



Inflation Reduction Act of 2022

CLEAN ENERGY INCENTIVES

The Inflation Reduction Act of 2022 (signed August 2022) now allows tax-exempt entities to receive the full value of the tax credit for qualifying clean energy projects. Projects are eligible for tax-exempt entities starting in 2023, and the credit availability will remain until 2032 after which the tax credits begin to phase out under the Inflation Reduction Act.

- **Tax Credit Name:** *Investment Tax Credit for Energy Property (pre-2025) and Clean Electricity Investment Tax Credit (2025 onwards)*. These tax credits award a percentage of the construction cost of the clean energy project. For a solar system project this would include panels, inverters, battery storage, labor costs, and other equipment infrastructure. The tax credit base percentage is 30% of the construction cost and can receive bonuses, +10% for domestic content and/or +10% for being in an energy community.

- **Eligible Clean Energy Technologies:** Fuel cell, Solar, Geothermal (plant), Small Wind, Energy Storage (Solar Battery), Biogas, Microgrid Controllers, and Combined Heat & Power Systems.

- The payment method to tax-exempt entities is called elective pay/payment or direct pay that provides applicable entities eligibility to claim these credits even though they do not owe federal income tax.







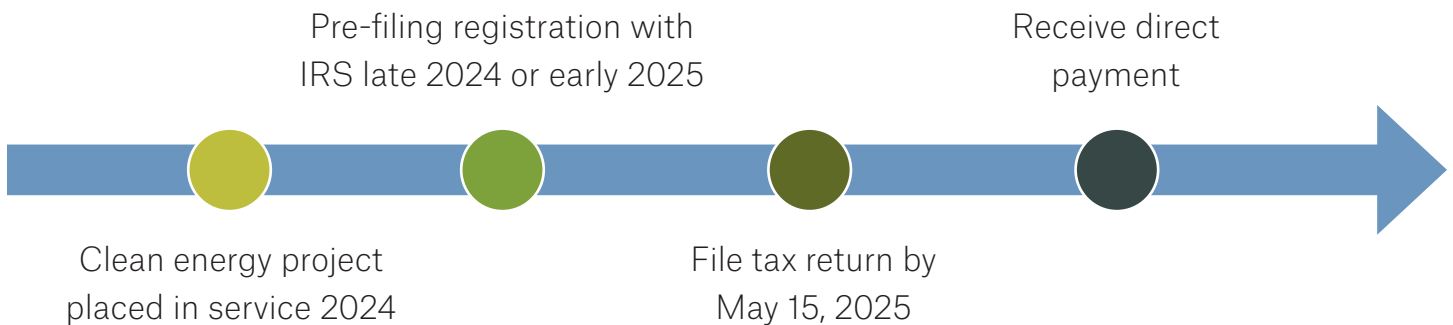
Who falls under direct pay?

Tax-Exempt Organizations: Governmental agencies (school districts and certain public universities), non-profit organizations (public charities, private foundations, schools, houses of worship, etc.) under 501(c)(3), religious organizations 501(d), and other organization under 501(2). though they do not owe federal income tax.

What is the IRS process?

- Identify a clean energy project and procure the necessary documentation for the tax credit that the building qualifies for.
- Complete the clean energy project and place in service. The tax year to receive the tax credit is the same year the clean energy project comes online.
- Register with the IRS (Pre-Filing Registration) and obtain a registration number from the IRS before being eligible to file a tax return and receive payment.
- File tax return by due date (before May 15 of the following year). Provide registration number and make the elective payment selection on tax return (typically IRS Form 990-T).
- Receive direct payment after tax return processed.

Sample project timeline



Example Commercial Project

Placed Into Service in 2024

Solar Array Size	1.0 MW
Initial Cost	\$2,000,000

Years	Utility Savings	Federal Tax Credit	Total Cash Flow	Cumulative Cash Flow
Install			(\$2,000,000)	(\$2,000,000)
1	\$150,000	\$600,000	\$750,000	(\$1,250,000)
2	\$153,728		\$153,728	(\$1,096,273)
3	\$157,548		\$157,548	(\$938,725)
4	\$161,463		\$161,463	(\$777,262)
5	\$165,475		\$165,475	(\$611,787)
6	\$169,587		\$169,587	(\$442,200)
7	\$173,801		\$173,801	(\$268,399)
8	\$178,120		\$178,120	(\$90,278)
9	\$182,547		\$182,547	\$92,268
10	\$187,083		\$187,083	\$279,351
11	\$191,732		\$191,732	\$471,083
12	\$196,496		\$196,496	\$667,579
13	\$201,379		\$201,379	\$868,959
14	\$206,384		\$206,384	\$1,075,342
15	\$211,512		\$211,512	\$1,286,855
16	\$216,768		\$216,768	\$1,503,623
17	\$222,155		\$222,155	\$1,725,778
18	\$227,676		\$227,676	\$1,953,453
19	\$233,333		\$233,333	\$2,186,787
20	\$239,132		\$239,132	\$2,425,918
21	\$245,074		\$245,074	\$2,670,992
22	\$251,164		\$251,164	\$2,922,157
23	\$257,406		\$257,406	\$3,179,562
24	\$263,802		\$263,802	\$3,443,364
25	\$270,358		\$270,358	\$3,713,722

8.5 Years Payback Period



Clean Energy Tax Incentives: Elective Pay Eligible Tax Credits

The Inflation Reduction Act of 2022 (“IRA”) makes several clean energy tax credits available to businesses; tax-exempt organizations; state, local, and tribal governments; other entities; and individuals. The IRA also enables entities to take advantage of certain clean energy tax credits through its elective pay provision (also colloquially known as direct pay). Elective pay allows several types of entities, such as tax-exempts and governments, to treat the amount of certain credits as a payment against tax on their tax returns and as a result receive direct payments for certain clean energy tax credits.

	Tax Provision	Description
Energy Generation & Carbon Capture	Production Tax Credit for Electricity from Renewables (§ 45, pre-2025)	For production of electricity from eligible renewable sources , including wind, biomass, geothermal, solar, small irrigation, landfill and trash, hydropower, marine and hydrokinetic energy. Credit Amount (for 2022): 0.55 cents/kilowatt (kW); (1/2 rate for electricity produced from open loop biomass, landfill gas, and trash); 2.75 cents/kW if Prevailing Wage and Apprenticeship (PWA) rules are met ^{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 begin construction and are placed in service after 2024. Credit Amount: Starts in 2025, consistent with credit amounts under section 45 ^{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: 6% of qualified investment (basis); 30% if PWA requirements 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 ⁷
	Credit for Carbon Oxide Sequestration (§ 45Q)	Credit for carbon dioxide 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 used, 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 req’s met ^{1,7}
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 materials. Credit Amount: Varies by component
Vehicles	Credit for Qualified Commercial Clean Vehicles (§ 45W)	For purchasers of commercial clean vehicles. Qualifying vehicles include passenger vehicles, buses, ambulances, and certain other vehicles for use on public streets, roads, and highways. Credit Amount: Up to \$40,000 (max \$7,500 for vehicles <14,000 lbs) ⁹
	Alternative Fuel Vehicle Refueling Property Credit (§ 30C)	For alternative fuel vehicle refueling and charging property , located in low-income and non-urban areas. Qualified fuels include electricity, ethanol, natural gas, hydrogen, and biodiesel. Credit Amount: 6% of basis for businesses and can increase to 30% if PWA is met.
Fuels	Clean Hydrogen Production Tax Credit (§ 45V)	For producing clean hydrogen at a qualified, U.S.-based clean hydrogen production facility. Credit Amount: \$0.60/kg multiplied by the applicable percentage (20% to 100%, depending on lifecycle greenhouse gas emissions), 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}



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