

FORVIS

Navigating the Carbon Sequestration Tax Credit in the Inflation Reduction Act of 2022

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Presenters



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Agenda

- Introduction
- Framework of the 45Q credit and key qualification elements
- Potential business impacts
- How 45Q may support ESG and other business objectives
- Questions

45Q Framework and Key Qualification Elements

- What is 45Q?
 - Credit against income tax
 - Part of the general business credits (i.e. IRC 38 credits)
 - Election to shift who is allowable taxpayer for credit
 - NEW: Ability to make direct pay election for 45Q credit attributable to equipment originally placed in service after December 31, 2022
 - NEW: Ability to make election to transfer all or a portion of the 45Q credit to unrelated person in exchange for cash, applicable tax years beginning after December 31, 2022

45Q Framework and Key Qualifications

- Key Qualification Elements

Within the United States or a possession of the United States

Carbon Capture

- Captured by taxpayer
- Using carbon capture equipment
- Originally placed in service at a qualified facility

Carbon Disposal

- Disposed in secure geological storage and not used, or
- Used as tertiary injectant in qualified enhanced oil or natural gas recovery project and disposed in secure geological storage, or
- Utilized by taxpayer in a manner described under paragraph (f)(5)

45Q Framework and Key Qualifications: Capture

- Carbon capture equipment
 - Generally, all components of property used to capture or process CO until the CO is transported for disposal, injection, or utilization.
 - Separating, purifying, drying, and/or capturing CO that would otherwise be released into the atmosphere by industrial facility
 - Removing CO from the atmosphere via direct air capture; or
 - Compressing or otherwise increasing the pressure of CO.
 - May be owned by taxpayer other than taxpayer that owns industrial facility if equipment originally placed in service on or after February 9, 2018.

45Q Framework and Key Qualifications: Capture

- Carbon capture equipment
 - Additional carbon capture equipment – physical modification or equipment addition that results in an increase of CO capture design capacity and does not meet 80/20 rule
 - New carbon capture equipment – physical modification or equipment addition with a cost that satisfies the 80/20 rule

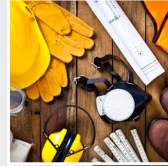
45Q Framework and Key Qualifications: Capture

- Originally placed in service at “qualifying facility”



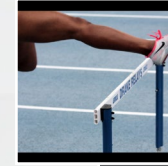
TYPE

- Industrial facility that produces CO that would otherwise be released into the atmosphere as a greenhouse gas, from fuel combustion source or fuel cell, a manufacturing process, or fugitive CO emission source,
- OR
- Direct air capture facility



Construction Period

- Construction begins before January 1, 2033 AND EITHER
- Construction of carbon capture equipment begins before such date,
- OR
- Original planning and design for facility such facility includes installation of carbon capture equipment



Capture Threshold

- At which carbon capture equipment is placed in service that captures the requisite annual thresholds of CO

45Q Framework and key qualifications: Capture

| Facility Type | BEFORE (Construction begins before 8/16/2022) | AFTER IRA (Construction begins on or after 8/16/2022) |
|---------------------------------|--|--|
| Direct Air Capture Facility | <ul style="list-style-type: none"> Not less than 100,000 metric tons of qualified carbon | <ul style="list-style-type: none"> Not less than 1,000 metric tons of qualified carbon |
| Electricity Generating Facility | <ul style="list-style-type: none"> If facility emits <500,000 metric tons of CO, then not less than 25,000 metric tons of qualified carbon utilized in manner described, or Not less than 500,000 metric tons of qualified carbon | <ul style="list-style-type: none"> Not less than 18,750 metric tons of qualified carbon and not less than 75% of the baseline CO production of electric generating unit with respect to any capture equipment for such unit |
| Other Industrial Facility | <ul style="list-style-type: none"> If facility emits <500,000 metric tons of CO, then not less than 25,000 metric tons of qualified carbon utilized in manner described, or Not less than 100,000 metric tons of qualified carbon | <ul style="list-style-type: none"> Not less than 12,500 metric tons of qualified carbon |

* All references to metric tons is with respect to a tax year, ex. 500,000 metric tons emitted during the tax year

45Q Framework and Key Qualifications: Dispose

- Secure geological storage
 - Includes but not limited to storage at deep saline formations, oil and gas reservoirs, and unminable coal seams. Must be under conditions as Secretary has determined in issued regulations.
 - Adequate security measures for geological storage such that qualified CO does not escape into the atmosphere as provided in regulations.

45Q Framework and Key Qualifications: Dispose

- Secure geological storage
 - All documentation required by Form 8993
 - Enhanced oil and gas
 - If taxpayer reports to EPA, self-certify volume
 - If taxpayer determines volumes pursuant to CSA/ANSI ISO 27916:2019, certification of documentation by independent engineer or geologist required
 - Affidavit and specific statements must be included
 - **Failure to submit complete documentation or certification will result in disallowance of all 45Q credit for the tax year**

45Q Framework and Key Qualifications: Utilize

- Utilization means
 - Fixation through photosynthesis or chemosynthesis
 - Chemical conversion to material or chemical compound in which CO is securely stored, or
 - Use for any other purpose for which commercial market exists (except as tertiary injectant enhanced oil or natural gas recovery project)

45Q Framework and Key Qualifications: Utilize

- Utilization
 - Measurement: metric tons based on analysis of life-cycle greenhouse emissions (LCA) that were
 - Captured and permanently isolated from the atmosphere, or
 - Displaced from being emitted into atmosphere

45Q Framework and Key Qualifications: Utilize

- Utilization: LCA
 - Must be documented in a written LCA report
 - In conformity with International Organization for Standardization (ISO) 14040:2006, Environmental management — Lifecycle assessment — Principles and framework and ISO 14044:2006, Environmental management — Life cycle assessment Requirements and guidelines.
 - Must be performed or verified by qualified independent third party
 - Submitted under penalties of perjury
 - LCA report will be reviewed by Department of Energy and advise taxpayer of approval. **Approval must be received prior to claiming of 45Q credits.**

45Q Framework and Key Qualifications: Credit

- Applicable dollar amount per metric ton each year for the 12-year period beginning on date equipment originally placed in service
 - Thresholds for qualified facility must be met annually
 - Annualized amount used for year placed in service and the year in which the 12-year period ends
 - “Additional carbon capture equipment” rate applied to incremental carbon captured and disposed/used

45Q Framework and Key Qualifications: Credit

| Qualified Facility Type | Disposal/Use | Placed in service before February 9, 2018 | Placed in service February 9, 2018 through December 31, 2022 | Placed in service on or after December 31, 2022 (Base Rate) |
|-------------------------|--|---|---|---|
| Industrial | Not used and Disposed in secure geological storage | \$20 | \$22.66-\$50 based on linear interpolation* \$50 plus inflation factor** | \$17 * \$17 plus inflation factor** |
| Industrial | Used as tertiary injectant and Disposed in secure geological storage | \$10 | \$12.83-\$35 based on linear interpolation* \$35 plus inflation factor** | \$12 * \$12 plus inflation factor** |
| Industrial | Utilized in manner described (45Q(f)(5) and Reg. 1.45Q-4) | \$10 | \$12.83-\$35 based on linear interpolation* \$35 plus inflation factor** | \$12 * \$12 plus inflation factor** |

FORVIS * For tax years beginning in calendar year after 2016 and before 2027
 **For tax years beginning in a calendar year after 2026

45Q Framework and Key Qualifications: Credit

| Qualified Facility Type | Disposal/Use | Placed in service before February 9, 2018 | Placed in service February 9, 2018 through December 31, 2022 | Placed in service on or after December 31, 2022 (Base Rate) |
|-------------------------|--|---|---|---|
| Direct Air Capture | Not used and Disposed in secure geological storage | \$20 | \$22.66-\$50 based on linear interpolation* \$50 plus inflation factor** | \$36 * \$36 plus inflation factor** |
| Direct Air Capture | Used as tertiary injectant and Disposed in secure geological storage | \$10 | \$12.83-\$35 based on linear interpolation* \$35 plus inflation factor** | \$26 per metric ton* \$26 plus inflation factor** |
| Direct Air Capture | Utilized in manner described (45Q(f)(5) and Reg. 1.45Q-4) | \$10 | \$12.83-\$35 based on linear interpolation* \$35 plus inflation factor** | \$26 per metric ton* \$26 plus inflation factor** |

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 **For tax years beginning in a calendar year after 2026

45Q Framework: Credit Multiplier

- Applicable to property placed in service after December 31, 2022
- If requirements met credit amount will be base rate multiplied by 5
- Critical time periods/dates
 - Placed in service after December 31, 2022
 - Beginning of construction period
 - Date Secretary publishes guidance on the multiplier wage and apprenticeship requirements and the subsequent 60-day period

45Q Framework: Credit Multiplier

| Property | Construction Period | Additional Requirements |
|--|--|---|
| Qualified Facility as well as any carbon capture equipment placed in service at <u>such facility</u> | Construction <u>of facility</u> begins <u>on or after</u> the date that is 60-days after the Secretary publishes guidance on wage and apprenticeship requirements (AFTER, AFTER) | Both wage and apprenticeship requirements must be met |
| Carbon capture equipment | Construction of equipment begins <u>after</u> the date that is 60-days after the Secretary publishes guidance on wage and apprenticeship and is installed at qualified facility the construction of which began before such date (AFTER, BEFORE) | Both wage and apprenticeship requirements must be met with respect to equipment |
| Carbon capture equipment | Construction of equipment begins <u>before</u> the date that is 60-days <u>after</u> the Secretary publishes guidance on wage and apprenticeship requirements and is installed at qualified facility the construction of which began before such date (BEFORE, BEFORE) | None |

45Q Framework: Credit Multiplier

- Wage
 - Laborers and mechanics employed by contractors and subcontractors are paid wages not less than applicable prevailing wage as determined by Secretary of Labor
 - Construction as well as any alteration or repair within the 12-year credit period
 - Other per guidance including requirements for recordkeeping or information reporting for purposes of administration

45Q Framework: Credit Multiplier

- Apprenticeship requirements “similar to 45(b)(8)”
 - Thresholds for percentage of total labor hours performed by qualified apprentices
 - Construction as well as any alteration or repair within designated period
 - Applicable contractors and subcontractors
- Other per guidance including requirements for recordkeeping or information reporting for purposes of administration

45Q Framework: Credit Multiplier Effect

| Qualified Facility Type | Disposal/Use | Placed in service on or after December 31, 2022 with Multiplier |
|-------------------------|--|---|
| Industrial | Not used and Disposed in secure geological storage | \$85* \$85 plus inflation factor** |
| Direct Air Capture | Not used and Disposed in secure geological storage | \$180 * \$180 plus inflation factor** |
| Industrial | Used as tertiary injectant and Disposed in secure geological storage | \$60* \$60 plus inflation factor** |
| Direct Air Capture | Used as tertiary injectant and Disposed in secure geological storage | \$130 per metric ton* \$130 plus inflation factor** |
| Industrial | Utilized in manner described | \$60* \$60 plus inflation factor** |
| Direct Air Capture | Utilized in manner described | \$130 per metric ton* \$130 plus inflation factor** |



* For tax years beginning in calendar year before 2027

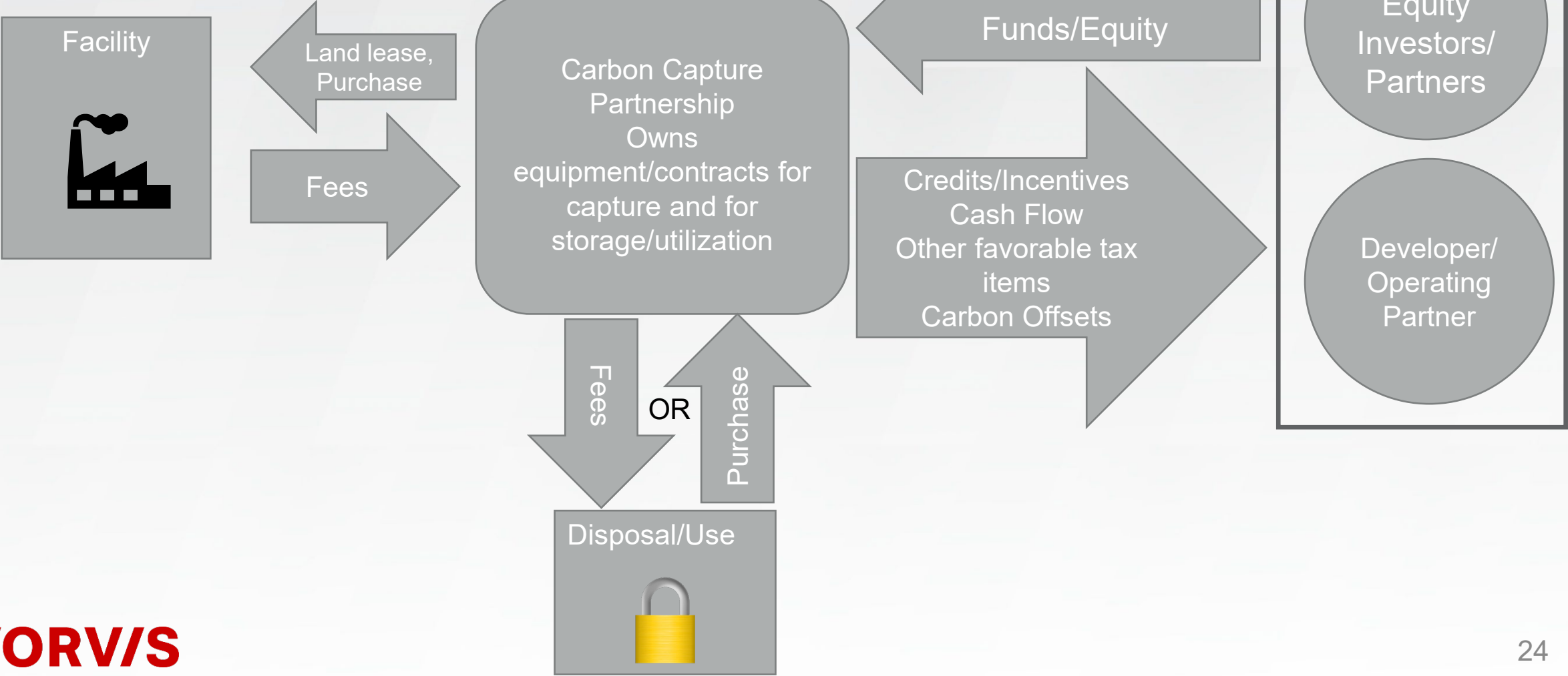
**For tax years beginning in a calendar year after 2026

45Q Credit – How to Claim

- A taxpayer must claim the credit on Form 8933 filed with the federal income tax return or Form 1065 and annually report to the IRS the following information:
 - Name and location of the qualified facilities at which the qualified carbon oxide was captured; and
 - If the taxpayer is claiming the 45Q credit on an amended federal income tax return, an amended Form 1065, or AAR, as applicable, the taxpayer must state “AMENDED RETURN FOR SECTION 45Q CREDIT” at the top of the amended federal income tax return, the amended Form 1065, or the AAR, as applicable.
- The taxpayer must do this for each year the taxpayer is eligible for the credit. The existence of each contract and the parties involved must be reported to the IRS annually on Form 8933 by each party to the contract, regardless of which party is claiming the credit.
 - Failure of an electing taxpayer or a credit claimant to satisfy the reporting requirements in a taxable year will result in the inability to claim the credit with respect to any qualified carbon oxide that is disposed of, injected, or utilized in the taxable year pursuant to that particular election.
- If the taxpayer elects to allow the 45Q credit in whole or in part to another taxpayer, additional information is required annually to the IRS. The taxpayer must include an election statement on Form 8933 and provide each credit claimant with a copy of the electing taxpayer’s Form 8933.

45Q Potential Business Impacts - Monetizing

- Investment opportunity



45Q Potential Business Impacts – Monetizing

- Direct Pay

| Applicable Entity | Deemed Applicable Entity for 45Q |
|--|---|
| Available for 45Q credit on eligible property placed in service after December 31, 2022 | |
| Treats credit as payment by taxpayer, effectively converting to a refundable credit | |
| May only be made at entity level (i.e. partners or shareholders cannot make this election) | |
| Election applied separately with respect to the carbon equipment placed in service during a taxable year | |
| Year equipment placed in service, by due date of tax return but in no case earlier than 180 days after August 16, 2022 | |
| Applies to taxable year and any subsequent taxable year within the 12-year credit period of 45Q | Applies to taxable year and the four subsequent taxable years. |
| Irrevocable | Within the period, may revoke election for any subsequent years during such period |
| NA – Transfer provisions to not apply to Applicable Entities | Prohibited from making an election to transfer credit during the five-year period (year of election + 4 subsequent) with respect to the equipment |

45Q Credit – Recent Changes to Credit Transfer Rules

- For tax years beginning after 12/31/2022, the Inflation Reduction Act of 2022 allows an eligible taxpayer to elect to transfer all or a portion of an eligible credit determined as to the eligible taxpayer for any tax year to an unrelated taxpayer. The transferee taxpayer is treated as the taxpayer for the purpose of the credit or a portion of the credit.
- The Section 45Q(a) credit for carbon oxide sequestration is available for transfer. The election must be made by the due date (including extensions) for the return for the tax year for which the credit is determined or, if later, **180 days after August 16, 2022**. The election is irrevocable. For the Section 45Q(a) credit, the election is made separately for each facility and for each tax year during the 10-year period beginning on the date the facility was originally placed in service, or the 12- year period, in the case of carbon capture equipment.
- There are special rules regarding S-corporations. An S-corporation that owns a facility or property directly can make the election to transfer the credit. The amount received as consideration for the transfer is treated as tax-exempt income for purposes of IRC 1366. A S-corporation shareholder cannot make an election to transfer the credit for a facility or property that is held directly by an S-corporation. An eligible taxpayer could transfer a credit to an unrelated S-corporation, which would then allocate the credit amount its shareholders. But S shareholders who are allocated credits cannot later transfer them to an eligible taxpayer.

45Q Credit – Treatment of Credit Transfer Payment

- With respect to any amount paid by a transferee taxpayer to an eligible taxpayer as consideration for the transfer of credit, such consideration:
 1. Shall be required to be paid in cash,
 2. Shall not be included in gross income of the eligible taxpayer, and
 3. With respect to the transferee taxpayer, shall not be deductible
- Default “Applicable Entities” as defined for Direct Pay cannot elect credit transfer

45Q Credit – Treatment of Credit Transfer Payment

Partnerships and S Corporations

- In the case of any eligible credit determined with respect to any facility or property held directly by a partnership or S corporation, if such partnership or S corporation makes an election under subsection (a) (in such manner as the Secretary may provide) with respect to such credit-
 - A. any amount received as consideration for a transfer described in such subsection shall be treated as tax exempt income for purposes of sections 705 and 1366 , and
 - B. a partner's distributive share of such tax exempt income shall be based on such partner's distributive share of the otherwise eligible credit for each taxable year.
- Coordination with application at partner or shareholder level.

In the case of any facility or property held directly by a partnership or S corporation, no election by any partner or shareholder shall be allowed under subsection (a) with respect to any eligible credit determined with respect to such facility or property.

45Q Support of ESG and Other Business Objectives

- Carbon reduction and voluntary carbon offsets align with environmental goals of ESG
- Certifications and reporting associated with claiming credits provide high level of transparency around both tax stewardship and progress towards environmental goals of ESG
- Funding of equipment directly with credits or through investor partnerships
- Potential profit center if can align with purchaser

45Q Closing Thoughts and Key Takeaways

- Significant lowering of the thresholds to qualify expands the number of taxpayers who may benefit
- Significant increase in dollar amounts with multiplier significantly enhances the value of these credits
- Applicability of credit to taxpayers other than facility owners as well as new provisions for direct pay (refundability) and credit transfers allow taxpayers to monetize benefits for financing of investments which align with ESG and other business objectives

Questions?

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