Direct Pay

How states and local governments can finance the clean energy transition

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The United States is in the middle of a clean energy transition as the nation pivots away from dirty fossil fuels and toward wind, solar, and other clean renewable energy sources. In 2022, as reported by the Energy Information Administration, generation from renewable sources—wind, solar, hydro, biomass, and geothermal—surpassed coal-fired generation in the electric power sector for the first time.[1]

State and local elected leaders have recognized the need for this transition as part of a larger response to climate change. According to a 2022 Menino Institute survey, nearly all mayors surveyed worry about climate impacts on their cities.[2] Local elected officials understand that their communities bear the costs of climate change, whether it be flooding or fire. And the reliance on dirty sources of energy have left many communities to deal with the effects of high pollution rates and poor health outcomes.

According to the National League of Cities, hundreds of cities have adopted 100 percent renewable energy or carbon neutrality goals.[3] The same Menino Institute survey found that mayors are willing to act and innovate—with support for investing in new technologies such as solar and electric vehicles.

States also are focused on responding to climate change. The 25 states and territories that are members of the U.S. Climate Alliance have all committed to reducing collective net greenhouse gas (GHG) emissions at least 26 to 28 percent below 2005 levels by 2025 and 50 to 52 percent by 2030, and collectively achieving overall net-zero GHG emissions as soon as practicable (no later than 2050).[4]

Even for state and local governments that have not committed to acting on climate change, there is a compelling case for making the transition to clean energy. State and local governments bear significant costs related to energy. Some have estimated that energy costs account for ten percent of local government operating budgets.[5] The U.S. Department of Education reports that energy is the second biggest category of expense for school districts, surpassed only by the cost of personnel. And there is growing evidence that in many cases, fleet electrification and a shift to clean and renewable energy resources can produce ongoing operating savings.

In the City of San Antonio, Texas, for example, city officials plan to build and own the largest municipal onsite solar project in Texas.[6] 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 13 percent of the city's electricity consumption from its buildings, which is expected to result in cumulative net financial savings between $7 million to $11 million over 25 years.

Finally, those local governments that run municipal electric utilities are by necessity responding to the national and international shifts to clean energy as power generators and distributors as well as consumers.

Direct pay can reduce the cost of capital for investment in clean energy

Despite the case for state and local government transition to clean energy, capital cost has posed an obstacle—even where there would be a return on investment in operating cost savings. For most government entities, the need for capital funding almost always outpaces

available resources. And investments in solar panels on a public works building may not necessarily have the same appeal in a town's capital plan as a new park or fewer potholes.

The federal government, with grant funding under both the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA), has started to change this calculus over the last three years. For example, BIL included funding for investments in clean energy for school buildings and grants to replace diesel school buses with electric ones. IRA included an array of grant opportunities for investment in renewable energy by state and local governments.

But perhaps the most powerful—and newest—tool in the state and local government funding toolkit for the clean energy transition is a tax provision in IRA known as elective or direct pay.

Under direct pay, for the first time, tax-exempt and governmental entities, including states and municipalities, can receive a payment equal to the full value of tax credits for building qualifying clean energy projects or purchasing clean vehicles. This fundamentally changes the cost analysis for state and local governments—and nonprofits—to invest in clean energy.[7]

The dozen tax credits applicable for direct pay generally fall into four categories: energy generation and carbon capture, manufacturing, vehicles, and fuels. They include the investment tax credit (ITC), for investments in renewable energy projects, as well as the production tax credit (PTC), to produce electricity from eligible renewable sources.[8] In general, an applicable entity can use elective pay with respect to these dozen credits if it meets the tax credit's underlying requirements.

For state and local governments, this means there is an opportunity to fundamentally rethink fleet composition and how government buildings are powered, heated, and cooled.

In the case of fleet electrification, direct pay can provide up to $7,500 toward the cost of a lighter vehicle or $40,000 toward the cost of a heavier vehicle. Direct pay can also provide up to 30 percent of the cost of charging equipment.

Several cities are already moving forward with fleet electrification and considering the potential of using direct pay to finance this investment. For example, according to a case study from the Local Infrastructure Hub, to meet its goal of 100 percent carbon free operations by 2030, the City of Madison, Wisconsin, is planning to file for $13 million in tax credits under direct pay to support transitioning its municipal fleet to low and no-carbon vehicles, as well as for solar and geothermal energy projects.[9] Before the IRA, Madison relied on local and state sources of funding. Under the city's capital improvement program for FY 2024 through FY 2029, though, Madison is planning on adding direct pay to a capital stack that includes government obligation

EXHIBIT 1 | Inflation Reduction Act bonus provisions

Prevailing wage and apprenticeship requirements	For a number of the tax credits created or modified by the IRA, the credit amount is increased by five times for projects that meet requirements for paying prevailing wages and using registered apprentices.
Domestic content bonus	Projects or facilities that meet domestic content requirements are eligible for a ten percent increase to the Production Tax Credit (sections 45, 45Y) or up to a ten-percentage point increase to the Investment Tax Credit (48, 48E). For projects or facilities beginning construction in 2024 or later, 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.
Energy communities bonus	Projects located in historical energy communities, including areas with closed coal mines or coal-fired power plants or that meet other eligibility criteria, are eligible for a ten percent increase in the PTC and an up to ten percentage point increase in the ITC.
Low-income communities bonus credit program	The program provides an increased credit of ten 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.

The City of San Antonio's municipal solar project is projected to offset 13% of the City's electricity consumption from solar installations at 42 city facilities, which is expected to result in cumulative net financial savings between $7-11 million over 25 years. *Photo courtesy of Big Sun Solar.*

borrowing and local support from partners to fund the fleet electrification.

State and local governments can also use direct pay in conjunction with grants and loans, and it is possible to fund 100 percent of a project's cost with a combination of direct pay and grants, provided the combination of credits plus "restricted tax-exempt amounts" do not exceed the cost of the investment.

Say, for example, a school district receives a tax-exempt grant in the amount of $300,000 to purchase an electric school bus, which costs $400,000. Under the IRA, clean commercial vehicles are eligible for a tax credit (Section 45W credit) of up to $40,000. If the school district purchases the bus using the grant ($300,000) and $100,000 of the school district's unrestricted funds, then the school district's 45W credit is not reduced since the sum of the grant and the tax credit ($340,000) is less than the cost of the electric bus ($400,000).

Local governments are also rethinking the way they power their own facilities. For example, recent reporting from Rethink Geoenergy noted that the City of Rochester, Minnesota, has started working on a geothermal heating and cooling system as part of its strategy to reduce greenhouse gases by 100 percent over the next three decades.[10] The system will serve at least one million square feet of downtown space including its city hall, the Mayo Civic Center, and public library. The city projects that half of the project's costs will be covered by tax credits under the IRA, as well as smaller public funding sources.

The size of the ITC and PTC for clean energy is greatly dependent on the application of different bonus provisions under the IRA (see Exhibit 1). For some projects, higher credits are available where construction involves workers receiving prevailing wage and the use of registered apprenticeship programs; where the projects are located in low-income communities or energy communities (such as, brownfield sites or a community historically dependent on fossil fuel energy), or meet certain domestic content requirements (which applies to facilities or projects built using the required amounts of domestically produced steel or iron, and manufactured products). These bonuses can significantly increase the value of the direct payment and can truly change the economics of a government's clean energy transition.

As an example, consider a local government thinking about building a solar farm with more than one MW of output and at a cost of $1 million. The project would be available for a base investment tax credit of six percent or $60,000. But if the project meets the requirements for the prevailing wage and apprenticeship bonus, the credit will increase to 30 percent, or $300,000. If the project is also located in an energy community, that 30 percent becomes 40 percent. And, if the project meets domestic content requirements, the tax credit that was originally six percent of the investment cost can instead become half of the investment cost—or in the case of this hypothetical, $500,000.

State and local governments that have started to look at the role that these tax credits can play in the overall structure of a deal, have found that projects that did not pencil out before now do.

Direct pay is a tax credit, not a grant

Direct pay funding is not another grant program. Funding is provided through tax credits that can be paid out by the IRS as refunds. That difference is important for several reasons.

By and large, there is no competitive process with direct pay. If the filing entity is one of those identified in statute and regulation—and state and local governments, including their agencies and instrumentalities, are

For state and local governments, there is an opportunity to fundamentally rethink fleet composition and how government buildings are powered, heated, and cooled.

TOP:
The City of Madison, Wisconsin, is using tax credits under direct pay to support the transition of it's municipal fleet to low and no-carbon vehicles, which will help the City meet its goal of 100 percent carbon free operations by 2030.

BOTTOM:
The City of Denver, Colorado, is using direct pay to bolster their Climate Protection Fund.

applicable entities—and they meet the underlying requirements of the tax credit and bonus provisions, they receive the funding in the form of the direct pay credit amount. While there are allocation processes for the low-income communities' bonus and another for the advanced energy project credit, there is otherwise no competitive process for the tax credits. If you earn, and are eligible for, the credit, you get it.

There is also no cap on the number of times that an applicable entity can file for direct pay credits or the total amount of credits.

Elective pay is available through 2032 (technically, through tax years that begin in 2032), and most of the underlying credits are in effect for about that long or longer. Unlike grant funding, there is no cap on the total amount that can be disbursed, nor is there a potential that there will be no "notice of funding opportunity" in the future under the program each year.

Next steps for state and local governments

State and local governments large and small are moving forward with the clean energy transition and are looking to direct pay to help fund it. But the reality is that different state and local governments are at different points in this process.

Many state and local governments are "pre-adopters"—they had already started both planning and deploying clean energy projects eligible for direct pay prior to the IRA. For these pre-adopters, IRA and direct pay will allow these governments to free up additional funding that can allow them to invest faster and more in the clean energy transition.

Other state and local governments are "early adopters"—they had developed plans for the clean energy transition but were largely stymied in execution because of the funding issues discussed earlier. These early adopters are now moving forward with projects, counting on direct pay as a key component of their capital stack.

TOP PHOTO: DEAN MOSIMAN | WISCONSIN STATE JOURNAL

Most state and local governments, however, are at earlier stages in the process. A significant number of state and local governments are "planners"—they may not have had a climate action plan or sustainability plan before the passage of IRA, but they are moving to develop one now. In many cases, they are looking at their existing capital plan to see if they have already invested in—or are planning to invest in—clean energy projects or purchases.

Finally, some state governments and most local governments are in the beginning stage. Smaller and lower-capacity local governments, particularly, may not know the details of how direct pay works and what it can be used for: if you are a finance official of one of those governments, you are not as far behind in the process as you might fear.

For those state and local governments that are in the beginning stage of this work, several steps are required to move forward. State and local governments can start by building a team with government stakeholders across departments and agencies, including those in finance, law, sustainability, fleet, and facilities staff. This team could coordinate early and assess existing capital and sustainability plans and see which projects around these categories may already qualify for receiving a tax credit via direct payment.

The team could also work with the broader ecosystem of tax-exempt entities (that are also eligible for direct pay) in its community or state, such as faith-based institutions, schools, hospitals, and local nonprofits that are interested in launching their own clean energy projects.

After assessing the landscape for potential projects, the team could begin developing a plan for advancing clean energy projects within the government, and there could also be a plan for a broader community and economic development strategy around clean energy. From there, the team could figure out how to finance these projects, including by leveraging the clean energy tax credits, direct pay, and possibly a mix of grants and loans. And every team should consider getting advice from a tax advisor.

It is also worth contemplating what comes after the projects are completed. These teams can think creatively about how they want to use the direct pay payments once they receive them. Well-deployed direct pay can be a sustainable source of funding for clean energy investments.

An example noted by the Local Infrastructure Hub, is the City of Denver, Colorado, which is currently planning on using direct pay funds to bolster Denver's Climate Protection Fund.[11] The city adopted a local sales tax in 2020 to fund clean energy projects with the goal of raising approximately $40 million. Denver is now starting to use this local revenue and plans on supplementing it with direct pay. The city has recognized that some of its investment will come back to the city and has essentially created an internal revolving fund, with a new budget line for direct pay, or "non-grant federal revenue." This approach will also enable their investments in clean energy to have a greater impact in their city.

Finally, there are important roles that state and local governments can play as coordinators, convenors, and problem solvers for the larger ecosystem of tax-exempt entities that can take advantage of direct pay. State governments can play an important role in helping to coordinate municipalities within their states. For example, they can provide bridge financing directly to municipalities that are contemplating leveraging direct pay for their clean energy projects but need that up-front financing to put the project into service. They can also provide technical assistance to municipalities, as it is very likely that they had faced similar challenges or questions. Likewise, municipalities can provide similar services—bridge financing, technical assistance, and best practices—to other tax-exempt entities such as nonprofit organizations and faith-based institutions.

Conclusion

Direct pay provides so many possibilities and opportunities, and state and local governments should explore all these options. As the clean energy transition progresses, state and local governments now have access to a powerful financial innovation that can help them not only participate, but also lead in this transformation.

1 "Renewable generation surpassed coal and nuclear in the U.S. electric power sector in 2022," Today in Energy, U.S. Energy Education Administration, March 27, 2023.

2 Katherine Levine Einstein, David M. Glick, Maxwell Palmer, and Stacy Fox, Mayors and the Climate Crisis, Menino Survey of Mayors, Boston University Initiative on Cities, 2022.

3 Peyton Siler Jones, How to Get Your Local Government to 100 Percent Clean Electricity, National League of Cities, April 11, 2023.

4 "All Hands on Deck," U.S. Climate Alliance Annual Report, December 2023.

5 "Energy costs are a significant expense for most local governments and can account for as much as 10 percent of a local government's operating costs." Green Best Practices: How Local Governments Can Reduce Energy Cost and Minimize Impact on Global Climate Change, research brief, Office of the New York State Controller.

6 Helping U.S. Cities Advance Ambitious Renewable Energy Goals, American Cities Climate Challenge, Renewables Accelerator, San Antonio, Texas (cityrenewables.org/story/san-antonio-tx).

7 "Applicable entities" that are eligible for and can use direct pay include tax-exempt organizations, states, local governments, Indian tribal governments, Alaska Native Corporations, the Tennessee Valley Authority, rural electric cooperatives, U.S. territories, as well as agencies and instrumentalities of state, local, tribal, and U.S. territorial governments.

8 The IRA sunsets the existing PTC (section 45 of the tax code) and ITC (section 48 of the tax code) by limiting their availability to projects beginning construction before 2025 and transitioning to the Clean Electricity Production Credit (section 45Y of the tax code) and the Clean Electricity Investment Credit (section 48E of the tax code) for projects placed in service after December 31, 2024. These new Clean Electricity credits are one of the law's most significant reforms, providing incentives for the first time to any clean energy facility that achieves net zero greenhouse gas emissions.

9 Fleet Electrification in Madison, Local Infrastructure Hub, U.S. Conference of Mayors, National League of Cities, Results for America, and Delivery Associates, March 18, 2024.

10 Carlo Cariaga, Geothermal heating and cooling system being built in Rochester, Minnesota, Think Geoenergy, September 6, 2023.

11 Climate Protection Fund, Denver, Colorado, Transformative Projects, Local Infrastructure Hub, December 12, 2023 (localinfrastructure.org/resources/transformative-projects).

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