CLIENT ALERT

Inflation Reduction Act Creates Game Changing Incentives for Carbon Capture and Energy Storage Projects

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On August 12, 2022, five days after it passed the Senate, the House passed legislation that would create long-term tax credits for carbon capture and energy storage projects, providing a jolt to the economics of financing such projects. The legislation, part of the Inflation Reduction Act of 2022 (the "Act"),[1] would provide billions of dollars in tax credits over 10 years to companies that build new sources of zero-emissions electricity, such as wind turbines, solar panels, wind and solar facilities, battery storage, geothermal plants or advanced nuclear reactors. The Act still needs to be signed by President Biden to become law, but it is expected that this will be a near certainty.

Overview

By including $369 billion in energy-related provisions, the Act would be the largest legislative investment in clean energy and decarbonization in U.S. history.

Some of the major highlights of the Act include the following:

- Extension and expansion of the Section 45Q carbon capture and sequestration credit.

[1] H.R. 5376: https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_of_2022.pdf.

- Qualifying projects will earn up to $85 (compared to $50 currently) for each metric ton of carbon they capture and store underground, whether the carbon oxide is captured from a power plant or from some other emitting source.
- Qualifying direct air projects will earn up to $180 (compared to $85 currently) for each metric ton of carbon they capture directly out of the atmosphere.
- A change in the definition of "energy storage technology" now includes thermal energy storage facilities.
- Standalone energy storage facilities now qualify for an investment tax credit ("ITC").
- Tax credits for clean sources of electricity and energy storage and approximately $30 billion in targeted grant and loan money for states and electric utilities to accelerate the transition to clean energy.
- A five year, over $60 billion production tax credit ("PTC") to be allocated to on-shore clean energy manufacturing in the U.S.
- $500 million to expand biofuel infrastructure such as storage tanks and blending facilities.
- $10 billion ITC for producing cleaner technology manufacturing facilities, like facilities that make electric vehicles, wind turbines, and solar panels.
- Bonus tax credits available for the satisfaction of "domestic content" requirements or location of facilities in "energy communities" or "low-income communities."
- A new ten-year tax credit for the production of clean hydrogen.

Extension to 2033

The Act grants an extension of the 45Q tax credit. The 45Q credit would be extended to projects starting prior to January 1, 2033. This extension would overwrite the current 45Q Credit expiration date, which applies to projects starting prior to December 31, 2025.

Extension of PTC and ITC

The Act extends the PTC and ITC for projects beginning construction before January 1, 2025 and expands the definition of "energy storage technology" to include thermal energy storage property, which is a system for storing thermal energy.

The Act delays the effective dates of these changes to the ITC by one year. Under Section 48C of the Act, standalone storage projects and interconnection property placed in service after December 31, 2022 would count as qualifying facilities eligible for the tax credit.

Energy storage projects would now qualify for the ITC whereas, under current law, standalone storage projects do not. The ITC is available at the base 6% rate for any projects starting construction before January 1, 2033. Afterwards, it starts phasing out (5.2% before January 1, 2034 and 4.4% before January 1, 2035).

The ITC under current law begins phasing out for projects starting after 2019. The Act would extend the ITC to projects starting before January 1, 2025, with the extension for geothermal to January 1, 2035.

Minimum Storage Requirements Lowered

The minimum carbon capture requirements for treatment as a qualified facility would be lowered. Under current laws, a facility meets its carbon capture requirements to be treated as a qualified facility when it captures at least 18,750 metric tons of carbon oxide during the taxable year. Under the Act, a facility can become qualified if it captures just 12,500 metric tons of carbon oxide during the taxable year. Direct act capture facilities must capture 1,000 metric tons per year.

The Act changes the structure of and significantly increases the tax credits relating to carbon capture. The 45Q credit could be claimed as a base credit or, alternatively, as a bonus credit if the relevant facility meets the prevailing localized wage requirements and utilizes registered apprenticeship programs. The value of the bonus credit for qualifying facilities is five times the value of the base credit.

Geologic Storage

The base credit would be $17 per metric ton of carbon oxide captured and permanently stored in geologic storage and the bonus credit would be $85 per metric ton of carbon oxide.

In the case of carbon oxide used by the taxpayer as a tertiary injectant in a qualified enhanced oil or natural gas recovery project, the base credit would be $12 per metric ton of carbon oxide and the bonus credit would be $60 per metric ton of carbon oxide.

Direct Air Capture

The Act offers an enhanced tax credit for direct air capture facilities that capture at least 1,000 metric tons of qualified carbon oxide per year. In the case of direct air capture, where the taxpayer stores the carbon oxide in a secure geological storage (and does not otherwise use the carbon oxide), the base credit would be $36 per metric ton of carbon oxide. The bonus credit would be $180 per metric ton of carbon oxide captured and stored.

In the case of direct capture, but where the taxpayer uses the carbon oxide as a tertiary injectant in a qualified enhanced oil or natural gas recovery project, the base credit would be $26 per metric ton of carbon oxide. The bonus credit would be $130 per metric ton of carbon oxide.

Clean Electricity Production Credit

A new credit under Section 45Y of the Act is available for the production of clean electricity produced at a qualified placed-in-service facility after December 31, 2024 and for which greenhouse gas emissions is zero. Section 45Y offers a base credit of $0.003/kWh of electricity produced with an increased credit rate of $0.015/kWh, as adjusted for inflation, if certain prevailing wage and apprenticeship requirements are met

Clean Electricity Investment Credit

A new credit under Section 48D of the Act is available for the qualified investment in an electric generating facility or energy storage property PIS after December 31, 2024 and for which greenhouse gas emissions is zero. Section 48D offers a base credit of 6% of the qualified investment with an increased rate of 30% if certain prevailing wage and apprenticeship requirements are met

Benefits Chart

	Current Law	**The Act**
Section 48 ITC for energy storage projects	Begins phasing out for projects beginning construction after 2019	Available for projects beginning construction before January 1, 2025
Section 45 PTC for projects beginning construction before 2025, including a new PTC for solar property and the extension of the geothermal-related PTC	Available for projects beginning construction before December 31, 2021	Available for projects beginning construction before January 1, 2025
Section 45Q tax credit (carbon capture)	Available for projects beginning construction before January 1, 2026	Available for projects beginning construction before January 1, 2033

Section 45V tax credit (for the production of clean hydrogen)	Not available	Available for clean hydrogen produced after December 31, 2022 by a taxpayer at a qualified facility beginning construction by January 1, 2033
Section 45Y tax credit (for clean electricity production)	Not available	Available for qualified production after December 31, 2024
Section 48C tax credit (for standalone storage projects)	Not available	Taxpayer must apply to standalone storage projects by December 31, 2022
Section 48D tax credit (for investment in clean electricity)	Not available	Available for qualified investments after December 31, 2024
Section 48 Technology neutral PTC and ITC	Not available	Available beginning in 2025 through the later of (i) 2032 or (ii) the year certain emissions thresholds are achieved

Monetization of Tax Credits

Under the Act, several energy-related credits would, subject to certain limitations, be (i) transferable to unrelated parties for cash (compensation received by the transferor would not be taxable and no deduction would be permitted by the transferee), (ii) eligible for “direct pay” (but only if claimed by certain tax-exempt governmental and cooperative entities), and (iii) eligible to be carried back for up to three years. A revision of the Act expands the definition of cooperative entities to include corporations operating on a cooperative basis that are engaged in furnishing electric energy to persons in rural areas. Furthermore, for credits attributable to property held by a partnership, the Act specifies that direct pay election must be made at the partnership level and may not be made at the partner level.

Conclusion

The Act should spur significant project development and manufacturing in renewable energy due to the favorable tax incentives. PTCs and ITCs are vital to the financing of energy projects and these tax credits will help renewable energy projects overcome financing obstacles.

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