

2023 Pathways for Solar

For Nonprofits on Mount Desert Island

This document provides information about the solar options available to nonprofits on Mount Desert Island in order to help our local leaders understand and navigate the various options and financial pathways available.

Solar has both environmental and economic benefits. Over the last decade, the cost of solar has declined substantially and homeowners, businesses, municipalities, and nonprofits are taking advantage of the opportunity. Thanks to the Inflation Reduction Act, there is now more federal funding than ever to support solar installation for nonprofits. This document will walk through the federal incentives, Maine's Net Energy Billing program and the various available financing options.

New Federal Incentives for Nonprofits

Historically, nontaxable entities like nonprofits and municipalities have not been able to access the significant federal tax credits that make solar economically viable for homeowners and businesses. However, beginning in January of 2023, nonprofits are eligible to receive a direct payment from the IRS, which reimburses 30% of the solar project's equipment and installation cost. Local governments and higher education institutions, as well as other exempt organizations, can now treat tax credits they have earned as an "overpayment of taxes" and receive a direct payment from the U.S. Treasury as a tax refund.

On top of the 30% direct payment, there is the potential for adders, including a 10% adder for domestic content, a 10% adder if the project is built on a brownfield site, and a 10% adder for low-income communities, with an additional 10% for federally subsidized affordable housing. The IRS review is still in process, and details of the additional 10% adders are not yet set in stone. That said, many of our local nonprofits should be able to earn at least one (if not two) of the 10% adders, which would amount to a total of 40% to 50% of a solar project's costs.

Net Energy Billing

Maine's net energy billing program allows customers to offset their electricity bills using the output from small renewable generators. Customers may own their own project or share in a project with other customers. The generation facility may be located on the customer's property or on another property within the same utility service territory. There are two ways to participate. Small accounts without demand charges should opt for the standard NEB rate, however medium and large accounts

with demand charges should pursue a tariff rate. This credit can be applied to offset the electricity use AND demand charges. Unused credits expire after 12-months.

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MDI is in Versant Power Territory, meaning medium systems receive NEB credits worth \$.25 per kWh. See chart below. The Maine Public Utilities Commission will establish a new tariff rate for net energy billing credits by January 2024.

Period	Customer Class	Central Maine Power Company	Versant Power – Bangor Hydro District
Calendar Year 2023 Tariff Rates for Facilities that Qualify under Ch. 313 Section 3(K)(4) (a) (December 9, 2022 Order in Docket No. 2019-00197)	Small Commercial	\$0.246922 per kWh	\$0.250467 per kWh
	Medium Commercial or Industrial	\$0.235503 per kWh	\$0.243196 per kWh

(Source: Maine Public Utility Commission Net Energy Billing Tarrif Rates)

Financing Options for Non-Profits

Direct Purchase

If a nonprofit chooses to purchase an array directly, they simply contact a local installer like Sundog Solar, ReVision Energy, or SolarLogix and schedule a consultation. The contractor should be able to provide a preliminary shade analysis and a site visit to determine the size and cost of the array. The array should be sized to offset the maximum possible amount of the nonprofit's electricity use.

Bond

Some nonprofits like schools and municipalities may have access to low-interest financing like a bond. Bonds offer monthly, quarterly or yearly payments that are often significantly lower than the organization's current electric bills. If direct payment is not available then financing the solar project with a bond is likely to be the next best option.

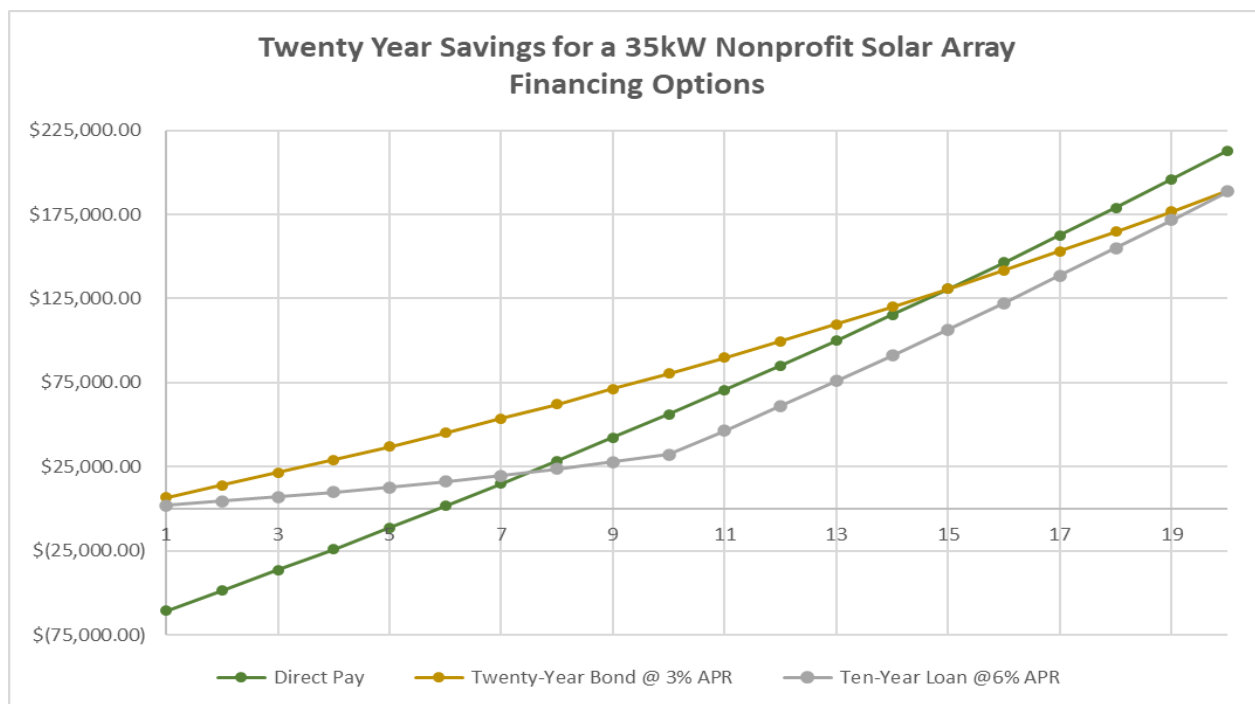
Loan

Similar to a mortgage the interest rate and length of the loan will impact overall savings. A shorter loan term will allow you to pay off the array faster, but the payments will be higher. However, the faster the array is paid off, the more substantial your long term savings will be.

You can use a [loan calculator](#) to find out what your monthly payments will look like based on the interest rate and length of the loan. This tool will allow you to compare your expected electricity savings to your anticipated monthly payments.

Comparing Solar Financing Models

The graph below demonstrates the long-term savings of a 35kW nonprofit rooftop array utilizing three different financing mechanisms. The upfront cash price for an array this size after tax incentives are accounted for is \$72,450. Currently, a direct purchase or a low-interest bond offer the best long-term savings for a nonprofit solar array; However a ten year loan with a 6% interest rate offers nearly identical savings to a twenty year bond with 3% interest rate.



(Graph assumes a 2.5% annual electrical price escalation and a conservative .5% annual loss of solar array efficiency. This is meant to serve only as a model, each financing mechanism varies and solar array output will vary based on tilt and shading.)

Solar Subscriptions

Not every nonprofit owns land or a building where solar can be constructed, has access to upfront capital or knows how long it will be in operation. In these cases, subscription solar might be the best option available.

In this scenario, the nonprofit can enter into a contract with a subscription provider like NextAmp, Power Market, Ampion, Syncarpha, or BlueWave. ACTT tends to recommend NextAmp or PowerMarker, as they both develop their own arrays and manage subscribers, while others act as middlemen between solar developers and subscribers. Depending on the contract the nonprofit will generally receive 10-15% off their electricity bill by purchasing the large-scale solar array's net energy billing credits. Subscriptions are a viable option for nonprofits that rent their space or as a stop-gap way to support solar development while waiting for the opportunity to own an array.

If you are considering entering into a solar subscription agreement, here are some important questions to ask:

1. When will I receive my net energy billing credits?
2. How much notice do I need to give before I can cancel?
3. Where is the solar array located?
4. Has it been interconnected with Versant Power's grid?