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Picture Becoming Clearer for the Inflation Reduction Act Tax Credits

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The Inflation Reduction Act of 2022 (IRA), signed by President Biden on August 16, 2022, changed a wide range of tax laws, and includes over \$320 billion in new and expanded incentives for energy efficiency, renewable and clean energy investments, fleet decarbonization, infrastructure improvements, and other sustainability-related investments. The effective dates of various provisions began applying January 1, 2023, and under the IRA, the changes will be implemented over an approximately 10-year plan period.

Recent Updates: On February 13, 2023, the U.S. Treasury Department, the U.S. Department of Energy, and the Internal Revenue Service released information on the Qualifying Advanced Energy Project Credit (QAEP) program under Internal Revenue Code (IRC) Section 48C. The QAEP program incentivizes clean energy property manufacturing and recycling, industrial decarbonization, and critical materials processing, refining, and recycling. The investment tax credit is up to 30%, including for the manufacturing of fuel cells and components for geothermal electricity and hydropower, equipment for carbon capture, and critical minerals processing facilities. More details about IRC 48C and other tax credits are in the chart below.

The release, Notice 2023-18 (the Notice), allocates \$4 billion of the \$10 billion in new credits for the QAEP program. Of the \$4 billion allocated under the Notice, \$1.6 billion is reserved for projects in coal communities. The application process for the QAEP program will begin on May 31, 2023.

Treasury also issued Notice 2023-17 on February 13th, establishing the Low-Income Communities Bonus Credit (LIC Bonus) program under IRC Section 48(e). The LIC Bonus program provides for an increase of up to 20 percentage points to the investment tax credit for solar and wind energy projects in low-income communities. The LIC Bonus program will allocate 1.8 gigawatts of capacity available in 2023 across four categories for solar and wind projects with maximum output of less than five megawatts (MW) in low-income communities (700MW), on Tribal land (200MW), for federally-subsidized residential buildings (including housing supported by the LIHTC and Section 8) (200MW)

and facilities where at least 50 percent of the financial benefits of the electricity produced go to households with incomes below 200 percent of the poverty line or below 80 percent of area median gross income (700MW).

The application process for the LIC Bonus program opens in two phases, with low-income residential buildings and those that benefit low-income households accepted first during a 60-day application window expected in calendar Q3, with applications for other projects to follow.

Prevailing Wage and Apprenticeships: The IRA utilizes the two-tiered credit structure (same as the Build Back Better Act) to receive an increased tax credit rate. The increased rate (up to 5x the base rate) requires the taxpayer to meet prevailing wage and apprenticeship requirements. There are also bonus credit opportunities for IRC Section 45 and IRC Section 48 credits based on the project location (in an energy or low-income community).

Notice 2022-61, released November 30, 2022, provides preliminary guidance for the prevailing wage and apprenticeship provisions in the IRA. The guidance is applicable to projects with construction beginning January 30, 2023 or later, and re-confirms the rules for determining when “construction begins” – either when physical work of a significant nature begins or, under the safe harbor, when 5% or more of the total cost of the project or facility is incurred, subject to continuous construction or efforts requirements.

The guidance in Notice 2022-61 is primarily a review of the IRA provisions. However, the guidance does indicate that the U.S. Treasury and IRS may issue regulations and additional guidance about the prevailing wage and apprenticeship requirements. In the interim, the IRA provides that laborers and mechanics employed by the taxpayer (the owner of the project when placed in service) and all contractors and subcontractors engaged by the taxpayer must be paid prevailing wages of the locality for the specific profession and classification during construction, alteration, or repair of a covered facility. Unlike the Davis-Bacon and Related Acts (DBRA), the IRA does not appear to require certified payroll be submitted to the U.S. Department of Labor (DOL) – but the guidance otherwise adopts key definitions, including “wages,” “laborer,” and “construction” from the DBRA. Wage determinations are published by the DOL at www.sam.gov, and if the information needed is not listed there, taxpayers can request a wage determination or rate from the DOL via email at IRAPrevailingWage@dol.gov.

The text of the IRA itself allows a taxpayer to cure a failure to satisfy prevailing wages through catch-up payments, with interest, to each worker paid below the prevailing wage and penalty payments to the IRS that amount to \$5,000 per affected worker. Higher payments to workers (3x the difference between actual and prevailing wages) and higher penalties (\$10,000 per affected worker) apply where the failure to pay prevailing wages is the result of an intentional disregard of the regulations.

The apprenticeship provisions generally require (1) that a certain percentage of the total labor hours for construction, alteration or repair of a covered facility must be performed by qualified apprentices; (2) taxpayers (and their contractors and subcontractors) that employ 4 or more individuals must also employ at least 1 qualified apprentice; and (3) taxpayers must maintain the required ratio of journeymen to apprentices for the duration of the project (for example, construction that begins during 2023 requires 12.5%, and after December 31, 2023 it requires at least 15% qualified apprenticeship labor). The guidance notes that taxpayers must employ apprentices through a “registered apprenticeship program,” meaning one registered under the National Apprenticeship Act or by the DOL. A good-faith effort exception exists

under the Notice if the taxpayer requests qualified apprentices from a registered program and either the request is denied or the program fails to respond to the request within five (5) business days. A taxpayer can only rely on this exception if they maintain sufficient records documenting the request.

Transferability of Credits: The IRA authorizes the one-time cash sale of certain 2023 and later federal tax credits to other parties pursuant to Section 6418 of the IRC without the use of tax equity structures. The seller notifies the IRS of the sale by filing an “election” with its tax return. Sellers do not have to report the sales proceeds as income, and buyers cannot deduct the purchase price. Additional reporting or registration rules are expected from Treasury.

Overview of Commercial Tax Credits/Deductions in the IRA: The specific breakdown of IRA commercial tax credits is below. We plan to provide a listing of the IRA funding (grants, primarily for nonprofit and governmental entities) in a subsequent article.

IRA Category

IRC Section

Notes/Description

Transferable under §6418

Production Tax Credit for Electricity from Renewables

45

Production of electricity from renewable sources; construction starting before 1/1/25; credit modified with prevailing wage (PW) and apprenticeship requirements (5x); domestic content (10%) and in energy community (10%); base credit amount is 0.3 cents/kWh, inflation adjusted

Yes

Investment Tax Credit for Energy Property

48

Investment in renewable energy projects; construction begins before 1/1/25; base investment tax credit is 6% for the first 10 years, scaling down to 5.2% in

2033 and 4.4% in 2034; credit modified with PW and apprenticeship requirements; project can include standalone storage (at least 5kWh), micro grid controllers (<20MW) and interconnection (<5MW); fuel cell, solar, geothermal, small wind, energy storage, biogas, and combined heat and power properties also eligible; base credit is 6% of basis in energy property, up to 5x enhancement, plus up to 10% for domestic content and 10% for energy community

Yes



Increase in Energy Credit for Solar and Wind Facilities Placed in Service in Connection with Low-Income Communities

48(e),
48E(h)

Additional investment tax credit for small-scale solar and wind facilities in low-income communities. 48(e) begins in 2023 and ends when the 48E(h) credit becomes available (2025 through 2032); allocated investment credit, capped at 1.8 GW per year (unused capacity carries over to following year); for solar and wind facilities with a maximum net output of less than 5 MW, including associated energy storage technology; base credit amount: 6% of qualified investment (basis of energy property), with enhancements (credit increased by 10% if located in low-income communities or on Tribal land; 20% if part of federally subsidized housing programs or that offer at least 50% of the financial benefits of the electricity produced to low-income households (bonus requires an application by the taxpayer, with a cumulative total of 1.8 GW of direct current capacity per year available for allocation)

Yes

Zero-Emission Nuclear Power Production Credit

45U

For electricity produced at a qualified nuclear power facility; produced and sold 1/1/24-12/31/32; available for existing plants not eligible under 45J; credit is 0.3 cents/kWh, inflation adjusted after 2024; phases down depending on the amount of energy produced and the gross receipts of the nuclear power facility; bonus of

5x base credit if PW is met for workers doing alteration or repair at the facility

Yes

Clean Electricity Production Tax Credit

45Y

Technology-neutral credit for production of clean electricity; replaces Section 45 for electricity generated from renewable sources (which was extended through 2024); for facilities placed in service after 12/31/24, phase-out starts the later of (a) 2032 or (b) when U.S. greenhouse gas emissions from electricity are 25% of 2022 emissions or lower; credit is 0.3 cents/kW, inflation adjusted; increased 5x for PW and apprenticeship; 10% for domestic content; 10% if located in an energy community

Yes

Clean Electricity Investment Tax Credit

48E

Technology-neutral credit for facilities generating clean electricity; replaces Section 48 for electricity generated from renewable sources (which was extended through 2024); for facilities placed in service after 12/31/24; phase-out starts the later of (a) 2032 or (b) when U.S. greenhouse gas emissions from electricity are 25% of 2022 emissions or lower; credit is 6% of qualified investment (basis); increased 5x for PW and apprenticeship; 10% for domestic content; 10% if located in an energy community

Yes

Cost Recovery for Qualified Facilities, Qualified Property, and Energy Storage Technology

168(e)(3)(B)

Additional tax deduction for facilities or property qualifying for Section 45Y tax credit. These facilities or property will be treated as 5-year property for purposes of cost recovery (able to deduct from their taxable income the depreciating value of their business assets, such as equipment, faster than the value actually declines)

No

Advanced Energy Project Credit

48C

\$10,000,000,000; credit for investments in advanced energy projects, as defined in 26 USC § 48C(c)(1); available when the application and certification process begins (5/31/23) and ends when credits are fully allocated; 48C provides \$10 billion of allocations, at least \$4 billion of which must be allocated in energy communities; expands eligibility to new types of projects (includes a project that (1) re-equips, expands, or establishes an industrial or manufacturing facility for the production or recycling of a range of clean energy equipment and vehicles; (2) re-equips an industrial or manufacturing facility with equipment designed to reduce greenhouse gas emissions by at least 20 percent; or (3) re-equips, expands, or establishes an industrial facility for the processing, refining, or recycling of critical materials); base credit amount is 6% of taxpayer's qualifying investment; bonus credit (5x) makes it a 30% credit for projects meeting prevailing wage and registered apprenticeship requirements

Yes

Advanced Manufacturing Production Credit

45X

Production tax credit for domestic manufacturing of components for solar and wind energy, inverters, battery components, and critical minerals; credit for critical minerals is permanent starting in 2023. For other items, the full credit is available between 2023-2029 and phases down over 2030-2032; domestic manufacturers only; credit varies by technology; cannot claim both 45X and 48C; for profit entities are eligible for up to 5 years of direct pay (which expires at the end of 2032) for tax years after December 31, 2022 in which they produce eligible components if they make an election

Yes

Clean Vehicle Credit

30D

Tax credit for purchases of clean vehicles; subject to income limits; \$3,750 plus bonus \$3,750 for meeting battery component threshold; subject to MSRP limits; additional limits in 2024 and 2025

No (but permitted starting in 2024 to dealer at point of sale)

Credit for Previously-Owned Clean Vehicles

25E

Tax credit for used clean vehicles; lesser of \$4,000 or 30% of sales price; income limits and sales price limit (\$25,000)

No (but permitted starting in 2024 to dealer at point of sale under 25E(f))

Credit for Qualified Commercial Clean Vehicles

45W

For purchasers of qualified commercial clean vehicles placed in service after 1/1/23 and acquired before 1/1/33; tax credit for commercial use or lease; for businesses that acquire motor vehicles or mobile machinery for use or lease; for tax-exempt entities that acquire them for use; credit is the lesser of (a) 15% of the vehicle's basis (i.e. its cost to the purchaser) or 30% for vehicles without internal combustion engines, or (b) the amount the purchase price exceeds the price of a comparable internal combustion vehicle; credit is capped at \$7,500 for vehicles < 14,000 lbs and \$40,000 for all other clean vehicles

No

Alternative Fuel Vehicle Refueling Property Credit

30C

Tax credit for alternative fuel vehicle refueling and charging property in low-income and rural areas; alternative fuels include electricity, ethanol, natural gas, hydrogen, biodiesel, and others; available 1/1/23 – 12/31/32; for consumers and businesses; includes prevailing wage and registered apprenticeship requirements for businesses claiming the credit; adds bidirectional charging equipment, charging equipment for 2- and 3-wheel electric vehicles; refueling property must be for clean-burning fuels, as defined in the statute, and must be located in low-income or rural areas; base credit is 6% of the cost for businesses, limited to a \$100,000 credit per item of property for businesses; 30% for individuals, limited to \$1,000; businesses can claim a 30% credit for projects meeting prevailing wage and registered apprenticeship requirements

Yes (if used in trade or business)

Extension of Tax Credits for Biodiesel and Renewable Diesel

40A,
6426(c),
6427(e)

Provides income and excise tax credits for biodiesel and renewable diesel; available through 12/31/24; for producers of biodiesel, biodiesel mixtures, and renewable diesel; base credit is \$1.00 per gallon for biodiesel, biodiesel mixtures, and renewable diesel with additional \$0.10 credit for small agri-diesel producers; \$1.00-per-gallon excise tax credit for biodiesel and renewable diesel mixtures

No

Extension of Tax Credit for Alternative Fuels

6426(d),
6426(e),
6427(e)

Excise tax credit extended through 12/31/24; for registered producers; \$0.50 per gallon for alternative fuels and alternative fuel mixes

No

Extension of Second-Generation Biofuel Incentives

40

Income tax credit (nonrefundable) for second-generation biofuel production through 12/31/24; base credit amount is \$1.01 per gallon

No

Clean Fuel Production Credit

45Z

Credit for domestic production of clean transportation fuels (including sustainable aviation fuels); produced after 12/31/24 and used or sold before 12/31/27; registered U.S. producers; fuels with less than 50 kilograms of carbon dioxide equivalent per million British thermal units (CO₂e per mMBTU) qualify as clean fuels eligible for credits; base credit amount is \$0.20/gallon for non-aviation fuel and \$0.35/gallon for aviation fuel, multiplied by the carbon dioxide "emissions factor" of the fuel; inflation adjusted after 2024; credit is 5x the base amount (\$1/gallon for non-aviation fuel, \$1.75 gallon for aviation fuel, multiplied by the emissions factor) for facilities meeting prevailing wage and registered apprenticeship requirements

Yes

Sustainable Aviation Fuel Credit

40B

Credit for the sale or use of sustainable aviation fuel (SAF) that achieves a lifecycle greenhouse gas emissions reduction of at least 50% as compared with petroleum-based jet fuel; 1/1/23-12/31/24; producers and blenders of SAF-kerosene fuel mixtures for aviation; qualified SAF mixture must be made in the U.S. and fueling of the aircraft must occur in the U.S.; credit is \$1.25/gallon of SAF; with bonus up to \$0.50/gallon depending on lifecycle greenhouse gas emissions of SAF relative to petroleum-based jet fuel

No

Credit for Carbon Oxide Sequestration

45Q

Credit for carbon dioxide sequestration coupled with permitted end uses within the U.S.; credit can be claimed for 12 years after a facility is placed in service (which must be prior to 1/1/33); PTC based on carbon capture and sequestration, injection for enhanced oil recovery (EOR), or utilization; facilities within minimum volumes: 1,000 metric tons of CO2 per year for DAC facilities; 18,750 metric tons for electricity generating facilities (with carbon capture capacity of 75% of baseline CO2 production); 12,500 metric tons for other facilities; base credit is \$17/metric ton of carbon dioxide captured and sequestered; \$12/metric ton for carbon dioxide that is injected for enhanced oil recovery or utilized (those amounts are \$36 and \$26, respectively, for direct air capture facilities); bonus is 5x the base amounts if the facility meets prevailing wage and registered apprenticeship requirements; for profit entities are eligible for up to 5 years of direct pay (which is less than the full credit period and expires at the end of 2032) if they make an election (applies to carbon capture equipment (CCE) that is originally placed in service after December 31, 2022)

Yes

Clean Hydrogen Production Tax Credit

45V

Tax credit for the production of clean hydrogen at a qualified clean hydrogen production facility; for hydrogen produced after 12/31/22 (for facilities placed in service before 1/1/33 for their first 10 years in service); for U.S. hydrogen producers; base credit is \$0.60/kg (adjusted for inflation) multiplied by the applicable percentage (20% to 100% depending on lifecycle greenhouse gas emissions); bonus is 5x the base credit if the facility meets prevailing wage and registered apprenticeship requirements; for profit entities are eligible for up to 5 years of direct pay (which is less than the full credit period and expires at the end of 2032) if they make an election

Yes

Energy Efficient Commercial Buildings Deduction

179D

Tax deduction for energy efficiency improvements to commercial buildings, such as improvements to interior lighting; heating, cooling, ventilation, and hot water; and building envelope; generally begins in 2023; owners and long-term lessees of commercial buildings, designers of energy efficient building property (architects, engineers) and tax-exempt owners of commercial properties, pending Treasury guidance on deduction allocation; \$0.50-\$1 per square foot, depending on increase in efficiency, with deduction over four year periods capped at \$1 per square foot (inflation adjusted); alternatively, taxpayers can deduct adjusted basis in “qualified retrofit plans” that reduce a building’s energy use intensity by at least 25%; bonus deduction is 5x the base amount if the project meets prevailing wage and registered apprenticeship requirements

No

A PDF version of this overview chart can be [found here](#).

Vorys encourages you to contact your Vorys attorney or advisor with questions about these new provisions. Please feel free to contact the following Vorys professionals: Scott J. Ziance, 614.464.8287, sjziance@vorys.com; Christopher J. Knezevic, 614.464.5627, cjknezevic@vorys.com; R. Elissa Wilson, 614-464-6224, rewilson@vorys.com; Sean Byrne, 614.464.8247, spbyrne@vorys.com; Jonathan K. Stock, 614.464.5647, jkstock@vorys.com; or Janie S. Hanna, jshanna@vorys.com, 330.252.5703.