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Inflation Reduction Act (IRA) Wage and Apprenticeship Requirements: Effect on Tax Credit Values

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Nicholas E. Buffie
Analyst in Public Finance

Inflation Reduction Act (IRA) Wage and Apprenticeship Requirements: Effect on Tax Credit Values

The Inflation Reduction Act of 2022 (P.L. 117-169; IRA) created or modified 21 tax provisions subsidizing the use of “clean” energy. These benefits targeted taxpayers who purchase electric vehicles, produce fuels with low greenhouse gas emissions, make energy-efficiency upgrades to buildings, and engage in other activities potentially resulting in lower fossil fuel consumption.

Low-emission energy sources such as wind, solar, and nuclear often have high fixed costs and low operational costs. Similarly, consumers pay a certain amount up front for energy-efficiency upgrades to buildings and benefit from lower energy bills thereafter.

To reduce these high fixed costs and thereby increase energy efficiency and clean-energy consumption, the IRA tax credits and deductions subsidize the construction, alteration, or repair of certain energy infrastructure. The credits and deductions are accompanied by prevailing wage and registered apprenticeship (PWA) requirements that increase the generosity of the credits or deductions five-fold. (Although these rules are referred to as “requirements,” they can be thought of as requirements to receive a *larger* credit or deduction rather than as requirements to qualify for a credit or deduction.) The prevailing wage requirements stipulate that laborers and mechanics involved in the construction, alteration, or repair of facilities, projects, property, and equipment (FPPE) must be paid at least the average wage of workers performing similar work in the same locality. The registered apprenticeship requirements stipulate that registered apprentices must supply at least 12.5% or 15% (depending on when the given facility began construction) of the labor hours associated with constructing, altering, or repairing FPPEs used to claim an IRA tax benefit. Under the *good faith effort exception*, firms are deemed to have met the apprenticeship requirements if they request apprentices from a registered apprenticeship program and either do not receive a response within five business days or are denied for reasons other than their refusal to comply with the requirements. The good faith effort exception may limit the impact of the apprenticeship requirements.

Table 2 describes the 12 IRA tax provisions that include PWA requirements, and contrasts the value of tax credits or deductions for firms meeting the PWA requirements with firms not meeting PWA requirements. Tax credit or deduction values are generally five times as large for firms meeting PWA requirements as for firms not meeting the requirements. For example, various tax credits are equivalent to 6% of applicable investment costs for firms not meeting PWA requirements and to 30% for firms meeting PWA requirements. Tax credit bonuses are also sometimes increased five-fold, though this is not true of every bonus credit.

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Wage and Apprenticeship Requirements in the IRA

The Inflation Reduction Act of 2022 (P.L. 117-169; IRA) enacted or modified 21 tax provisions subsidizing energy efficiency and “clean” energy use.¹ These benefits targeted taxpayers who purchase electric vehicles, produce fuels with low greenhouse gas emissions, make energy-efficiency upgrades to buildings, and engage in other activities potentially resulting in lower fossil fuel consumption.² (The term *taxpayer* may refer to either businesses or individuals who pay federal taxes.)

Low-emissions energy sources such as wind, solar, and nuclear often have high fixed costs (costs associated with getting facilities up and running) paired with low operational costs (otherwise known as variable costs).³ Similarly, the fixed cost of energy-efficiency upgrades to buildings is essentially the only cost to consumers, who benefit from lower energy bills thereafter.⁴ To reduce these high fixed costs, the IRA’s tax provisions generally subsidize the construction, alteration, or repair of clean energy infrastructure.

For business tax credits associated with constructing, altering, or repairing facilities, projects, property, or equipment (FPPE) generating clean energy, the applicable credit is often larger if the firm meets prevailing wage and registered apprenticeship (PWA) requirements.⁵ Firms may claim these larger credits without meeting the PWA requirements only if (1) they are small facilities producing less than 1 megawatt of energy, or (2) they began construction on the facilities used to claim the credit before January 29, 2023.⁶

Table 1 summarizes the applicability of PWA requirements to all 21 energy tax provisions from the IRA. The requirements apply to nine energy-related business tax credits and one energy-related business tax deduction. Two IRA business tax credits are subject to prevailing wage requirements but not subject to registered apprenticeship requirements. The PWA requirements do not apply to the IRA’s individual tax credits, perhaps because private individuals would have difficulty verifying compliance with the requirements.⁷ Finally, five business tax credits from the IRA are subject to neither prevailing wage nor registered apprenticeship requirements.

The Internal Revenue Service (IRS) issued initial guidance for the PWA requirements on November 30, 2022; issued proposed regulations on August 30, 2023; and issued final regulations on June 25, 2024.⁸

¹ P.L. 117-169.

² For descriptions of the energy tax provisions in the IRA, see CRS Report R47202, *Tax Provisions in the Inflation Reduction Act of 2022 (H.R. 5376)*, and CRS Report R46865, *Energy Tax Provisions: Overview and Budgetary Cost*.

³ CRS Report R44715, *Financial Challenges of Operating Nuclear Power Plants in the United States*, by Phillip Brown and Mark Holt; Justin Worland, “What High Interest Rates Mean for U.S. Renewable Energy,” *Time*, May 19, 2023; and Tim Gould et al., *Financial Headwinds for Renewables Investors: What’s the Way Forward?*, International Energy Agency, December 8, 2023, <https://www.iea.org/commentaries/financial-headwinds-for-renewables-investors-what-s-the-way-forward>.

⁴ Richard A. Muller, *Energy for Future Presidents: The Science Behind the Headlines* (W.W. Norton & Company, Inc., 2013), pp. 114-129.

⁵ The PWA “requirements” can be thought of as *requirements for receiving a larger credit or deduction* rather than as *requirements to receive a credit or deduction*.

⁶ Internal Revenue Service (IRS), “Increased Amounts of Credit or Deduction for Satisfying Certain Prevailing Wage and Registered Apprenticeship Requirements,” 89 *Federal Register* 53184-53273, June 25, 2024.

⁷ These credits were later repealed, according to varying timelines, in the FY2025 reconciliation law (P.L. 119-21).

⁸ IRS, “Prevailing Wage and Apprenticeship Initial Guidance Under Section 45(b)(6)(B)(ii) and Other Substantially Similar Provisions,” 87 *Federal Register* 73580-73585, November 30, 2022, <https://www.federalregister.gov/> (continued...)

Table I. Prevailing Wage and Registered Apprenticeship Requirements, by IRA Tax Provision

	Prevailing Wage Requirement	Registered Apprenticeship Requirement
<i>Business and individual tax credits</i>		
Alternative Fuel Vehicle Refueling Property Credit (IRC §30C)	✓ ^a	✓ ^a
<i>Business tax credits</i>		
Second-Generation Biofuel Producer Credit (IRC §40)	n/a	n/a
Credits for Agri-biodiesel, Biodiesel, Biodiesel Mixtures, Renewable Diesel, Alternative Fuels, and Alternative Fuels Mixtures (IRC §40A)	n/a	n/a
Sustainable Aviation Fuel Credit (IRC §40B)	n/a	n/a
Renewable Electricity Production Tax Credit (IRC §45)	✓	✓
New Energy-Efficient Home Credit (IRC §45L)	✓	n/a
Credit for Carbon Oxide Sequestration (IRC §45Q)	✓	✓
Zero-Emission Nuclear Power Production Credit (IRC §45U)	✓	n/a
Clean Hydrogen Production Credit (IRC §45V)	✓	✓
Credit for Qualified Commercial Clean Vehicles (IRC §45W)	n/a	n/a
Advanced Manufacturing Production Credit (IRC §45X)	n/a	n/a
Clean Electricity Production Credit (IRC §45Y)	✓	✓
Clean Fuel Production Credit (IRC §45Z)	✓	✓
Energy Investment Tax Credit (IRC §48)	✓	✓
Qualifying Advanced Energy Project Credit (IRC §48C)	✓	✓
Clean Electricity Investment Credit (IRC §48E)	✓	✓
<i>Business tax deductions</i>		
Energy Efficient Commercial Buildings Deduction (IRC §179D)	✓	✓
<i>Individual tax credits</i>		
Energy Efficient Home Improvement Credit (IRC §25C)	n/a	n/a
Residential Clean Energy Credit (IRC §25D)	n/a	n/a
Used Clean Vehicle Credit (IRC §25E) ^b	n/a	n/a
Clean Vehicle Credit (IRC §30D)	n/a	n/a

Source: CRS analysis of P.L. 117-169 and the Internal Revenue Code (IRC).

documents/2022/11/30/2022-26108/prevailing-wage-and-apprenticeship-initial-guidance-under-section-45b6bii-and-other-substantially; IRS, “Increased Credit or Deduction Amounts for Satisfying Certain Prevailing Wage and Registered Apprenticeship Requirements,” 88 *Federal Register* 60018-60054, August 30, 2023, <https://www.federalregister.gov/documents/2023/08/30/2023-18514/increased-credit-or-deduction-amounts-for-satisfying-certain-prevailing-wage-and-registered>; and IRS, “Increased Amounts of Credit or Deduction for Satisfying Certain Prevailing Wage and Registered Apprenticeship Requirements,” 89 *Federal Register* 53184-53273, June 25, 2024, <https://www.federalregister.gov/documents/2024/06/25/2024-13331/increased-amounts-of-credit-or-deduction-for-satisfying-certain-prevailing-wage-and-registered>.

Notes: “n/a” stands for “not applicable.”

- a. Requirement applies to the business portion but not to the individual portion of the tax credit.
- b. The used clean vehicle credit is alternatively referred to as the “credit for previously-owned clean vehicles” or the “previously-owned clean vehicles credit.”

Prevailing Wage Requirements

To satisfy the prevailing wage requirements, laborers and mechanics constructing, altering, or repairing an FPPE must be paid wages at or above the *prevailing wage* (including fringe benefits).⁹ The prevailing wage is the average wage of laborers and mechanics performing similar work in the same locality; prevailing wage rates are posted at the federal government’s System for Awards Management (SAM) website.¹⁰ Laborers and mechanics are workers (including apprentices and helpers) whose duties are physical or manual in nature.¹¹

For projects spanning more than one geographic area and therefore coinciding with more than one prevailing wage, businesses must pay the wage specified for each area.¹² For offshore wind facilities and other offshore energy property, businesses may use the prevailing wage in the closest onshore geographic area or request a supplemental wage determination.¹³

To comply with the requirements, businesses must pay the prevailing wage rates in place when a contract is established, but are generally not required to update those rates throughout the project’s life.¹⁴ However, additional work beyond that in the initial contract requires a new wage determination, and prevailing wage rates for contracts “not tied to the completion of any specific work” must be updated annually.¹⁵ Laborers and mechanics involved in the “alteration or repair of a facility after the facility is placed in service” must be paid the prevailing wage that is “in effect at the time the contract for the alteration or repair work is executed by the taxpayer and a contractor.”¹⁶

Registered Apprenticeship Requirements

The apprenticeship requirements stipulate that registered apprentices must provide at least 12.5% or 15% of the total labor hours associated with constructing, altering, or repairing any FPPes.¹⁷

⁹ For background information on prevailing wage requirements, see CRS In Focus IF11927, *Federally Funded Construction and the Payment of Locally Prevailing Wages*, by Elizabeth Weber Handwerker and Jon O. Shimabukuro.

¹⁰ For more information on prevailing wages as posted by the System for Awards Management (SAM), see General Services Administration, SAM, “Wage Determinations,” <https://sam.gov/wage-determinations>.

¹¹ Department of Labor, “Prevailing Wage and the Inflation Reduction Act,” <https://www.dol.gov/agencies/whd/IRA>; and Keith Martin et al., “Final Wage and Apprentice Requirements,” Norton Rose Fulbright, June 24, 2024, <https://www.projectfinance.law/publications/2024/june/final-wage-and-apprentice-requirements/>.

¹² IRS, “Increased Amounts of Credit or Deduction,” p. 53253.

¹³ IRS, “Increased Amounts of Credit or Deduction,” p. 53206.

¹⁴ IRS, “Increased Amounts of Credit or Deduction,” pp. 53207 and 53253.

¹⁵ IRS, “Increased Amounts of Credit or Deduction,” p. 53208.

¹⁶ IRS, “Frequently Asked Questions about the Prevailing Wage and Apprenticeship Under the Inflation Reduction Act,” July 3, 2024, <https://www.irs.gov/credits-deductions/frequently-asked-questions-about-the-prevailing-wage-and-apprenticeship-under-the-inflation-reduction-act>.

¹⁷ A *registered apprentice* is an individual participating in a registered apprenticeship program under the National Apprenticeship Act.

The threshold is 12.5% for FPPEs beginning construction in 2023 and 15% for FPPEs beginning construction after 2023.¹⁸

Taxpayers, contractors, and subcontractors employing four or more individuals in the construction, alteration, or repair of an FPPE must employ at least one qualified apprentice.¹⁹ In addition, the number of apprentices per journeyworker cannot exceed certain ratios prescribed by the Department of Labor and state apprenticeship agencies.²⁰ This “ratio requirement” is applied on a daily basis.²¹

Under the *good faith effort exception*, firms are deemed to have met the apprenticeship requirements if they request apprentices from a registered apprenticeship program and either do not receive a response within five business days or are denied for reasons other than their refusal to comply with the apprenticeship program requirements.²² Taxpayers must submit new requests for registered apprentices every year to continue qualifying for the exception.²³ The good faith effort exception is meant to accommodate situations in which the potential supply of registered apprentices does not meet the demand necessary to otherwise comply with the apprenticeship requirements.²⁴ The good faith effort exception may limit the impact of the apprenticeship requirements.

Tax Values for Firms Meeting vs. Not Meeting the PWA Requirements

Table 2 shows how the values of 11 IRA tax credits and one deduction are affected by compliance with the PWA requirements. IRA tax credits not subject to the requirements are not included. For tax provisions affected by the PWA requirements, credit and deduction values are *five times* the amount for firms meeting the requirements as for firms not meeting them; precise values may depart from this general rule somewhat due to rules about rounding credit or deduction values to the nearest cent or dollar. Apart from this five-fold multiplier, the provisions are otherwise the same regardless of firms’ PWA compliance. Credit and deduction values are listed in **bold** to facilitate easy visual comparisons.

Additional information on these credits and deductions is available in CRS Report R46865, *Energy Tax Provisions: Overview and Budgetary Cost*, and CRS Report R47202, *Tax Provisions in the Inflation Reduction Act of 2022 (H.R. 5376)*. Where applicable, **Table 2** includes references

¹⁸ IRS, “Increased Amounts of Credit or Deduction,” p. 53185. The threshold is 10% for FPPEs beginning construction before 2023. However, because facilities beginning construction before January 29, 2023, are eligible for the maximum credit amounts regardless of taxpayer compliance with the PWA requirements, the 10% requirement is effectively void.

¹⁹ IRS, “Increased Credit or Deduction Amounts,” pp. 60020 and 60048.

²⁰ According to the Department of Labor, *journeyworker* means “a worker who has attained a level of skill, abilities, and competencies recognized within an industry as having mastered the skills and competencies for the occupation.” See Department of Labor, “Inflation Reduction Act Apprenticeship Resources,” Apprenticeship USA, <https://www.apprenticeship.gov/inflation-reduction-act-apprenticeship-resources>.

²¹ The daily requirement was established in the 2023 proposed regulations and verified in the final 2024 regulations. See IRS, “Increased Credit or Deduction Amounts,” p. 60030; and IRS, “Increased Amounts of Credit or Deduction,” p. 53225.

²² 26 U.S.C. §45(b)(8)(D)(ii) and IRS, “Increased Amounts of Credit or Deduction,” pp. 53186 and 53228.

²³ IRS, “Increased Amounts of Credit or Deduction,” pp. 53232 and 53264. Page 53264 gives examples of cases that do and do not qualify for the good faith effort exception.

²⁴ IRS, “Increased Amounts of Credit or Deduction,” p. 53227. The regulation states: “the Good Faith Effort Exception contemplates that the supply of available qualified apprentices may not always match the demand necessary to meet the Apprenticeship Requirements.”

to short CRS products (two pages or fewer) describing the given credit or deduction in greater detail.

Table 2. Effect of Wage and Apprenticeship Requirements on IRA Tax Benefits

	Credit or Deduction for Firms Not Meeting PWA Requirements	Credit or Deduction for Firms Meeting PWA Requirements^a
Alternative Fuel Vehicle Refueling Property Credit (IRC §30C)	<p>The Section 30C credit is equal to 6% of the cost of installing qualified alternative fuel vehicle refueling property at a taxpayer’s business, up to a limit of \$100,000 per property item.</p> <p>For property installed on a personal residence, the credit is equal to 30% of installation costs up to a maximum value of \$1,000. (The PWA requirements do not apply to property installed at personal residences.)</p> <p>The FY2025 reconciliation law (P.L. 119-21) terminated this credit for property placed in service after June 2026.</p>	<p>The Section 30C credit is equal to 30% of the cost of installing qualified alternative fuel vehicle refueling property at a taxpayer’s business, up to a limit of \$100,000 per property item.</p> <p>For property installed on a personal residence, the credit is equal to 30% of installation costs up to a maximum value of \$1,000. (The PWA requirements do not apply to property installed at personal residences.)</p> <p>The FY2025 reconciliation law (P.L. 119-21) terminated this credit for property placed in service after June 2026.</p>
Renewable Electricity Production Tax Credit (IRC §45)	<p>The renewable electricity production tax credit may be claimed by facilities producing electricity from renewable energy sources. Qualifying facilities must have commenced construction before January 1, 2025.</p> <p>For calendar year 2023, the credit was equivalent to 0.6 cents per kilowatt-hour (kWh) of electricity produced by wind, closed-loop biomass, geothermal energy, and solar energy facilities that were placed in service after 2021. The credit was 0.3 cents per kWh for facilities producing electricity from open-loop biomass, small irrigation power, and landfill gas and trash that were placed in service after 2021. The credit was 0.3 cents per kWh for qualified hydropower and marine and hydrokinetic renewable energy facilities that were placed in service in 2022. For qualified hydropower and marine and hydrokinetic renewable energy facilities that were placed in service after 2022, the 2023 credit amount was 0.6 cents per kWh. Credit values are adjusted annually for inflation, and taxpayers may claim the credit for the first 10 years of a facility’s production.</p> <p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p> <p>Taxpayers receiving the production tax credit are eligible for a 10% bonus credit if certain shares of the iron, steel, and manufactured products used to construct the facility were produced in the United States.^c Taxpayers are eligible for a separate</p>	<p>The renewable electricity production tax credit may be claimed by facilities producing electricity from renewable energy sources. Qualifying facilities must have commenced construction before January 1, 2025.</p> <p>For calendar year 2023, the credit was equivalent to 3.0 cents per kilowatt-hour (kWh) of electricity produced by wind, closed-loop biomass, geothermal energy, and solar energy facilities that were placed in service after 2021. The credit was 1.5 cents per kWh for facilities producing electricity from open-loop biomass, small irrigation power, and landfill gas and trash that were placed in service after 2021. The credit was 1.5 cents per kWh for qualified hydropower and marine and hydrokinetic renewable energy facilities that were placed in service in 2022. For qualified hydropower and marine and hydrokinetic renewable energy facilities that were placed in service after 2022, the 2023 credit amount was 3.0 cents per kWh. Credit values are adjusted annually for inflation, and taxpayers may claim the credit for the first 10 years of a facility’s production.</p> <p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p> <p>Taxpayers receiving the production tax credit are eligible for a 10% bonus credit if certain shares of the iron, steel, and manufactured products used to construct the facility were produced in the United States.^c Taxpayers are eligible for a separate</p>

	Credit or Deduction for Firms Not Meeting PWA Requirements	Credit or Deduction for Firms Meeting PWA Requirements^a
New Energy-Efficient Home Credit (IRC §45L)	<p>10% bonus credit if the facility used to claim the credit is located in an <i>energy community</i>.^d Bonus credit amounts are calculated after considering any reduction for financing from tax-exempt bonds.</p> <p>For multifamily dwelling units, contractors may receive a credit equal to \$500 per unit meeting certain Energy Star efficiency standards and \$1,000 per unit meeting Zero Energy Ready Home standards established by the Department of Energy. (These are known as “DOE ZERH standards.”)</p> <p>For homes acquired after 2021, the credit is \$2,500 if the home meets certain Energy Star efficiency standards and is \$5,000 if the home meets DOE ZERH standards.</p> <p>The FY2025 reconciliation law terminated this credit for homes acquired after June 2026.</p>	<p>10% bonus credit if the facility used to claim the credit is located in an <i>energy community</i>.^d Bonus credit amounts are calculated after considering any reduction for financing from tax-exempt bonds.</p> <p>For multifamily dwelling units, contractors may receive a credit equal to \$2,500 per unit meeting certain Energy Star efficiency standards and \$5,000 per unit meeting Zero Energy Ready Home standards established by the Department of Energy. (These are known as “DOE ZERH standards.”)</p> <p>For homes acquired after 2021, the credit is \$2,500 if the home meets certain Energy Star efficiency standards and is \$5,000 if the home meets DOE ZERH standards.</p> <p>The FY2025 reconciliation law terminated this credit for homes acquired after June 2026.</p> <p>There is no apprenticeship requirement for this provision.</p>
Credit for Carbon Oxide Sequestration (IRC §45Q) ^e	<p>The base credit amounts are \$36 per metric ton of carbon oxide that is captured and geologically sequestered, \$26 per metric ton that is reused, and \$36 per metric ton that is captured using direct air capture (DAC) technologies and then geologically sequestered. The credit is \$26 per metric ton for carbon oxide captured using DAC that is utilized in a qualified manner. These amounts are scheduled to remain in place through the end of 2026 and will be adjusted annually for inflation starting in 2027.</p> <p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p> <p>The FY2025 reconciliation law increased tax credit amounts for carbon oxides that were not captured using DAC technologies. Under the IRA, for non-DAC carbon oxides, the credit amount was \$17 per ton that was geologically sequestered and \$12 per ton that was reused.</p>	<p>The base credit amounts are \$180 per metric ton of carbon oxide that is captured and geologically sequestered, \$130 per metric ton that is reused, and \$180 per metric ton that is captured using direct air capture (DAC) technologies and then geologically sequestered. The credit is \$130 per metric ton for carbon oxide captured using DAC that is utilized in a qualified manner. These amounts are scheduled to remain in place through the end of 2026 and will be adjusted annually for inflation starting in 2027.</p> <p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p> <p>The FY2025 reconciliation law increased tax credit amounts for carbon oxides that were not captured using DAC technologies. Under the IRA, for non-DAC carbon oxides, the credit amount was \$85 per ton that was geologically sequestered and \$60 per ton that was reused.</p> <p>Firms must pay prevailing wages during the construction phase and the first 12 years of the facility’s or equipment’s operations. Firms receiving the credit must also meet registered apprenticeship requirements.</p>
Zero-Emission Nuclear Power	<p>The zero-emission nuclear power production credit subsidizes electricity generation from qualifying nuclear power</p>	<p>The zero-emission nuclear power production credit subsidizes electricity generation from qualifying nuclear power</p>

	Credit or Deduction for Firms Not Meeting PWA Requirements	Credit or Deduction for Firms Meeting PWA Requirements^a
Production Credit (IRC §45U)	<p>facilities. Qualifying facilities must have been placed in service before August 16, 2022, and cannot have received a previous tax credit allocation under IRC §45J.</p> <p>Depending on the price of electricity, the tax credit may reach a value of up to 0.3 cents per kilowatt-hour (kWh) of electricity produced and sold after December 31, 2023.</p> <p>When the taxpayer’s <i>gross receipts</i> from electricity sales are at or below 2.5 cents per kWh, the <i>baseline credit</i> is set at 0.3 cents per kWh. Gross receipts include revenues from the sale of electricity as well as any local, state, or federal zero-emission credit programs or subsidies (excluding the IRC §45U credit itself). When the taxpayer’s gross receipts exceed 2.5 cents per kWh, the baseline credit is reduced by 16% of the difference between the gross receipts per kWh and 2.5 cents per kWh. For example, a taxpayer with gross receipts of 3.5 cents per kWh would have their baseline credit reduced by 0.16 cents per kWh, resulting in a baseline credit of 0.14 cents per kWh. The baseline credit is reduced to 0.0 cents per kWh when gross receipts are at or above 4.375 cents per kWh.</p> <p>After the baseline credit per kWh has been determined, this amount is multiplied by the kWh of electricity produced to arrive at the taxpayer’s total tax credit under IRC §45U.</p> <p>Values depicted above are for 2024. Both the maximum baseline credit amount of 0.3 cents per kWh and the gross receipts cutoff of 2.5 cents per kWh are adjusted annually for inflation. (The point at which the credit reduces to zero, which is 4.375 cents per kWh, is not directly adjusted for inflation. However, it changes every year based on its implicit linkages to changes in the 0.3-cent and 2.5-cent values.)</p>	<p>facilities. Qualifying facilities must have been placed in service before August 16, 2022, and cannot have received a previous tax credit allocation under IRC §45J.</p> <p>Depending on the price of electricity, the tax credit may reach a value of up to 1.5 cents per kilowatt-hour (kWh) of electricity produced and sold after December 31, 2023.</p> <p>When the taxpayer’s <i>gross receipts</i> from electricity sales are at or below 2.5 cents per kWh, the <i>baseline credit</i> is set at 0.3 cents per kWh. Gross receipts include revenues from the sale of electricity as well as any local, state, or federal zero-emission credit programs or subsidies (excluding the IRC §45U credit itself). When the taxpayer’s gross receipts exceed 2.5 cents per kWh, the baseline credit is reduced by 16% of the difference between the gross receipts per kWh and 2.5 cents per kWh. For example, a taxpayer with gross receipts of 3.5 cents per kWh would have their baseline credit reduced by 0.16 cents per kWh, resulting in a baseline credit of 0.14 cents per kWh. The baseline credit is reduced to 0.0 cents per kWh when gross receipts are at or above 4.375 cents per kWh.</p> <p>After the baseline credit per kWh has been determined, this amount is multiplied by five times the kWh of electricity produced to arrive at the taxpayer’s total tax credit under IRC §45U.</p> <p>Values depicted above are for 2024. Both the maximum baseline credit amount of 0.3 cents per kWh and the gross receipts cutoff of 2.5 cents per kWh are adjusted annually for inflation. (The point at which the credit reduces to zero, which is 4.375 cents per kWh, is not directly adjusted for inflation. However, it changes every year based on its implicit linkages to changes in the 0.3-cent and 2.5-cent values.)</p> <p>To qualify for the larger total credit amounts, IRC §45U(d)(2)(A) states that “any laborers and mechanics employed by the taxpayer or any contractor or subcontractor in the alteration or repair of such facility shall be paid wages at rates not less than the prevailing rates for alteration or repair of a similar character in the locality in which such facility is located as most recently determined by the Secretary of Labor.” The IRC §45U credit is not subject to apprenticeship requirements.</p>

	Credit or Deduction for Firms Not Meeting PWA Requirements	Credit or Deduction for Firms Meeting PWA Requirements^a
Clean Hydrogen Production Credit (IRC §45V) ^f	<p>Businesses and other eligible entities may receive a tax credit for each kilogram of qualified clean hydrogen (QCH) that they produce. For calendar year 2024, the credit is \$0.622 per kilogram of QCH if the hydrogen has a lifecycle greenhouse gas emissions rate of less than 0.45 kilograms of carbon dioxide equivalent (CO₂e). The credit per kilogram of QCH is \$0.208 if the emissions rate is between 0.45 and 1.5 kilograms of CO₂e, \$0.156 if the emissions rate is between 1.5 and 2.5 kilograms of CO₂e, and \$0.124 if the emissions rate is between 2.5 and 4.0 kilograms of CO₂e. These amounts are adjusted annually for inflation.</p> <p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p>	<p>Businesses and other eligible entities may receive a tax credit for each kilogram of qualified clean hydrogen (QCH) that they produce. For calendar year 2024, the credit is \$3.11 per kilogram of QCH if the hydrogen has a lifecycle greenhouse gas emissions rate of less than 0.45 kilograms of carbon dioxide equivalent (CO₂e). The credit per kilogram of QCH is \$1.04 if the emissions rate is between 0.45 and 1.5 kilograms of CO₂e, \$0.78 if the emissions rate is between 1.5 and 2.5 kilograms of CO₂e, and \$0.62 if the emissions rate is between 2.5 and 4.0 kilograms of CO₂e. These amounts are adjusted annually for inflation.</p> <p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p>
Clean Electricity Production Credit (IRC §45Y)	<p>The clean electricity production tax credit (CEPTC) may be claimed by facilities producing electricity from any zero-emissions energy source. Qualifying facilities must be placed in service after December 31, 2024.</p> <p>Since 2025, the tax credit has been set at the equivalent of 0.3 cents per kilowatt-hour (kWh) of electricity in 1992 dollars. Credit values are adjusted annually for inflation, and taxpayers may claim the credit for the first 10 years of a facility’s production.</p> <p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p> <p>Taxpayers receiving the CEPTC are eligible for a 10% bonus credit if certain shares of the iron, steel, and manufactured products used to construct the facility were produced in the United States.^c Taxpayers are eligible for a separate 10% bonus credit if the facility used to claim the credit is located in an <i>energy community</i>.^d Bonus credit amounts are calculated after considering any reduction for financing from tax-exempt bonds.</p>	<p>The clean electricity production tax credit (CEPTC) may be claimed by facilities producing electricity from any zero-emissions energy source. Qualifying facilities must be placed in service after December 31, 2024.</p> <p>Since 2025, the tax credit has been set at the equivalent of 1.5 cents per kilowatt-hour (kWh) of electricity in 1992 dollars. Credit values are adjusted annually for inflation, and taxpayers may claim the credit for the first 10 years of a facility’s production.</p> <p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p> <p>Taxpayers receiving the CEPTC are eligible for a 10% bonus credit if certain shares of the iron, steel, and manufactured products used to construct the facility were produced in the United States.^c Taxpayers are eligible for a separate 10% bonus credit if the facility used to claim the credit is located in an <i>energy community</i>.^d Bonus credit amounts are calculated after considering any reduction for financing from tax-exempt bonds.</p>
Clean Fuel Production Credit (IRC §45Z) ^g	<p>The clean fuel production credit (CFPC) may be claimed by businesses and other entities producing “clean” transportation fuel. To qualify as “clean,” fuel claimed under the credit must have a lifecycle greenhouse gas (GHG) emissions rate less than or equal to 50 grams of carbon</p>	<p>The clean fuel production credit (CFPC) may be claimed by businesses and other entities producing “clean” transportation fuel. To qualify as “clean,” fuel claimed under the credit must have a lifecycle greenhouse gas (GHG) emissions rate less than or equal to 50 grams of carbon</p>

	Credit or Deduction for Firms Not Meeting PWA Requirements	Credit or Deduction for Firms Meeting PWA Requirements^a
	<p>dioxide equivalent (CO₂e) per 1 million British Thermal Units (mmBTU). Qualifying fuel must be produced in the United States or its possessions and must be sold no later than December 31, 2029. Due to reforms enacted under the FY2025 reconciliation law, qualifying fuels must use feedstocks produced or grown in the United States, Canada, or Mexico. The FY2025 reconciliation law also extended the credit's expiration date from 2027 to 2029.</p> <p>The CFPC is structured on a sliding scale so that fuel producers become eligible for larger credits as their fuel's lifecycle GHG emissions approach zero. For fuel with zero lifecycle GHG emissions, the maximum credit is \$0.20 per gallon of either aviation fuel or nonaviation fuel (i.e., car fuel). (The IRA allowed a higher credit of \$0.35 per gallon of nonaviation fuel, though this was changed in the FY2025 reconciliation law.) The amounts phase down, in a linear fashion, to \$0.00 per gallon when the fuel's lifecycle emissions reach 50 grams of CO₂e per mmBTU. Fuels with emissions rates between 0 and 50 grams are eligible for intermediate amounts. For example, fuel with a lifecycle GHG emissions rate of 20 grams of CO₂e per mmBTU is eligible for a credit of \$0.12 per gallon.</p> <p>CFPC values are adjusted annually for inflation and are depicted above in 2022 dollars.</p>	<p>dioxide equivalent (CO₂e) per 1 million British Thermal Units (mmBTU). Qualifying fuel must be produced in the United States or its possessions and must be sold no later than December 31, 2029. Due to reforms enacted under the FY2025 reconciliation law, qualifying fuels must use feedstocks produced or grown in the United States, Canada, or Mexico. The FY2025 reconciliation law also extended the credit's expiration date from 2027 to 2029.</p> <p>The CFPC is structured on a sliding scale so that fuel producers become eligible for larger credits as their fuel's lifecycle GHG emissions approach zero. For fuel with zero lifecycle GHG emissions, the maximum credit is \$1.00 per gallon of either aviation fuel or nonaviation fuel (i.e., car fuel). (The IRA allowed a higher credit of \$1.75 per gallon of nonaviation fuel, though this was changed in the FY2025 reconciliation law.) The amounts phase down, in a linear fashion, to \$0.00 per gallon when the fuel's lifecycle emissions reach 50 grams of CO₂e per mmBTU. Fuels with emissions rates between 0 and 50 grams are eligible for intermediate amounts. For example, fuel with a lifecycle GHG emissions rate of 20 grams of CO₂e per mmBTU is eligible for a credit of \$0.60 per gallon.</p> <p>CFPC values are adjusted annually for inflation and are depicted above in 2022 dollars.</p>
Energy Investment Tax Credit (IRC §48) ^h	<p>The Energy Investment Tax Credit (ITC) subsidizes the costs of energy storage and renewable electricity generation. The ITC is available to electricity suppliers and other entities.</p> <p>Facilities, projects, property, and equipment (FPPE) qualifying for the ITC must have begun construction before January 1, 2025. ITC amounts differ by energy source and storage technology, but are always calculated as a share of the taxpayer's capital investment costs (described in statute as "basis"). The percentages under current law are</p> <ul style="list-style-type: none"> • 6% (of capital investment costs) for solar energy property and equipment, small wind energy property, qualified fuel cell property, geothermal power equipment, combined heat and power system property, and waste energy recovery property; 	<p>The Energy Investment Tax Credit (ITC) subsidizes the costs of energy storage and renewable electricity generation. The ITC is available to electricity suppliers and other entities.</p> <p>Facilities, projects, property, and equipment (FPPE) qualifying for the ITC must have begun construction before January 1, 2025. ITC amounts differ by energy source and storage technology, but are always calculated as a share of the taxpayer's capital investment costs (described in statute as "basis"). The percentages under current law are</p> <ul style="list-style-type: none"> • 30% (of capital investment costs) for solar energy property and equipment, small wind energy property, qualified fuel cell property, geothermal power equipment, combined heat and power system property, and waste energy recovery property;

Credit or Deduction for Firms Not Meeting PWA Requirements	Credit or Deduction for Firms Meeting PWA Requirements^a
<ul style="list-style-type: none"> • 6% for energy storage technology, qualified biogas property, and microgrid controllers; and • 6% for “qualified interconnection property” installed in connection with energy property with “a maximum net output of not greater than 5 megawatts (as measured in alternating current).” <p>Prior law also allowed a 2% credit for qualified microturbine property, though this was disallowed under the FY2025 reconciliation law.</p> <p>Geothermal heat pumps are eligible for the ITC if they begin construction before 2035. Geothermal heat pumps are eligible for a 6% credit if they begin construction before 2033, 5.2% if they begin construction in 2033, and 4.4% if they begin construction in 2034.</p> <p>In some circumstances, the ITC allows taxpayers qualifying for other energy tax credits to receive the ITC in place of the other credits. Taxpayers qualifying for a renewable electricity production tax credit (PTC) using technologies specified in subsections 1-7, 9, and 11 of IRC §45(d) are eligible for a 6% ITC if they choose not to claim the PTC. Technologies covered under the relevant subsections include wind facilities other than small wind energy property, closed-loop biomass facilities, open-loop biomass facilities, geothermal energy facilities, solar energy facilities, small irrigation power facilities, landfill gas facilities, trash facilities, qualified hydropower facilities, and marine and hydrokinetic renewable energy facilities.</p> <p>Qualified property that is part of a specified clean hydrogen production facility may claim the ITC in lieu of the clean hydrogen production credit from IRC §45V. The ITC is 6% if hydrogen produced by the facility has a lifecycle greenhouse gas emissions rate of less than 0.45 kilograms of carbon dioxide equivalent (CO₂e). The ITC is 2% if the emissions rate is between 0.45 and 1.5 kilograms of CO₂e, 1.5% if the emissions rate is between 1.5 and 2.5 kilograms of CO₂e, and 1.2% if the emissions rate is between 2.5 and 4.0 kilograms of CO₂e. In addition to foregoing the clean hydrogen production credit, taxpayers claiming the ITC for a specified clean hydrogen production facility are prohibited from</p>	<ul style="list-style-type: none"> • 30% for energy storage technology, qualified biogas property, and microgrid controllers; and • 30% for “qualified interconnection property” installed in connection with energy property with “a maximum net output of not greater than 5 megawatts (as measured in alternating current).” <p>Prior law also allowed a 10% credit for qualified microturbine property, though this was disallowed under the FY2025 reconciliation law.</p> <p>Geothermal heat pumps are eligible for the ITC if they begin construction before 2035. Geothermal heat pumps are eligible for a 30% credit if they begin construction before 2033, 26% if they begin construction in 2033, and 22% if they begin construction in 2034.</p> <p>In some circumstances, the ITC allows taxpayers qualifying for other energy tax credits to receive the ITC in place of the other credits. Taxpayers qualifying for a renewable electricity production tax credit (PTC) using technologies specified in subsections 1-7, 9, and 11 of IRC §45(d) are eligible for a 30% ITC if they choose not to claim the PTC. Technologies covered under the relevant subsections include wind facilities other than small wind energy property, closed-loop biomass facilities, open-loop biomass facilities, geothermal energy facilities, solar energy facilities, small irrigation power facilities, landfill gas facilities, trash facilities, qualified hydropower facilities, and marine and hydrokinetic renewable energy facilities.</p> <p>Qualified property that is part of a specified clean hydrogen production facility may claim the ITC in lieu of the clean hydrogen production credit from IRC §45V. The ITC is 30% if hydrogen produced by the facility has a lifecycle greenhouse gas emissions rate of less than 0.45 kilograms of carbon dioxide equivalent (CO₂e). The ITC is 10% if the emissions rate is between 0.45 and 1.5 kilograms of CO₂e, 7.5% if the emissions rate is between 1.5 and 2.5 kilograms of CO₂e, and 6% if the emissions rate is between 2.5 and 4.0 kilograms of CO₂e. In addition to foregoing the clean hydrogen production credit, taxpayers claiming the ITC for a specified clean hydrogen production facility are prohibited</p>

	Credit or Deduction for Firms Not Meeting PWA Requirements	Credit or Deduction for Firms Meeting PWA Requirements^a
	<p>claiming the credit for carbon oxide sequestration under IRC §45Q.</p> <p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p> <p>Taxpayers receiving the ITC are eligible for a 2 percentage-point bonus credit if certain shares of the iron, steel, and manufactured products used to construct the facility were produced in the United States.^c Taxpayers are eligible for a separate 2 percentage-point bonus credit if the facility used to claim the credit is located in an <i>energy community</i>.^d Bonus credit amounts are calculated without considering any reduction for financing from tax-exempt bonds. (This is different from how bonus credits are calculated under the PTC and the CEPTC.)</p> <p>Solar and wind facilities (and energy storage technology installed with such facilities) with a maximum net output of less than 5 megawatts, as measured in alternating current, may qualify for a low-income communities bonus credit. The bonus is 10 percentage points for facilities located in a low-income community or on Indian land, and is 20 percentage points for facilities that are part of a qualified low-income residential building project or a qualified low-income economic benefit project. No more than 1.8 gigawatts of electric capacity may be claimed under this bonus credit program in each of calendar years 2023 and 2024.^j Unused electric capacity from one year may be carried over to future years, including to 2025 and later years under the CEITC.</p> <p>Considering the highest possible values of all bonus credits, the maximum ITC is 30% of capital investment costs for taxpayers not meeting PWA requirements.</p>	<p>from claiming the credit for carbon oxide sequestration under IRC §45Q.</p> <p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p> <p>Taxpayers receiving the ITC are eligible for a 10 percentage-point bonus credit if certain shares of the iron, steel, and manufactured products used to construct the facility were produced in the United States.^c Taxpayers are eligible for a separate 10 percentage-point bonus credit if the facility used to claim the credit is located in an <i>energy community</i>.^d Bonus credit amounts are calculated without considering any reduction for financing from tax-exempt bonds. (This is different from how bonus credits are calculated under the PTC and the CEPTC.)</p> <p>Solar and wind facilities (and energy storage technology installed with such facilities) with a maximum net output of less than 5 megawatts, as measured in alternating current, may qualify for a low-income communities bonus credit. The bonus is 10 percentage points for facilities located in a low-income community or on Indian land, and is 20 percentage points for facilities that are part of a qualified low-income residential building project or a qualified low-income economic benefit project. No more than 1.8 gigawatts of electric capacity may be claimed under this bonus credit program in each of calendar years 2023 and 2024.^j Unused electric capacity from one year may be carried over to future years, including to 2025 and later years under the CEITC.</p> <p>Considering the highest possible values of all bonus credits, the maximum ITC is 70% of capital investment costs for taxpayers meeting PWA requirements.</p>
Qualifying Advanced Energy Project Credit (IRC §48C)	<p>Unlike the other energy tax credits enacted or modified by the IRA, the Qualifying Advanced Energy Project Credit (QAEPC) is a <i>competitively awarded</i> or <i>capped</i> credit. This means that total funding for the credit may not exceed limits established under law.</p> <p>The QAEPC was created by P.L. 111-5, the American Recovery and Reinvestment Act of 2009, and was initially given \$2.3 billion of funding. The IRA added an additional \$10 billion, to be distributed in two allocation rounds. The first round provided \$4 billion</p>	<p>Unlike the other energy tax credits enacted or modified by the IRA, the Qualifying Advanced Energy Project Credit (QAEPC) is a <i>competitively awarded</i> or <i>capped</i> credit. This means that total funding for the credit may not exceed limits established under law.</p> <p>The QAEPC was created by P.L. 111-5, the American Recovery and Reinvestment Act of 2009, and was initially given \$2.3 billion of funding. The IRA added an additional \$10 billion, to be distributed in two allocation rounds. The first round provided \$4 billion</p>

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	<p>for projects in <i>energy communities</i> located in census tracts that did not receive QAEPC funding under P.L. 111-5. The second round provided \$6 billion in funding without statutory geographical restrictions, though regulators determined that \$2.5 billion or more would go to energy communities.^d</p> <p>Taxpayers receiving the QAEPC may receive a credit equal to 6% of qualifying investment costs. Qualifying investments include the costs associated with</p> <ul style="list-style-type: none"> • reequipping, expanding, or establishing an industrial or manufacturing facility for the production or recycling of certain energy equipment described in IRC §48C(c)(1)(A)(i); • reequipping an existing industrial or manufacturing facility with equipment designed to reduce greenhouse gas (GHG) emissions by 20% or more; or • reequipping, expanding, or establishing an industrial facility for the processing, refining, or recycling of <i>critical materials</i> as defined in 30 U.S.C. §1606(a). <p>Because total funding for the QAEPC is capped, taxpayers were required to submit applications for QAEPC funding. IRC §48C(d)(3) describes criteria for winning a tax credit allocation, including domestic job creation, impact on air pollution and GHG emissions, technological innovation, and commercial viability, among other factors. Although total QAEPC funding is capped, there are no caps per company or per project. Round 1 allocation winners were announced on March 29, 2024, and Round 2 allocation winners were announced on January 10, 2025.</p>	<p>for projects in <i>energy communities</i> located in census tracts that did not receive QAEPC funding under P.L. 111-5. The second round provided \$6 billion in funding without statutory geographical restrictions, though regulators determined that \$2.5 billion or more would go to energy communities.^d</p> <p>Taxpayers receiving the QAEPC may receive a credit equal to 30% of qualifying investment costs. Qualifying investments include the costs associated with</p> <ul style="list-style-type: none"> • reequipping, expanding, or establishing an industrial or manufacturing facility for the production or recycling of certain energy equipment described in IRC §48C(c)(1)(A)(i); • reequipping an existing industrial or manufacturing facility with equipment designed to reduce greenhouse gas (GHG) emissions by 20% or more; or • reequipping, expanding, or establishing an industrial facility for the processing, refining, or recycling of <i>critical materials</i> as defined in 30 U.S.C. §1606(a). <p>Because total funding for the QAEPC is capped, taxpayers were required to submit applications for QAEPC funding. IRC §48C(d)(3) describes criteria for winning a tax credit allocation, including domestic job creation, impact on air pollution and GHG emissions, technological innovation, and commercial viability, among other factors. Although total QAEPC funding is capped, there are no caps per company or per project. Round 1 allocation winners were announced on March 29, 2024, and Round 2 allocation winners were announced on January 10, 2025.</p>
Clean Electricity Investment Credit (IRC §48E)	<p>The clean electricity investment tax credit (CEITC) may be claimed by facilities producing electricity from any zero-emissions energy source. The CEITC is equal to 6% of taxpayers' capital investment costs (defined in statute as "basis"), and qualifying facilities must be placed in service after 2024. Energy storage technology is also eligible for the credit. Due to reforms enacted in the FY2025 reconciliation law, fuel cell property is also eligible for a 30% tax credit that is not conditional on PWA requirements. Unlike other energy sources, fuel cell property may have positive greenhouse gas emissions while qualifying for the credit.</p>	<p>The clean electricity investment tax credit (CEITC) may be claimed by facilities producing electricity from any zero-emissions energy source. The CEITC is equal to 30% of taxpayers' capital investment costs (defined in statute as "basis"), and qualifying facilities must be placed in service after 2024. Energy storage technology is also eligible for the credit. Due to reforms enacted in the FY2025 reconciliation law, fuel cell property is also eligible for a 30% tax credit that is not conditional on PWA requirements. Unlike other energy sources, fuel cell property may have positive greenhouse gas emissions while qualifying for the credit.</p>

	Credit or Deduction for Firms Not Meeting PWA Requirements	Credit or Deduction for Firms Meeting PWA Requirements^a
	<p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p> <p>Taxpayers receiving the CEITC are eligible for a 2 percentage-point bonus credit if certain shares of the iron, steel, and manufactured products used to construct the facility were produced in the United States.^c Taxpayers are eligible for a separate 2 percentage-point bonus credit if the facility used to claim the credit is located in an <i>energy community</i>.^d Bonus credit amounts are calculated without considering any reduction for financing from tax-exempt bonds. (This is different from how bonus credits are calculated under the PTC and the CEPTC.)</p> <p>Solar and wind facilities (and energy storage technology installed with such facilities) with a maximum net output of less than 5 megawatts, as measured in alternating current, may qualify for a low-income communities bonus credit. The bonus is 10 percentage points for facilities located in a low-income community or on Indian land, and is 20 percentage points for facilities that are part of a qualified low-income residential building project or a qualified low-income economic benefit project. No more than 1.8 gigawatts of electric capacity may be claimed under this bonus credit program each year, though unused electric capacity from one year may be carried over to future years, including pre-2025 amounts carried over from the ITC.^j</p> <p>Considering the highest possible values of all bonus credits, the maximum CEITC is 30% of capital investment costs for taxpayers not meeting PWA requirements.</p>	<p>Credit amounts are reduced in proportion to the share of capital financing coming from tax-exempt bonds, up to a maximum reduction of 15%.^b</p> <p>Taxpayers receiving the CEITC are eligible for a 10 percentage-point bonus credit if certain shares of the iron, steel, and manufactured products used to construct the facility were produced in the United States.^c Taxpayers are eligible for a separate 10 percentage-point bonus credit if the facility used to claim the credit is located in an <i>energy community</i>.^d Bonus credit amounts are calculated without considering any reduction for financing from tax-exempt bonds. (This is different from how bonus credits are calculated under the PTC and the CEPTC.)</p> <p>Solar and wind facilities (and energy storage technology installed with such facilities) with a maximum net output of less than 5 megawatts, as measured in alternating current, may qualify for a low-income communities bonus credit. The bonus is 10 percentage points for facilities located in a low-income community or on Indian land, and is 20 percentage points for facilities that are part of a qualified low-income residential building project or a qualified low-income economic benefit project. No more than 1.8 gigawatts of electric capacity may be claimed under this bonus credit program each year, though unused electric capacity from one year may be carried over to future years, including pre-2025 amounts carried over from the ITC.^j</p> <p>Considering the highest possible values of all bonus credits, the maximum CEITC is 70% of capital investment costs for taxpayers meeting PWA requirements.</p>
Energy Efficient Commercial Buildings Deduction (IRC §179D) ^k	<p>The Energy Efficient Commercial Buildings Deduction (EECBD) may be claimed by commercial building owners either when constructing a new energy-efficient building or when upgrading the energy efficiency of an existing building. Because the EECBD is a <i>deduction</i> rather than a <i>credit</i>, it reduces the amount of income subject to taxation. Whereas credits generally lower tax payments dollar for dollar, deductions reduce tax payments by the amount of the deduction multiplied by the tax rate.</p> <p>Qualifying energy-efficient equipment must be installed as part of (1) the interior lighting systems; (2) the heating, cooling, ventilation, and hot water systems; or (3)</p>	<p>The Energy Efficient Commercial Buildings Deduction (EECBD) may be claimed by commercial building owners either when constructing a new energy-efficient building or when upgrading the energy efficiency of an existing building. Because the EECBD is a <i>deduction</i> rather than a <i>credit</i>, it reduces the amount of income subject to taxation. Whereas credits generally lower tax payments dollar for dollar, deductions reduce tax payments by the amount of the deduction multiplied by the tax rate.</p> <p>Qualifying energy-efficient equipment must be installed as part of (1) the interior lighting systems; (2) the heating, cooling, ventilation, and hot water systems; or (3)</p>

Credit or Deduction for Firms Not Meeting PWA Requirements	Credit or Deduction for Firms Meeting PWA Requirements^a
<p>the envelope of the commercial building. Such equipment must reduce the building's annual energy and power costs by at least 25% relative to a reference building. The maximum deduction is equivalent to \$0.58 per square foot of the building, with an additional \$0.02 per square foot for every additional percentage point of energy and power cost reduction above 25%, up to a maximum of \$1.16 per square foot.</p> <p>An alternative deduction available under §179D(f) allows buildings engaged in qualified retrofit plans to deduct the adjusted basis in the retrofitted property. To qualify, the building must be at least five years old, and the qualified retrofit plan must reduce the building's energy use intensity by at least 25%.</p> <p>Amounts displayed above are for 2025, though EECBD values are adjusted annually for inflation.</p> <p>The FY2025 reconciliation law terminates this deduction for property beginning construction after June 30, 2026.</p>	<p>the envelope of the commercial building. Such equipment must reduce the building's annual energy and power costs by at least 25% relative to a reference building. The maximum deduction is equivalent to \$2.90 per square foot of the building, with an additional \$0.12 per square foot for every additional percentage point of energy and power cost reduction above 25%, up to a maximum of \$5.81 per square foot.</p> <p>An alternative deduction available under §179D(f) allows buildings engaged in qualified retrofit plans to deduct the adjusted basis in the retrofitted property. To qualify, the building must be at least five years old, and the qualified retrofit plan must reduce the building's energy use intensity by at least 25%.</p> <p>Amounts displayed above are for 2025, though EECBD values are adjusted annually for inflation.</p> <p>The FY2025 reconciliation law terminates this deduction for property beginning construction after June 30, 2026.</p>

Source: CRS analysis of P.L. 117-169, P.L. 119-21, the Internal Revenue Code, and various regulatory documents published by the Internal Revenue Service (IRS).

Notes:

- a. Firms may claim these larger credits without meeting the PWA requirements only if (1) they are small facilities producing less than 1 megawatt of energy, or (2) they began construction on the facilities used to claim the given credit before January 29, 2023.
- b. For information on tax-exempt bonds and their uses in capital financing, see CRS Report R40523, *Tax Credit Bonds: Overview and Analysis*, by Grant A. Driessen, CRS Report RL30638, *Tax-Exempt Bonds: A Description of State and Local Government Debt*, by Grant A. Driessen, and CRS Report RL31457, *Private Activity Bonds: An Introduction*, by Grant A. Driessen.
- c. For information on the domestic content bonus credits in the ITC, PTC, CEITC, and CEPTC, see CRS Report R48358, *Domestic Content Requirements for Electricity Tax Credits in the Inflation Reduction Act (IRA)*, by Nicholas E. Buffie.
- d. For information on energy communities, see CRS Report R47831, *Federal Economic Assistance for Coal Communities*, by Julie M. Lawhorn et al.
- e. For more information on the credit for carbon oxide sequestration, see CRS In Focus IF11455, *The Section 45Q Tax Credit for Carbon Sequestration*, by Angela C. Jones and Donald J. Marples. For information on reforms to the credit for carbon oxide sequestration in the FY2025 reconciliation law, see CRS Report R48611, *Tax Provisions in P.L. 119-21, the FY2025 Reconciliation Law*, coordinated by Anthony A. Cilluffo.
- f. For more information on the clean hydrogen production credit, see CRS In Focus IF12602, *The Section 45V Clean Hydrogen Production Credit*, by Nicholas E. Buffie and Martin C. Offutt.
- g. Additional information on the CFPC can be found in CRS In Focus IF12502, *The Section 45Z Clean Fuel Production Credit*, by Nicholas E. Buffie. For information on reforms to the CFPC in the FY2025 reconciliation law, see CRS Report R48611, *Tax Provisions in P.L. 119-21, the FY2025 Reconciliation Law*, coordinated by Anthony A. Cilluffo.
- h. The descriptions of the Energy Investment Tax Credit (ITC) generally apply to facilities, projects, property, and equipment (FPPE) placed in service after 2021. In some cases, they apply to FPPE placed in service after 2022; see P.L. 117-169, page 105. FPPE placed in service in earlier years may have been subject to phaseouts in 26 U.S.C. §48(a)(5)(E) or 26 U.S.C. §48(a)(6). Credit amounts and other rules for the ITC were modified

- i. in P.L. 117-169, pp. 97-105. For information on the previous structure of the ITC, see CRS In Focus IF10479, *The Energy Credit or Energy Investment Tax Credit (ITC)*.
- j. Allocations of the 1.8 gigawatts of electric capacity for the low-income communities bonus credit program are made by the IRS. For information on the allocation process and other aspects of the program, see authorizing statute 26 U.S.C. §48(e) and the IRS web page on the bonus credit, available at <https://www.irs.gov/credits-deductions/clean-electricity-low-income-communities-bonus-credit-amount-program>.
- k. Additional information on the EECBD can be found in CRS In Focus IF12862, *The Section 179D Energy Efficient Commercial Buildings Deduction*, by Nicholas E. Buffie.

Author Information

Nicholas E. Buffie
Analyst in Public Finance

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