



July 2024

How Higher Ed Institutions Can Use Elective Pay to Transition Toward a Clean Energy Economy

Ground Rules: Disclaimer

- This deck provides an overview of certain Inflation Reduction Act tax provisions for general informational purposes only and **is not itself tax guidance**.
- The content in this presentation is based on tax guidance on IRS.gov.
- This deck relies on simplifications and generalizations to convey high-level points about Inflation Reduction Act tax provisions. Please **refer to guidance** issued by the IRS for detailed information on the rules associated with Inflation Reduction Act tax provisions.

Higher Education: Leading the Way Toward a Clean Energy Future

- For years, higher education institutions have been investing in clean energy projects, doing what they can to lower utility bills and combat climate change.
- In January 2024, Treasury Secretary Janet Yellen visited Roxbury Community College (RCC) in Boston where she toured the school and learned about its ambitious clean energy projects.
 - RCC has built a novel “tri-level renewable solution” on its campus. A system of geothermal wells circulates fluid deep below the ground to cool the facility in the summer months. These wells sit below a parking lot with electric vehicle charging stations. And above the parking lot sits a canopy of solar panels that generates energy for the campus.
- The Inflation Reduction Act (IRA) is helping to accelerate the pace of clean energy investment. The law supports these investments by making many higher education institutions that are not subject to Federal income tax eligible for clean energy tax credits for the first time.

Introduction: The Inflation Reduction Act

- IRA makes the **largest investment in clean energy** in United States history, and much of that investment is **delivered via tax incentives**.
- The Treasury Department is the federal agency responsible for **administering the tax code** and is **proud to be playing a central role** in implementing the Inflation Reduction Act's clean energy tax incentives.
- The Inflation Reduction Act includes **tax incentives for a broad range of activities that support building a clean energy economy**, as well as **certain cross-cutting provisions and bonuses** that apply to multiple incentives.

What is Elective Pay?

- With elective pay, tax-exempt and governmental entities that do not owe Federal income taxes are, for the first time, able to receive a **payment equal to the full value of tax credits for building qualifying clean energy projects or making qualifying investments.**
- Unlike competitive grant and loan programs, in which applicants may not receive an award, elective pay allows entities to get their payment if they meet **the requirements for both elective pay and the underlying tax credit.**

How Does Elective Pay Work?

Under the final rules, applicable entities for elective pay include:

- Tax-exempt organizations
 - Under final regulations, this includes any organization described in sections 501-530 of the Code that meets the requirements to be recognized as exempt from tax under those sections
- U.S. territory governments and their political subdivisions;
- States and political subdivisions, such as local governments;
- Indian tribal governments and their subdivisions;
- Agencies and instrumentalities of state, local, tribal, and territorial governments;
- Alaska Native Corporations;
- The Tennessee Valley Authority, and
- Rural electric co-operatives.
 - The final regulations clarify that both tax-exempt and taxable rural electric co-operatives are eligible for elective pay

Note: In general, only “applicable entities” are eligible for Elective Pay.

*However, other taxpayers that are not “applicable entities” may elect to be treated as an applicable entity with respect to **three tax credits** (for carbon oxide sequestration, production of clean hydrogen, or advanced manufacturing).*



Applicable Tax Credits for Elective Pay

Energy Generation & Carbon Capture

Tax Provision	Description
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}

* For footnotes, see irs.gov/pub/irs-pdf/p5817g.pdf. You can also learn more at IRS.gov/CleanEnergy and IRS.gov/ElectivePay.



Applicable Tax Credits for Elective Pay

	Tax Provision	Description
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}

* For footnotes, see irs.gov/pub/irs-pdf/p5817g.pdf. You can also learn more at IRS.gov/CleanEnergy and IRS.gov/ElectivePay.



What types of projects might be eligible for Elective Pay?

- Colleges and universities typically own and operate a significant number of buildings and vehicles.
- Direct pay can help higher education transition fleet and generate clean energy for their facilities. Potential projects include:
 - Solar panel farms or rooftop solar
 - Wind farms
 - Battery storage projects
 - Electric vehicle charging stations
 - Commercial clean vehicles for transportation, facilities maintenance, and other purposes

Certain requirements and bonuses that may affect the amount of Elective Pay applicable tax credits

Prevailing Wage and Apprenticeship Requirements

For a number of the tax credits created or modified by IRA, the credit amount is increased by five times for projects that meet requirements for paying prevailing wages and using registered apprentices. On June 18, 2024, the IRS and Treasury issued final rules on bonuses related to prevailing wage and apprenticeship requirements.

Domestic Content Bonus

Projects or facilities that meet domestic content requirements are eligible for a 10 percent increase to the Production Tax Credit (sections 45, 45Y) or up to a 10 percentage point increase to the Investment Tax Credit (48, 48E).

For projects or facilities beginning construction starting in 2024, for taxpayers using elective pay, the domestic content requirement can also result in a reduction of the Production Tax Credit or Investment Tax Credit if it is not met.

On Dec. 28, 2023, Treasury issued guidance on this rule for projects beginning construction in 2024 (Notice 2024-9).

Energy Communities Bonus

Projects located in historical energy communities, including areas with closed coal mines or coal-fired power plants, are eligible for a 10 percent increase in the PTC and an up to 10 percentage point increase in the ITC.

The bonus is also available to brownfield sites and to areas that have significant employment or local tax revenues from fossil fuels and a prior year unemployment rate at or above the national average.

Low Income Communities Bonus Credit Program

The program provides an increased credit of 10 percentage points or 20 percentage points to certain applicable credits that are part of the investment tax credit for certain facilities located in low-income communities, Indian lands, or federal housing projects, or serving low-income households.

You must apply and receive a capacity allocation, and then place your facility in service to claim this bonus.

Elective Pay Potential Use Cases

Goal	Project	Relevant Tax Credits
Fleet Cost Savings	Replace existing vehicle fleet with new electric vehicles and associated charging infrastructure	<ul style="list-style-type: none"> • Up to \$7,500 per light vehicle • Up to \$40,000 per larger vehicle • Up to 30% credit on investment in eligible EV charging equipment
Community Resilience	Install microgrid with solar and energy storage to serve critical infrastructure and facilities during emergencies and grid outages	<ul style="list-style-type: none"> • 6% - 50% credit on investment in solar, storage and microgrid controllers
Community Heating	Develop central geothermal system to provide heating to community buildings and dormitories	<ul style="list-style-type: none"> • 6% - 50% credit on investment in geothermal energy property

Clean Energy Investments Lower Cost

- Fleet Electrification Savings (U.S. Department of Energy)
 - EVs offer high fuel economy, which translates to lower operating costs.
 - EVs achieve their best fuel economy during stop-and-go driving conditions typical of many fleet applications.
 - Electricity prices are also less volatile than those of gasoline/diesel, making it easier to predict fuel costs over time. Lower off-peak electric rates may be available for charging, which further reduces EV fuel costs.

Clean Energy Investments Lower Cost

- Geothermal Savings (Ball State University Case Study)
 - As the coal fired boilers from the mid-20th century grew older and less efficient, Ball State University in Muncie, Indiana, grew larger. University staff needed to find a way to meet growing energy demands. Based on their research and analysis, the most cost-saving and energy-efficient solution was a campus-wide geothermal energy heating and cooling system.
 - Ball State's geothermal system heats and cools 47 buildings, covering 5.5 million square feet of space. In addition, Ball State saves approximately 45 million gallons of water, 500 billion British thermal Units (BTUs) of energy, and \$2.2 - \$2.5 million annually.)

Clean Energy Investments Lower Cost

- Solar Savings (San Antonio Case Study)
 - City officials plan to build and own the largest municipal onsite solar project in Texas. This \$30 million project will install rooftop, parking, and park canopy solar photovoltaic systems at 42 city facilities to offset energy consumption over the long-term.
 - The projected electricity generated annually from this multi-site project is expected to offset an estimated thirteen percent of the City's electricity consumption from its buildings, which is expected to result in cumulative net financial savings between \$7 - \$11 million over 25 years.

Using Elective Pay with Grants and Loans

- The elective pay final rule includes a special provision that would enable entities to **combine grants and forgivable loans with tax credits**.
- If an investment-related credit property is **funded by a tax-free grant or forgivable loan**, entities would get the **same value of eligible tax credit** as if the investment were financed with **taxable funds**—provided the credit plus ‘restricted tax-exempt amounts’ do **not exceed** the cost of the investment.

Using Elective Pay with Grants and Loans

- A higher education institution receives a tax-exempt grant in the amount of \$2,000,000 to install a solar farm on its main campus.
- The institution installs the solar farm for \$10,000,000, using the grant and \$8,000,000 of the institution's unrestricted funds.
- Under IRA, the institution is eligible for a section 48 Investment Tax Credit for its investment in the solar farm. The base credit is 6%. But because the institution has met prevailing wage and apprenticeship requirements, and the solar farm is located in an energy community, the ITC credit rate is enhanced to 40%.
- The institution's basis on the solar farm is \$10,000,000 and the institution's ITC credit is \$4,000,000.
- Since the amount of the restricted tax-exempt grant plus the amount of the ITC credit (\$6,000,000) is less than the cost of the solar farm (\$10,000,000), the institution's ITC credit is not reduced due to the grant.

How to Claim Elective Payments

- **Identify and pursue** the qualifying project or activity.
 - You will need to know what applicable credit you intend to earn and use elective pay for.
- **Complete** your project and place it into service.
- **Determine** your tax year, if not already known, to determine when your tax return will be due.
- **Complete** pre-filing registration with the IRS after earning the underlying credit.
 - This will include the credit(s) you intend to earn, among other information.
 - Upon completing this process, the IRS will provide you with a registration number for each applicable credit property.
 - **Registration is not a determination of the amount or validity of a credit**
- **File** your tax return by the due date (or extended due date) and make a valid elective pay election.
 - Provide your registration number on your tax return as part of making the elective pay election.
 - A valid election allows you to receive payment as a refund for the amount of the credit (or if applicable, offset your tax liability and receive a payment for any remaining amount).
- **Receive** payment after the return is processed.



State of Elective Pay

- As of mid-May, more than 2,000 projects or facilities have registered to claim elective pay for projects they have placed into service, including submissions from more than 100 state and local governments to register more than 950 clean buses and vehicles through elective pay.
- It is useful to think of applicable entities in one of four categories:
 - Pre-Adopters
 - Early-Adopters
 - Planners
 - Beginners

Closing

- More Information on Direct Pay
 - ✓ [IRS.gov/ElectivePay](https://www.irs.gov/ElectivePay)
 - ✓ [Pre-filing Registration User Guide](#); [How-to-Video](#)
 - ✓ [Permission Management User Guide](#)
 - ✓ [FAQs](#)
 - ✓ [CleanEnergy.gov/DirectPay](https://www.CleanEnergy.gov/DirectPay)
 - ✓ Subscribe to IRS e-News Subscriptions by visiting [IRS.gov/newsroom/e-news-subscriptions](https://www.irs.gov/newsroom/e-news-subscriptions) → Tax exempt & government entities
- More information on the IRA
 - ✓ [IRS.gov/CleanEnergy](https://www.irs.gov/CleanEnergy)
 - ✓ www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/

For more information

David R. Eichenenthal
Senior Advisor for Policy Implementation

David.Eichenenthal@treasury.gov

