



# **THE INFLATION REDUCTION ACT OF 2022: TAKEAWAYS FOR THE CLEAN ENERGY SECTOR**

August 18, 2022

The webinar will begin shortly

# Housekeeping Notes for Audience

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  - The recording and slides will be sent to all participants after the webinar.
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# Speakers



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Anne's practice encompasses a broad spectrum of US federal income tax matters, with a particular emphasis on renewable energy transactions and financing. She has counseled clients on tax matters for over 25 years, and has extensive experience with all facets of tax structures for renewable energy projects.



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With more than two decades of experience in government and government relations, Neal is Senior Director of Government Relations at ML Strategies. He has represented clients before the U.S. Congress and Executive Branch on a wide range of issues including appropriations, energy and sustainability, tax policy, trade, and transportation.



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Courtney, a Senior Vice President at ML Strategies in Washington, DC, has developed and implemented successful government relations strategies for clients in the energy and sustainability industry for more than 20 years. She leverages direct experience drafting legislation, enforcing regulations, and litigating complex court cases to achieve outcomes that advance her clients' interests and goals.

# Inflation Reduction Act Overview

- \$740 billion package focused on inflation and deficit reduction, health care, and energy security & climate change
- Raises \$737 billion in revenue through a new 15% corporate book minimum tax, reform of prescription drug pricing, IRS tax enforcement, a 1% excise tax on stock buybacks, and a two year extension of the excess business loss limitation rules
- \$437 billion in investments, including \$369 billion for energy security and climate change, \$64 billion for *Affordable Care Act* subsidies extension, and \$4 billion for Western drought resiliency

# Covered in This Presentation

- Background on the Inflation Reduction Act and how the proposed bill became law.
- Summary of the main energy tax provisions.
- Overview of how the Inflation Reduction Act will affect the clean energy sector.

# Changes to ITC and PTC

## Investment Tax Credit (ITC) – Section 48

- Start of construction deadlines extended
  - Through the end of 2024 –solar, qualified fuel cell, qualified microturbine, combined heat and power, waste energy, small wind, energy storage technology, microgrid controllers, and qualified biogas
  - Through the end of 2034 for geothermal
- Full 30% rate for the above technologies, with certain exceptions
  - Possible reduction to 6% under prevailing wage and apprenticeship (W&A) requirements (described below).
  - Reduced rates for geothermal projects that start construction in 2032 (26% ITC) or 2033 (22% ITC)

# Changes to ITC and PTC (continued)

## Production Tax Credit (PTC) – Section 45

- Start of construction deadlines extended through the end of 2024 for wind, solar, geothermal, biomass, landfill gas, solid waste, qualified hydropower, and marine and hydrokinetic projects
- Reinstatement of applicable 2021 credit rates for the above technologies
  - Applicable rate depends on the technology.
  - The maximum 2021 credit was 2.5 cents per kWh.
  - Possible reduction under applicable W&A requirements

# Changes to ITC and PTC (continued)

## Noteworthy Changes

- No ITC under prior law for energy storage technology, microgrid controllers, or qualified biogas
- Solar storage that was associated with a solar generating facility was eligible for an ITC. The ITC for stand-alone storage is a huge boon to the solar industry, which has requested this change for years.
- The ITC for energy storage technology includes certain thermal energy and hydrogen storage.
- There are opportunities to receive an additional 10-20% ITC or PTC (described in the bonus credits section). New monetization opportunities and a new direct pay election are also described below)



# New ITC and PTC starting in 2025

## New Emissions-Based ITC (Section 45E ITC) and PTC (Section 45Y PTC) Essentially Provide an Addition 10-Year Extension

- These are technology neutral tax credits, which become effective in 2025.
- Eligibility is based on the lifecycle greenhouse gas emission rate of the applicable electricity generating facility or storage technology, which cannot exceed zero.
- Section 48E provides a 30% ITC for investments in electricity generating facilities and storage technology if applicable W&A requirements are met, and a 10% ITC if not met.
- Section 45Y provides a PTC equal to 1.5 cents per kWh of electricity sold to an unrelated person (or sold, consumed or stored by the taxpayer when there is a metering device) and produced by a zero-emissions facility if applicable W&A requirements are met, and a PTC equal to 0.03 cents per kWh if not met. Rates are adjusted for inflation.
- Facilities with nameplate capacities less than 1 MW AC and thermal energy projects are not subject to the W&A requirements.

# New ITC and PTC starting in 2025 (continued)

- Expires beginning in the later of 2036 and the 4th year following the year US greenhouse gas emissions hit 25% of the 2022 rate.
- Phase out to 75% of the applicable rate for the later of 2034 and the second year following achievement of such 75% emissions reduction, and 50% of the applicable rate the following year.
- Carbon capture can offset emissions for purposes of determining whether the zero-emissions rate requirement is satisfied.

# Section 45Q Credit for Carbon Capture and Sequestration

- Credit extended for projects that start construction before January 1, 2033.
- The minimum carbon capture requirement is reduced to emissions of 18,750 tons for power plants (previously 500,000 tons), 12,500 tons for industrial facilities (previously 100,000 tons), and 1,000 tons for direct air capture facilities (previously 100,000 tons).
- Increased credit rates apply as follows (subject to satisfaction of applicable W&A requirements) :
  - For carbon capture by industrial facilities and power plants, the credit is \$85 per metric ton for captured CO<sub>2</sub> stored in geologic formations, \$60 per metric ton for carbon utilization, and \$60 per metric ton for CO<sub>2</sub> stored in oil and gas fields.
  - For direct air capture facilities, the credit is \$180 per metric ton for captured CO<sub>2</sub> stored in geologic formations, \$130 per metric ton for carbon utilization, and \$130 per metric ton for CO<sub>2</sub> stored in oil and gas fields.

# New PTC for Clean Hydrogen (Section 45V)

- 10-year PTC for qualified clean hydrogen produced through a process that results in a lifecycle greenhouse gas emissions rate that does not exceed 4kg of CO<sub>2</sub>e per kg of hydrogen.
- The hydrogen must be produced in the US by the taxpayer's qualifying facility for sale or use in the taxpayer's business.
- Credit can be as high as \$3 per kg if applicable W&A requirements are satisfied. Credit amount is based on the emissions rate.
- Cannot take both the Section 45V PTC and Section 45Q credit. But can take the PTC for qualified electricity used to produce the clean hydrogen.
- Option to claim an ITC in lieu of the Section 45V PTC.
- Applies to facilities placed in service after 2022, for which construction starts by the end of 2032.

# New Advanced Manufacturing Production Credit (Section 45X)

- Credit for eligible components produced in the US and sold to unrelated persons after 2022.
- Eligible components are certain critical minerals and components utilized in the construction of wind and solar facilities and energy storage technology.
- Examples include photovoltaic cells and wafers, solar grade polysilicon, polymeric backsheets, solar modules, wind energy components (such as blades, towers and nacelles), torque tubes, structural fasteners, electrode active materials, battery cells, battery modules, inverters, and certain critical minerals.
- The credit amount is different for each eligible component.
- Expires after 2032, with a 3-year phase out in 25% increments starting in 2030 (i.e., 75% of the applicable rate for 2030, 50% of the rate for 2031 and 25% of the rate for 2032).

# Other Changes

- Extension and expansion of the Section 48C Credit for investments in Advanced Energy Projects.
- New tax credits for zero-emissions nuclear power production and certain transportation fuels with lower emissions rates.
- New PTC for energy produced from an existing qualified nuclear power facility through the end of 2032.

## Other Changes (continued)

- Expansion of existing tax credits related to clean vehicles and related infrastructure, including
  - Changes to the tax credits for consumer purchases of electric vehicles
  - New tax credit for clean commercial vehicles, which can be up to \$40,000 for heavy vehicles.
  - Reinstatement of the tax credit for certain refueling infrastructure (including EV charging stations), which is expanded by applying the cap to each individual unit.

# Two Tier Rate Structure

- New two-tier rate structure for tax credits that are subject to the W&A requirements. If the requirements are not satisfied, the credit rate is generally 20% of the full credit rate - (e.g., a 30% ITC will only be 6% if the applicable W&A requirements are not met).
- W&A Requirements do not apply to:
  - projects that start construction within 59 days after the IRS issues regulations, or
  - projects with a nameplate capacity less than 1 MW AC or thermal energy projects.



# Prevailing Wage Requirement

- Requires contractors and subcontractors to pay all laborers and mechanics wages that are no less than the prevailing local wages (determined by the Secretary of Labor) for constructing, altering, or repairing the facility.
  - For the PTC, prevailing wages must be paid for 10 years after the project is placed in service for repairs and alterations.
  - For the ITC, prevailing wages must be paid during the 5-year recapture period for repairs and alterations.

# Apprenticeship Requirement

- Requires qualified apprentices perform a specified minimum percentage of the total labor hours spent by the constructor or subcontractor in constructing, repairing, or altering the facility.
  - A qualified apprentice is an employee that participates in a registered program, as defined under Code Section 3131(e)(b)(3).
  - The minimum percentage is 10% for projects that start construction before 2023, 12.5% if construction starts before 2024, and 15% if construction starts after 2023; lower thresholds for offshore wind.
  - There is a good faith efforts exception pursuant to which the requirement is deemed satisfied.

# Bonus Credit – Domestic Content (DC) Requirement

- 10% additional ITC or PTC if all steel, iron, and manufactured products that are components of the completed facility are produced in the United States.
- Manufactured products are considered produced in the United States if the total cost of all manufactured products included in the completed facility is attributable to not less than a 40% of manufactured products (including components) that are mined, produced, or manufactured in the United States.
  - Applies to projects placed in service in tax years beginning after 2022.
  - The thresholds are lower for off-shore wind.
- There is also an additional 10% Section 45Y PTC and Section 45E ITC for satisfaction of the DC requirement, but the thresholds for manufactured products are 40% for projects that start construction prior to 2025, 45% if construction starts in 2025, 50% if construction starts in 2026, and 55% thereafter.

# Bonus Credit – Location in an Energy Community

- Additional 10% PTC or ITC if the qualified facility is located in an “energy community,” which means one of the following:
  - A brownfield site (as defined under section 101(39) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980);
  - An area that currently has (or beginning in 2000, had) significant employment related to coal, oil, or natural gas extraction, processing, or transport; or
  - A census tract that (A) had a coal mine closed after 1999 or a coal-fired electric generating unit retired after 2009, or (B) directly adjoins a census tract described in (A).
- There is also a 10% Section 45E ITC or 45Y PTC for qualified projects located in an energy community.

# Bonus ITC – Small Solar and Wind Project Located in Low-Income Communities

- Additional 10-20% ITC or Section 48E ITC for small solar and wind facilities placed in service in connection with low-income communities.
  - Nameplate capacity cannot exceed 5 MW AC
  - The project must received an allocation of environmental justice solar and wind capacity limitations.
  - The placed in service date cannot be later than four years after receipt of the environmental justice solar and wind capacity limitation.

# Bonus ITC – Location in a Low-Income Community (continued)

- Additional 10% ITC for qualified projects located in a “low-income community” (as defined for new markets tax credit purposes) or on tribal land.
- Additional 20% ITC for a project that is part of a “qualifying low-income residential building project” and a “low-income economic benefit project.”
  - A qualifying low-income residential building project is a residential building project that participates in one of several listed programs.
  - A project is a low-income benefit project if at least 50% of the financial benefits of the electricity produced by the project are provided to households with income of less than 200% of the poverty line or less than 80% of the area median income.

# Bonus Credit Amount Applies to Applicable Credit Rate

- The additional tax credit is equal to the stated percentage of the applicable tax credit amount – i.e., a 10% additional tax credit is 10% of the rate that applies in the case of a phase out or if applicable W&A requirements are not met.
- Examples:
  - a 10% bonus ITC would only provide an additional 2% ITC if applicable W&A requirements are not met (for a total ITC of 8%).
  - Similarly, under current rates, a 10% bonus PTC would result in a total PTC of 0.55 cents per kWh (rather than 2.75 cents per kWh).

# Certain Credits Can Be Transferred

- Available for the ITC, PTC, Section 45Q Credit, Section 45V PTC, Section 45X PTC, Section 45Y PTC, and Section 48E ITC.
- Transfer must be to an unrelated person for cash.
- Important new tool for monetizing tax credits without using tax equity financing, which can be complicated and expensive.
- Amount paid is not includable in the gross income of the taxpayer or deductible by the transferee.
- The transferee cannot re-transfer the credits.
- Potential tax penalty if the tax credit claimed is higher than the amount allowed – i.e., the transferee will have to pay more additional tax than what would have been owed absent the transfer.



# Limited Direct Pay Option

- Provides an election to receive a tax refund equal to the amount of certain energy tax credits (including the ITC, PTC, Section 45Q Credit, Section 45V PTC, Section 45X PTC, Section 45Y PTC and Section 48E ITC).
- Available through the end of 2032, subject to a phase down in the direct pay value for projects that start construction after 2025.
- Generally available only to tax-exempt and government entities, tribes, rural electricity cooperatives, an Alaska Native Corporation, and the Tennessee Valley Authority.
- Limited exception that allows the election to be made by all taxpayers with respect to the Section 45V Clean Hydrogen Credit, Section 45Q Carbon Capture and Sequestration Credit, and Section 45X Advanced Manufacturing Credit; but only for the first 5 successive taxable years of such tax credit, which end prior to 2033.
- Potential tax penalty if the tax credit claimed is higher than the amount allowed – i.e., the if a portion of the tax refund claimed is greater than the tax credit allowed, the there will be additional tax owed with respect to the disallowed tax credit amount absent the election.

# Loan, Grant, and Consumer Rebate Opportunities

- *\$148 billion in direct appropriations to federal agencies.*
  - **Department of Energy**
  - **Environmental Protection Agency**
  - **Department of Agriculture**
  - Department of the Interior
  - Department of Transportation
  - General Services Administration
  - Department of Commerce
  - U.S. Postal Service
  - Department of Housing & Urban Development
  - Department of Homeland Security
  - Department of Defense
  - Federal Permitting Improvement Steering Council
  - Federal Energy Regulatory Commission
  - Council on Environmental Quality
  - Government Accountability Office
  - Office of Management and Budget

# Support for Disadvantaged Communities

The Biden Administration's Justice40 Initiative has made it a goal that 40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution. President Biden made this historic commitment when he signed Executive Order 14008 within days of taking office.

- The Inflation Reduction Act makes environmental justice a top priority.
- Many IRA programs include requirements that federal dollars are invested in low-income communities, communities of color, and rural areas.
- Direct funding opportunities will in many cases require a Justice40 component or partner.

# U.S. Department of Energy

*\$35 billion*

- Advanced Industrial Facilities Deployment Program (\$6 billion)
- Energy Infrastructure Reinvestment Financing (\$5 billion)
- High Efficiency Electric Home Rebate Program (\$4.5 billion)
- Home Energy Performance-Based, Whole House Rebates (\$4.3 billion)
- Loan Programs Office Title 17 Funding (\$3.6 billion)
- Domestic Manufacturing Conversion Grant Program (\$2 billion)
- Transmission Facility Financing (\$2 billion)
- National Laboratory Infrastructure (\$2 billion)
- Assistance of Latest and Zero Building Energy Code Adoption (\$1 billion)
- State-Based Home Energy Efficiency Contractor Training Grants (\$200 million)
- Interregional and Offshore Wind Electricity Transmission Planning, Modeling and Analysis (\$100 million)

# Environmental Protection Agency

*\$41 billion*

- Greenhouse Gas Reduction Fund (\$27 billion)
- Grants to Reduce Air Pollution at Ports (\$3 billion)
- Methane Emissions Reduction Program (\$1.55 billion)
- Clean Heavy-Duty Vehicles (\$1 billion)
- Grants to Address Air Pollution (\$280.5 million)
- Diesel Emissions Reduction Act Grants (\$60 million)
- Grants to Address Air Pollution in Schools (\$40 million)
- Grants to Industry to Support Investments in Advanced Biofuels (\$10 million)
- Greenhouse Gas Corporate Reporting (\$5 million)

# U.S. Department of Agriculture

*\$47 billion*

- Assistance for Rural Electric Cooperatives (\$10 billion)
- Funding for Electric Loans for Renewable Energy (\$1 billion)
- Competitive Grants for Non-Federal Forest Landowners (\$550 million)
- Competitive Grants for Non-Federal Forest Landowners (\$550 million)
- Biofuels Infrastructure (\$500 million)
- Loans and Grants for Underserved Farmers, Ranchers, or Forest Landowners (\$250 million)

## U.S. Department of the Interior

- Policy changes to fossil fuel royalty programs and new leasing requirements for energy development
- Drought mitigation funding (\$4 billion)

## General Services Administration

- Acquisition and installation of low-embodied carbon materials for GSA buildings (\$2.15 billion)
- Emerging and sustainable technologies (\$975 million)
- Convert facilities to high-performance green buildings (\$250 million)

## U.S. Postal Service

- *Clean Fleets (\$3 billion)*

## U.S. Department of Housing & Urban Development

- Loans and grants supporting improvement of energy and water efficiency in affordable housing, increased indoor air quality, and zero-emission electricity, among other uses (\$838 million)

## U.S. Department of Transportation

- Grants to develop and demonstrate low-emission aviation technologies and produce, transport, blend, or store sustainable aviation fuels (\$300 million)

# Implementation

- Federal agencies will soon begin promulgation of rules to implement the Inflation Reduction Act – as well as drafting Funding Opportunity Announcements
- Interested stakeholders should be engaging with federal officials to ensure the law is implemented appropriately and to identify opportunities





**THANK YOU**

