Funding Opportunities: Solar Arrays and Associated Energy Storage

Is your municipality ready to invest in a solar array and/or energy storage to meet its energy goals, build climate change resilience, and save money? Below are funding opportunities we've identified to support your efforts.

Consult program-specific guidance for additional information. Links to other websites offered in this document are provided to assist municipalities. The inclusion of a link does not imply endorsement or approval of the linked site or product.

Municipally Owned Array | Developer Owned Array | Resources

Municipally Owned Array

Cash Purchase

Direct ownership of a solar system can be financed with cash through the municipal budget, using local ARPA funds, or with a municipality's reserve fund.

Direct Solar Loan

The municipality can borrow money from a traditional lender and make monthly payments. EnergySage compiled a comprehensive list of lenders that finance solar projects in Vermont. VLCT is aware of these in-state lenders and programs marketing loans for energy projects.

Vermont State Employees Credit Union (VSECU) Green Loan – This program can be paired with the Federal Investment Tax Credit, so borrower pays lower payments during an initial

period. The payments then increase unless the tax credit is applied to the loan. Municipal terms and rates are higher than the residential rates published on the website.

Vermont Federal Credit Union (VFCU) Solar Loan - VFCU will amortize its loan for the Federal Investment Tax Credit. There are no pre-payment penalties. Municipal terms and rates vary.

Vermont Economic Development Authority (VEDA) Commercial Energy Loan Program - Municipalities are eligible for this program. It has variable rates and a low fixed rate option for five years.

Vermont Buildings and General Services Municipal Energy Loan Programs – The Vermont Legislature authorized a Municipal Energy Loan Program and a Municipal Energy Revolving Fund as part of Act 172 in 2022. Eligible activities are equipment replacement, studies, weatherization, construction of improvements affecting the use of energy resources the implementation of energy efficiency and conservation measures, and the use of renewable resources. Programs launch in mid- to late 2024.

Establish A Municipal Revolving Loan Fund - The City of Montpelier established its own Net Zero Revolving Loan Fund using $20,000 from the City's Reserve Fund, which Efficiency Vermont matched with $10,000. The fund finances municipal energy efficiency and renewable energy investments. Annual energy savings from funded projects are paid back into the fund so it grows over time.

Grants and Rebates

These funding opportunities can be used by a municipality for energy generation and/or storage.

Vermont Arts Council Cultural Facilities Grant - Supports projects that enhance, create, or expand the capacity of an existing building to provide cultural activities for the public. Applicants must own a facility that is at least 10 years old, and it must be physically located in Vermont. This grant will fund improvements to libraries and town halls if they provide cultural activities for the public, including accessibility improvements, hazard mitigation efforts, and energy efficiency upgrades among other physical improvements. Energy efficiency projects,

including renewable energy and battery storage, are eligible activities.

EBSCO Solar Grant Program – This annual grant funds solar installations at libraries with a goal of helping libraries offset their expenses by incorporating solar power. Optimal candidate libraries will have newer roofs that have a lifespan consistent with a new solar system or space for a ground installation. The library should be able to support an array large enough to offset a significant portion of the library's electricity costs. The library must be a current EBSCO customer. A library in a small Vermont community has received an EBSCO grant.

Federal Investment Tax Credit - In the Inflation Reduction Act (IRA) of 2022, Congress authorized entities that don't pay federal taxes, such as municipalities and municipal utilities, to use certain tax incentives. Based on their energy production capacity, most solar projects for municipal facilities will use the Investment Tax Credit. See VLCT's Tax Incentives Municipalities Can Use to Further Their Energy Goals. For renewable energy generation and storage, municipalities can use the Energy Tax Credit (§ 48) for projects placed in service through December 31, 2024, and the Clean Electricity Investment Tax Credit (§ 48E) for projects placed in service beginning January 1, 2025.

The IRS released temporary regulations that provide initial information about how the Section 48 Energy Investment Tax Credit will be implemented. More guidance/regulations are forthcoming. Read the short version in Publication 5817-E, Elective Pay for State and Local Governments.

The tax credit is claimed through a process known as Elective Pay (a.k.a. Direct Pay). To receive a payment from the IRS, the municipality must complete a pre-filing registration for each eligible project and receive a project registration number. More information about this pre-filing registration process will be available by late 2023. Other requirements include satisfying all eligibility requirements for the tax credit, substantiating them with documentation, and filing Form 990-T by a specified due date. Form 990-T is the Exempt Organization Business Income Tax Return.

The IRS's webpage for Inflation Reduction Act tax incentives includes information, publications, and frequently asked questions about Elective Pay and Transferability. Publication 5817-G, Clean Energy Tax Incentives: Elective Pay-Eligible Tax Credits highlights tax credits available to tax exempt entities.

Green Mountain Power (GMP) Rebates & Programs – GMP has incentive programs for energy storage for its customers.

VNRC Small Grants for Smart Growth – Supports advocacy for better land use, advancing transportation choice, supporting housing choice and affordability, promoting downtown or village center revitalization, conservation and natural resources, public outreach and engagement. Awards can be useful for project planning, as well as outreach and education activities around community revitalization efforts. Awards cannot be used for capital improvements. Awards range from $500 to $1,500.

These funding opportunities require wrapping the solar project into a larger project, developing arrays that serve low- and moderate-income communities, or selling power.

USDA Powering Affordable Clean Energy PACE Program – Supports renewable energy projects that use wind, solar, hydropower, geothermal, or biomass, as well as for renewable energy storage projects. Applicants must generate electricity for resale to residents. Projects must be based on bankable power purchase agreements (PPAs) or through a financial guarantee that ensures the financial feasibility of the project. Energy must be sold for resale to eligible off-takers which can include both utility and non-utility customers.

Both rural and nonrural areas are eligible; however, at least 50 percent of the population served by your proposed renewable energy project must live in communities with populations of 20,000 or fewer. This is a loan program, but it provides loan forgiveness (grant component) if minimum standards are met (20% forgiveness) or if the project in or serves 50% or more of the population of a designated energy community, disadvantaged community, or distressed community (40% forgiveness). Award range is $1 million to $100 million. Loan term is up to 35 years. Federal investment and production tax credits can be used with this program.

USDA Rural Development Community Facilities Direct Loan and Grant Program - Funds solar as part of an award for other qualified projects, such as municipal and emergency services buildings, water and wastewater, and other community services. Communities with 20,000 people or fewer are eligible for the program. Communities with 5,000 people or fewer receive top priority for the grants.

Funding awards range from 75% grant and/or 25% loan to 0% grant and/or 100% loan depending on the community's population and Median Household Income. The program

website provides grant eligibility by municipality. This information will be updated for 2020 Census information in summer 2023. If your community's grant eligibility is 15% or less, it may be more beneficial to pursue a traditional loan. New federal requirements may raise project costs sufficiently to offset the benefits of the grant funds. It is advisable to discuss projects with USDA staff prior to initiating an application.

Northern Borders Regional Commission Catalyst – Supports projects that address transportation, telecommunications, energy, and basic public infrastructure; business and workforce development; health care, nutrition and food security, and other public services; resource conservation; tourism; recreation; and open space preservation consistent with economic development. New in 2023, the grant funds basic public infrastructure, including public meeting spaces. Incorporating a project's relationship to economic activity will increase application competitiveness. Solar arrays that sell power will be more competitive.

Congressionally Directed Spending (CDS) Requests - Formerly known as *Earmarks*, CDS projects are selected by Members of Congress for funding through the appropriations bill. The Senate and House have different rules for these requests. Projects benefit from discussion with Congressional staff prior to seeking these funds. Projects are usually submitted in late February through mid-March annually. Information is available on websites of Senator Sanders, Senator Welch, and Representative Balint. CDS grant awards pass through a federal agency and have that agency's associated grant terms and conditions. Funds may not be available for 1-4 years based on an agency's capacity.

Other grant and funding programs may apply based on the specifics of your project. Email FFA@vlct.org to schedule a project-based discussion about funding options.

Developer Owned Array

Municipalities can finance solar arrays through developer-financed solar loans, solar leases, and power purchase agreements (PPAs).

Solar Lease

With a solar lease, the municipality agrees to pay a fixed monthly lease payment to the solar developer. Ex. $XX every month through the life of the loan. Some lease agreements allow purchase of the panels at the end of the lease so the municipality can continue using the solar.

Power Purchase Agreement

With a power purchase agreement, the municipality agrees to purchase the power it uses for a set price per kilowatt-hour. This means the municipality's monthly bill will vary based on power used.

With solar leases and PPAs, the solar developer pays upfront costs and owns the system when it is placed in service. Therefore, the developer would own any tax credit.

Municipalities can request cost estimates from solar developers for municipally owned and developer owned arrays to understand how the tax credit affects municipal costs under both options.

Resources

US Department of Energy Solar and Storage Blueprint – This step-by-step guide includes a high-level overview of the process and benefits of two approaches to going solar – power purchase agreements (PPAs) and direct government ownership of projects. The Blueprint showcases important tools and online resources, such as a sample Request for Proposals - and outlines Key Activities to help guide entities to success. A Blueprint Summary PDF is available for download. The Blueprint, along with Blueprints for other energy activities, was developed for recipients of the Energy Efficiency and Conservation Block Grant (EECBG) formula program. Vermont's municipalities have access to these Blueprints even if they haven't been awarded an EECBG grant.

Vermont Department of Service Renewable Energy Resources – This website includes links to publications and websites about solar, biomass, hydroelectric, and wind energy.

Vermont Energy and Climate Action Network (VECAN) Community Solar Toolbox – VECAN walks you through getting started, siting, and other important issues. It provides models, approaches, resources, other guides, and success stories.

Publication Date
03/01/2024