are no nationally-recognized accreditation programs for this field.”[↩](#)
  5. The economic substance doctrine is effectively an anti-abuse rule for transactions that are chiefly tax-motivated. The codification of the doctrine in section 7701(o) of the Internal Revenue Code provides that a transaction only has economic substance if (i) the transaction changes in a meaningful way (apart from federal income tax effects) the taxpayer's economic position, and (ii) the taxpayer has a substantial purpose (apart from federal income tax effects) for entering into such transaction.[↩](#)
- 

## Authors

Lane E. Morgan

Partner / Dallas

Courtney Loyack

Associate / Houston

# Related Services

## Practices

- Transactional
- Tax
- Energy & Infrastructure

This publication is distributed with the understanding that the author, publisher and distributor of this publication and/or any linked publication are not rendering legal, accounting, or other professional advice or opinions on specific facts or matters and, accordingly, assume no liability whatsoever in connection with its use. Pursuant to applicable rules of professional conduct, portions of this publication may constitute Attorney Advertising.

This publication may cite to published materials from third parties that have already been placed on the public record. The citation to such previously published material, including by use of “hyperlinks,” is not, in any way, an endorsement or adoption of these third-party statements by Kirkland & Ellis LLP.