East Kingston Public Library Solar Project 2016 - 2024

Sometimes, looking up at the resplendent and stoic turkey weathervane on top of the library, I wonder what he's thinking about. Though I will never know, I *do* know that, when the wind is right, and faces him east, he's able to gaze down on a smooth lawn of solar panels covering that entire side of the library's roof. As of this week, thanks to the Friends of the East Kingston Public Library, the library owns those panels outright, contributing a clean stream of renewable energy into the grid, and dropping our electricity bills down to almost zero.

The library's solar panel project has been several years in the making, and none of it would have been possible without the effort and commitment of the Friends. Back in 2016, the Friends donated \$18,000 to buy an 18 panel array that would meet about 20% of the building's overall energy needs. Those panels have been quietly sopping up sunlight since then, with no issues, problems, or need for any repairs. It was always our goal to eventually install enough panels to meet the library's entire electricity demand, but we lacked the funds to purchase any additional panels and thought we'd just have to wait several years to raise more money. Then, at a conference of the NH Library Trustees Association, we learned about an option called a Power Purchase Agreement, or PPA. Under a PPA, a solar installer builds an array on a public or private property, and then retains ownership of the array. The property owner agrees to buy all the electricity the array produces for a set period of years, at which point, the property owner can either continue buying the power, or can elect to buy the array itself from the installer, and thus own both the panels and all the power they produce.

The Library Trustees signed a PPA with ReVision energy in 2018, and we became eligible to buy the array from them this January. The Friends of the Library have again stepped up with phenomenal fundraising, and donated \$40,000 for the purchase. We have now signed the agreement, sent in the check, and taken ownership of the ReVision installed panels on the roof. The existing smaller array is still merrily producing, and their combined power generation should now meet the Library's full electricity needs. We still will be paying a small utility bill to remain connected to the grid, and we also have an annual maintenance contract with ReVision to have the array inspected and serviced, but our bills for kilowatt hours drawn from Unitil should drop almost to nothing.

Knowing that we would be going fully solar, we have been shifting the Library away from propane and toward electricity wherever possible. We have replaced two of our three propane furnaces with electric heat pumps, and we are in the process of replacing our broken propane fireplace with a new electric one. Eventually, we plan to replace the final furnace with a heat pump, and also switch over our small water heater from propane to solar/electric.

The Trustees of the Library want to thank both our former Director, Tracy Waldron, and our current Director, Zoe Sucu, for helping shepherd this project along. We give massive thanks to the Friends of the East Kingston Public Library and the people of our town who support the Friends. Thanks to you, we are finally seeing this multi-year, multi-phase adventure in clean, green energy come to fruition!

This article was written by Sarah Courchesne, Library Board of Trustees Treasurer January 2024