Evergreen Collaborative

Direct Pay for States: How States Can Advance Clean Energy With Tax Credits

The Inflation Reduction Act (IRA) is the nation's largest investment in climate and clean energy and provides tools for states, local, and Tribal governments to invest in and own clean energy and emissions reduction technology like never before. Under the IRA, state, local, and Tribal governments—and other tax-exempt entities—are now able to access tax credits that have historically only been available to the private sector for investment in clean energy generation or to support the development of zero-emissions technologies.[1] Specifically, the new direct pay provision (also referred to as elective pay) enables tax-exempt entities to claim the value of a tax credit in the form of a direct payment from the Internal Revenue Service (IRS).

This memo outlines how direct pay can work for state governments, and how credits can be maximized and combined with other IRA funding opportunities. This memo details five tax credits that states can take advantage of through direct pay to reduce emissions and expand ownership of clean energy assets. (A full list of eligible tax credits can be found here.):

1. Investment Tax Credit (48, 48E)
2. Production Tax Credit (45, 45Y)
3. Advanced Energy Production Credit (48C)
4. Advanced Manufacturing Production Credit (45X)
5. Qualified Commercial Clean Vehicles Credit (45W)

How Direct Pay Works

The purpose of the direct pay provision is to enable tax-exempt entities, like states, to more easily reduce the overall cost of clean energy or clean technology projects. The direct pay provision allows tax-exempt entities to benefit from some clean energy tax credits by receiving a direct payment of the equivalent tax credit value, essentially making the tax credit refundable. The direct pay amount is a minimum of 30 percent[2] of the value of the project under most qualifying tax credits. Bonus credits are also available that can be stacked to increase the value of certain tax credits. Direct pay can also be used in conjunction with other IRA grants and loans to make the project financing even more accessible for state governments.

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[1] According to the IRS, "applicable entities include tax-exempt organizations, states, and political subdivisions such as local governments, Indian tribal governments, Alaska Native Corporations, the Tennessee Valley Authority, rural electric cooperatives, U.S. territories and their political subdivisions, and agencies and instrumentalities of state, local, Tribal, and U.S. territorial governments."

[2] The 30 percent minimum value for the qualified commercial clean vehicles credit is only valid if the vehicle is not powered by diesel or gas. Diesel or gas powered vehicles that qualify for the credit will only receive 15 percent of the value. The maximum credit available is dependent upon gross weight.

Direct pay enables states and other tax-exempt entities to finance a variety of projects without having to partner with for-profit entities to monetize tax credits, saving states time and money. Examples of clean energy projects include wind and solar projects, clean energy manufacturing of batteries or solar panels, and microgrids for community centers and medical centers. Direct pay can even be used to purchase new commercial clean vehicles and electric vehicle (EV) charging equipment to transition state and local fleets.

Direct pay works similarly to other tax credits that tax-liable entities would receive in that the recipient of the tax credit first needs to make an investment in the qualifying asset, file a tax return claiming the asset, and then receive the tax credit. This means that states will not receive a direct payment from the IRS until the investment is made and a tax return is filed, so project financing must incorporate this requirement and timing. The tax-exempt entity must also typically own the property to qualify for direct pay. The steps to claiming direct pay include:

1. Identifying the clean energy or clean technology project that is needed and selecting the applicable credit(s);
2. Identifying the tax year in which the project becomes operational;
3. Completing the pre-filing registration with the IRS and obtaining a registration number before the tax return can be filed and payment is received[3];
4. Fulfilling all eligibility requirements including, for example, placing the qualifying project into service;
5. Using the registration number to file tax returns by the due date; and
6. Receiving the payment!

While direct pay is designed to help states develop projects more quickly and reduce the need to partner with a third-party, for-profit entity, states will still need to allocate adequate time to access this provision. Direct pay may not be claimed in the same year as the financing is being secured, and depending on the complexity of the project, some projects may take longer to complete the steps to claim direct pay. States interested in taking advantage of direct pay should consider consulting a tax advisor and remain in close contact with the IRS as further guidance becomes available.

Project Financing

Before the IRA, tax-exempt entities could not access federal clean energy tax credits. Direct pay helps create a more positive mix of financing and funding for state projects and reduces reliance on private-sector developers. Direct pay will help reduce project costs and financing, derisk project financing, and provide states and other tax-exempt entities with greater leverage and flexibility in project design and ownership.

[3] More information about pre-filing registration will be made available by the IRS in late 2023.

It is important to note that a project must first be placed into service before an entity can claim direct pay. This means a qualifying entity will need to secure full financing of the project first and incorporate the timing of a direct pay claim, accordingly. While direct pay will never cover the full cost of the project, it will help significantly reduce the average cost of capital for a qualified project.

Direct pay can also be used with existing federal and state grants and loans to reduce the total cost of a project in addition to using traditional financing instruments like municipal bonds and state green banks. For example, states and local governments can stack funds allocated from the Climate Pollution Reduction Grants program, the Rural Utilities Services programs, the Grid Resilience formula grants for states and Tribes, and loans for transmission projects for projects that reduce emissions and support the development of clean electricity. States can stack the tax credits with funds from the National Electric Vehicle Infrastructure (NEVI) program as well as the Clean Heavy Duty Vehicles program and the Charging and Fueling Infrastructure Grant program for projects related to electric vehicle charging. Federal loans from the U.S. Department of Energy Loan Program Office may also be used to further reduce the cost of qualifying clean energy projects.

The tax credits available to states through direct pay are intended to be transformative for states by making new clean power and clean technologies available at a discount. The projects will only truly be transformative if they are done at a scale that will help transition a state or region away from polluting energy sources. Planning large-scale, high-impact projects using direct pay will require long-term planning and thorough budgeting from state offices

Uncapped Potential

The most exciting feature of direct pay is that there is no dollar limit on how much can be invested in projects applicable under direct pay. States can utilize direct pay for as many projects as they want each year until the tax credits run out early in the next decade. This means that states and local governments can use direct pay, along with other federal resources, to make significant progress on clean energy deployment and dramatically reduce emissions in the near term.

Clean Energy and Clean Technology Tax Credits for States

There are 13 clean energy tax credits that are eligible for direct pay. The following section details five of the most significant direct pay-eligible tax credits. A full list of the direct pay eligible tax credits can be found here.

Investment Tax Credit (48, 48E)

The Investment Tax Credit (ITC) allows for low-cost investment in projects that generate clean electricity. The IRA expanded the ITC (originally Section 48) for projects completed before 2025 and created a new Section 48E for projects that are placed into service in 2025 or later. Under the new ITC (48E), a variety of clean electricity projects qualify including fuel cells, solar,

geothermal, small wind, energy storage, biogas, microgrid controls, hydropower, and combined heat and power systems. To qualify for the ITC credit, a project has to be used for the purpose of generating electricity and have a zero or net negative lifecycle emissions rate. The base credit for ITC projects that are less than 1 megawatt (MW) is 30 percent of the project value, and up to 50 percent of the project value can be covered if the energy community and domestic content bonus credits are earned. For projects that are greater than 1MW, the base credit is six percent of the project value but can increase to 30 percent if prevailing wage and apprenticeship requirements are met. Projects greater than 1MW can also achieve up to 50 percent credit coverage if energy community and domestic content bonus standards are met in addition to prevailing wage and apprenticeship requirements (further discussed in the bonus credits subsection).

The ITC can be used for both large and small clean energy projects, giving states the opportunity to pilot clean energy projects and invest in large-scale projects to replace fossil fuel power. For example, a state may invest in battery storage to provide more flexibility and capacity to the grid as was done using the ITC in Texas. Historically, ITC has been used to make investments in solar energy, which can help take fossil fuel assets offline completely. The ITC's strong incentives for prevailing wage and apprenticeship standards for larger projects also mean that states can secure good-paying jobs by committing to large-scale clean energy projects.

For each project a state may undertake using direct pay, it is essential to balance the benefits of each tax credit opportunity to determine which credits will lead to the best returns. For example, while a solar project can utilize either the ITC or the production tax credit (PTC) (discussed below), the size of the project and whether bonus credits will be applied can determine which tax credit will be more advantageous. When no bonus credits are accounted for, a solar project may benefit more from the PTC; but when one or two bonus credits are applied, ITC is likely to be more beneficial for larger solar projects. Developers must choose between using the ITC and the PTC, as they cannot both be claimed for the same facility.

Production Tax Credit (45, 45Y)

The Production Tax Credit (PTC) encourages the production of electricity from renewable sources including wind, biomass, geothermal, solar, small irrigation, landfill and trash, hydropower, marine, and hydrokinetic energy. The IRA expanded the PTC (originally Section 45) for projects completed before 2025 and created a new Section 45Y for projects that are placed into service in 2025 or later. Credits are given on a per kilowatt-hour (kWh) basis with different base credit values given based on the type of energy the electricity was derived from. Typically, this credit system results in covering roughly 30 percent of the project value. Similar to ITC, there are wage and apprenticeship requirements when claiming the PTC if the project will generate at least 1MW. The domestic content and energy community bonus credits can apply as well. Once the project is operational the credit is good for 10 years.

Providing credits based on the amount of clean energy provided is an incentive to produce as much clean energy as possible, while not having to pay for the full price of production. This

means that states should consider investing in large-scale clean energy projects and provide the added benefit of good jobs and job pipelines by meeting the prevailing wage and apprenticeship requirements. For example, in Utah, investors are taking advantage of savings with PTC by building out 240 MW of solar to expand clean energy to Carbon County.

Advanced Energy Production Credit (48C)

The Advanced Energy Production Credit (AEPC) also known as 48C, encourages investment in industrial and manufacturing facilities that will recycle clean energy equipment and critical minerals, or reduce greenhouse gas emissions. A project can qualify for AEPC by re-equipping, expanding, or establishing a facility to produce or recycle clean energy equipment and vehicles, or the facility can process, refine, or recycle critical minerals. The other way an AEPC credit can be claimed is by re-equipping a facility to reduce greenhouse gas emissions by at least 20 percent. The base credit amount given is six percent of the value of the investment, but a credit of up to 30 percent can be given for projects that meet prevailing wage and apprenticeship requirements. Of the $10 billion allocated for this clean energy credit, $1.6 billion will be set aside in the first round of funding for projects within energy communities. Taking advantage of AEPC requires an application through the U.S. Department of Energy (DOE) applicant portal, including the submission of a concept paper. Applications for the first award amount of $4 billion closed as of August 2023, but applications for the remaining funds will open in the future.

Even though the deadline to submit concept papers recently closed, investors are already planning to take advantage of AEPC in future application rounds. For example, the electronics company LG intends to open a heat pump factory to take advantage of this tax credit, which will secure domestic manufacturing jobs. Historically, AEPC has been a very popular program with clean energy projects in 43 different states ranging from projects related to solar materials to batteries for clean vehicles, and turbines for hydroelectric power and nuclear facilities.

When considering the use of AEPC, the tax credit value must be weighed against the opportunity to claim the advanced manufacturing production credit (described below). Project developers will have to choose to apply for either AEPC or the advanced manufacturing production credit, as both cannot be claimed for the same project.

Advanced Manufacturing Production Credit (45X)

The Advanced Manufacturing Production Credit (AMPC), also known as 45X, provides an incentive for domestic manufacturing of components for solar and wind energy, batteries, inverters, and critical minerals. The AMPC is earned on a per-unit basis for each clean energy component that is produced, and the credit amount is determined by the component and multiplied by the number of units produced. Credit amounts vary greatly from solar-grade polysilicon at $3 per kilogram to PV modules at 7 cents. The tax credit is expected to cover 10 percent of the costs of the project.

This is a new tax credit established under the IRA that has great promise in being able to secure domestic production of clean energy components and ensure a steady supply chain of clean

technology development. Similar to the other credits listed above, AMPC cannot be claimed by a facility already claiming the ITC. The Department of Energy anticipates that facilities producing components that qualify under AMPC will get greater value from claiming AMPC than ITC, but developers should weigh the potential value of the specific project to determine which tax credit will be most beneficial.

Qualified Commercial Clean Vehicles Credit (45W)
The Qualified Commercial Clean Vehicle Credit (45W) incentivizes the purchase of clean vehicles by reducing the cost of clean vehicles. The credit covers the lesser of 15 percent of the vehicle cost or 30 percent for vehicles without internal combustion engines or the amount that the purchase price exceeds the price of a comparable internal combustion engine. The limit per vehicle is $7,500 for vehicles under 14,000 lbs and $40,000 for all other clean vehicles. To claim the credit the vehicle must be made by a qualified manufacturer, be used for business, and be used primarily in the United States.

The qualified commercial clean vehicles credit was established through the IRA and provides an opportunity for states, local, and Tribal governments to transition their fleets at a reduced cost. This credit can be used to transition passenger vehicle fleets such as cars and trucks used for state and city operations and management, delivery vehicles, and passenger vehicles used by state officials.

The 45W credit cannot be claimed if the vehicle was claimed under the consumer credit for new clean vehicles, 30D.

Bonus Credits

In addition to the base value tax credit amount discussed above for each credit, some tax credit values can be increased by meeting additional requirements. This increased value is achieved through attaining “bonus credits” that can be stacked and sometimes cover most of the project value. *It is important to note that most of these bonus credits are awaiting final guidance and rules from the IRS, so states should stay up-to-date with the IRS on forthcoming updates.* These bonus credits include:

Prevailing Wage and Apprenticeship Requirement: This bonus credit provides clean energy and clean technology developers using ITC, PTC, or AEPC the opportunity to reduce project costs by meeting the prevailing wage and apprenticeship requirements. Qualifying projects must pay covered workers the prevailing wage as set by the U.S. Department of Labor and employ apprentices from registered apprenticeship programs for a certain number of hours. Meeting these requirements multiplies the base credit amount by five. For example, under the ITC, the base credit is six percent of the project value but can increase to 30 percent if prevailing wage and apprenticeship requirements are met.

Domestic content bonus credit: This bonus credit can be stacked with ITC (48, 48E) and PTC (45, 45Y) qualifying projects when projects meet domestic sourcing requirements for iron, steel, and manufactured products (requirements vary depending on type and product). For the ITC, this can result in up to a 10 percentage point increase in the credit value of the project if prevailing wage and apprenticeship requirements are also met. For the PTC, credits are calculated based on energy generated per hour, so the base value of the credit per hour value increases by up to 10 percentage points. Claimants must also file the appropriate domestic content certification statement and meet required recordkeeping in accordance with IRS guidance.

Energy communities bonus credit: This bonus credit can be stacked with ITC (48, 48E) and PTC (45, 45Y) qualifying projects located in energy communities. Energy communities are communities that have been historically located near polluting industries like coal mining or oil extraction. The IRA defines energy communities as being any of the following: 1) a brownfield, 2) a region that has had significant employment or tax revenue from fossil fuel industries and has an unemployment rate higher than the national average, or 3) a census tract or adjacent census tract that has been affected by a coal mine since 1999 or a coal generation plant retirement since 2009. The energy communities bonus credit provides a 10 percentage point increase on the value of the project; however, for the ITC (48, 48E) prevailing wage and apprenticeship requirements must also be met to claim the 10 percentage point bonus. Energy communities can be identified with DOE's Energy Community Tax Credit Bonus map.

Low-income communities bonus credit: This bonus credit can be stacked with ITC (48E) qualifying solar and wind projects located in low-income communities. The low-income communities bonus credit provides a 10 or 20 percentage point credit increase for qualifying projects that are less than five megawatts: 10 percentage point increase for wind and solar projects that are located in a low-income community or on Tribal land or 20 percentage point increase for projects that are part of qualified low-income residential buildings or qualified low-income economic benefit projects. Low-income communities that would qualify a project for the bonus credit can be found with this map.

Direct Pay Trifecta: Clean Energy, Good Jobs, Supporting Domestic Industry

Direct pay provides an exciting opportunity for states to expand clean energy production and generation, and the development of clean technologies that will help states meet emissions reduction targets while bolstering domestic industries and supporting good, well-paying jobs and apprenticeship programs. By owning and operating a greater share of clean energy resources, states will be able to better meet their climate targets in the coming years as clean energy generation comes online. And by taking full advantage of the bonus credits that support prevailing wage and apprenticeship requirements, states can ensure that clean energy and technology development results in well-paying jobs for state residents. Meeting the domestic content requirements will also support good jobs and ensure there is continued demand for

domestic products that will be critical to the transition to clean energy. Maximizing direct pay tax credits will result in long-term gains for states looking to expand clean and affordable energy while supporting American workers.