



Clean Energy Tax Incentives for Businesses

The Inflation Reduction Act of 2022 (“IRA”) makes several clean energy tax credits available to businesses.
[IRS.gov/CleanEnergy](https://www.irs.gov/CleanEnergy)



Tax Provision

Description

Energy Generation & Carbon Capture

Production Tax Credit for Electricity from Renewables
 (§ 45, pre-2025)

For electricity sold to an unrelated person and produced from the following renewable sources: wind, biomass, geothermal, solar, landfill and trash, hydropower, and marine and hydrokinetic energy.
Credit Amount (for 2023): 0.55 or 0.03 cents (depending on source) per kilowatt hour (kW) for facilities placed in service (PIS) after 12/31/21; 2.8 or 1.4 cents (depending on source) per kW for facilities PIS before 1/1/22; 0.55 cents per kW for marine and hydrokinetic for facilities PIS after 12/31/22.^{1,2,3,7}

Clean Electricity Production Tax Credit
 (§ 45Y, 2025 onwards)

Technology-neutral tax credit for production of clean electricity. Replaces § 45 for facilities that are placed in service after December 31, 2024.
Credit Amount: 0.3 cents/kWh; 1.5 cent/kWh if PWA requirements are met.^{1,2,3,6,7}

Investment Tax Credit for Energy Property
 (§ 48, pre-2025)

For investment in renewable energy projects including fuel cell, solar, geothermal, small wind, energy storage, biogas, microgrid controllers, and combined heat and power properties.
Credit Amount: Generally, 6% of qualified investment (basis); 30% if PWA requirements are met.^{1,4,5,6,8}

Clean Electricity Investment Tax Credit
 (§ 48E, 2025 onwards)

Technology-neutral tax credit for investment in facilities that generate clean electricity and qualified energy storage technologies. Replaces § 48 for facilities that begin construction and are placed in service after 2024
Credit Amount: 6% of qualified investment (basis); 30% if PWA requirements met^{1,4,5,6}

Low-Income Communities Bonus Credit (§ 48(e), 48E(h))
Application required

Additional investment tax credit for small-scale solar and wind (§ 48(e)) or clean electricity (§48E(h)) facilities (<5MW net output) on Indian land, federally subsidized housing, in low-income communities, and benefit low-income households. Allocated through an application process.
Credit Amount: 10 or 20 percentage point increase on base investment tax credit

Credit for Carbon Oxide Sequestration
 (§ 45Q)

Credit for carbon oxide sequestration coupled with permitted end uses in the United States.
Credit Amount: \$12-36 per metric ton of qualified carbon oxide captured and sequestered, used as a tertiary injectant, or utilized, depending on the specified end-use; \$60-\$180 per metric ton if PWA requirements met.^{1,7}

Zero-Emission Nuclear Power Production Credit
 (§ 45U)

For electricity from nuclear power facilities. Facilities in operation prior to August 16, 2022.
Credit Amount (for 2023): 0.3 cents/kWh (reduced rate for larger facilities); 1.5 cent/kWh if PW requirements met^{1,7}

Clean Vehicles

Credit for Qualified Commercial Clean Vehicles
 (§ 45W)

For purchasers of commercial clean vehicles. Qualifying vehicles may include passenger vehicles, buses, ambulances, and certain other vehicles, as well as certain mobile machinery.
Credit Amount: Up to \$40,000 (max \$7,500 for vehicles <14,000 lbs.)

Manufacturing

Advanced Energy Project Credit (§ 48C)
Application required

For investments in advanced energy projects. A total of \$10 billion will be allocated, not less than \$4 billion of which will be allocated to projects in certain energy communities.
Credit Amount: 6% of taxpayer’s qualified investment; 30% if PWA requirements are met.¹

Advanced Manufacturing Production Credit
 (§ 45X)

Production tax credit for domestic clean energy manufacturing of components including solar and wind energy, inverters, battery components, and critical minerals.
Credit Amount: Varies by type of eligible component

Commercial Energy

New Energy Efficient Homes Credit
 (§ 45L)

Provides a tax credit for construction of new energy efficient homes **Credit Amount:** \$2,500 for new homes meeting Energy Star standards; \$5,000 for certified zeroenergy ready homes. For multifamily, base amounts are \$500 per unit for Energy Star and \$1000 per unit for zero-energy

Energy Efficient Commercial Buildings Deduction
 (§ 179D)

Provides a tax deduction for the cost of energy efficiency improvements to commercial buildings, installed as part of the building envelope; interior lighting systems; or the heating, cooling, ventilation, and hot water systems.
Credit Amount: \$0.50-\$1 per square foot, depending on increase in efficiency, with deduction over three or four-year periods capped at \$1 per square foot. Inflation adjusted. A new alternative deduction for energy efficient building retrofit property is also available.

Clean Hydrogen Production Tax Credit (§ 45V)	For producing qualified clean hydrogen at a qualified clean hydrogen production facility during the 10-year period beginning on the date the facility was originally placed in service. Credit Amount: \$0.60/kg multiplied by the applicable percentage (20% to 100%, depending on lifecycle greenhouse gas emissions rate), amount increases if PWA is met. ^{1,7}
Clean Fuel Production Credit (§ 45Z, 2025 onwards)	Technology neutral tax credit for domestic production of clean transportation fuels, including sustainable aviation fuels, beginning in 2025* Credit Amount: \$0.20/gallon (\$0.35/gal for aviation fuel) multiplied by CO2 “emissions factor”; \$1.00/gallon (\$1.75/gal for aviation fuel) multiplied by CO2 “emissions factor” if PWA is met. ^{1,7}
Biofuels Incentives (§ 40A)	Extends tax credits for biodiesel and renewable diesel. Credit Amount: \$1.00/gallon for biodiesel and renewable diesel; \$1.00 per gallon of biodiesel or renewable diesel used in a qualified mixture. Additional \$0.10/gallon credit available for small Agri-biodiesel producers. In addition, there is a \$1.00/gallon excise tax credit for biodiesel and renewable diesel mixtures.
Biofuels Incentives (§ 40(b)(6))	Retroactively extends second generation biofuel producer credit. This credit previously expired on 12/31/21. The IRA extends this credit for production through 12/31/24. Credit Amount: \$1.01 per gallon of second-generation biofuel, with a reduction for second generation biofuel that is alcohol.
Alternative Fuel and Alternative Fuel Mixture Excise Tax Credits (§§ 6426(d) and (e) and 6427(e))	Retroactively extends alternative fuel and alternative fuel mixture credits. The credits previously expired on 12/31/21. The IRA extends these credits through 12/31/24. Credit Amounts: \$0.50 per gallon of alternative fuel sold or used (§ 6426(d)); \$0.50 per gallon of alternative fuel used in producing any alternative fuel mixture for sale or use in a trade or business (§ 6426(e)).
Sustainable Aviation Fuel Credit (§ 40B)	Provides a tax 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. Credit Amount: \$1.25/gallon of SAF. Bonus Credit Amount: Up to \$0.50/gallon depending on lifecycle greenhouse gas emissions of SAF relative to petroleum-based jet fuel.

Notes:

The information in this document may be subject to change as guidance is issued or finalized. For all IRA clean energy tax credits, please see [IRS.gov/CleanEnergy](https://www.irs.gov/CleanEnergy) for further details and eligibility requirements.

¹ Credit is multiplied by 5 for projects that meet prevailing wages and apprenticeship requirements or other requirements under § 45(b)(6)(B). Apprenticeship requirements do not apply for §§ 45L and 45U. Under the one megawatt exception for the credits available under sections 45, 45Y, 48, and 48E, a facility that has a maximum net output of less than one megawatt of electrical energy (as measured in alternating current) may be eligible for the increased credit amount without satisfying the prevailing wage and apprenticeship requirements. The one-megawatt exception may also apply to qualified projects under section 48 with a maximum net output of less than one megawatt of thermal energy; and to energy storage technology under section 48E with a capacity of less than one-megawatt.

² Credit is increased by 10% if the project meets certain domestic content requirements.

³ Credit is increased by 10% if the project is located in an energy community.

⁴ Credit is increased by up to 10 percentage points for projects meeting certain domestic content requirements for steel or iron, and manufactured products.

⁵ Credit is increased by up to 10 percentage points if located in an energy community.

⁶ Section 168(e) provides favorable depreciation treatment for facilities or property qualifying for this tax credit. These facilities or property will be treated as a 5-year property for purposes of cost recovery, leaving them with lower taxable income in the earlier years of a clean energy investment.

⁷ Credit is adjusted annually for inflation.

⁸ See section 48 for more detail and applicable exceptions to the credit rate.

