

CASE STUDY | LENOX, MASSACHUSETTS

LENOX (population 5,025), a small town in the Berkshire Hills, is a [Massachusetts Green Community](#). To be designated as a Green Community by the state, communities must meet five criteria: 1) “Provide as-of-right siting in designated locations for renewable or alternative energy generation, research and development, or manufacturing facilities;” 2) “Adopt an expedited application and permit process for as-of-right energy facilities;” 3) “Establish an energy use baseline and develop a plan to reduce energy use by twenty percent within five years;” 4) “Purchase only fuel-efficient vehicles;” 5) “Set requirements to minimize life-cycle energy costs for new construction; one way to meet these requirements is to adopt the new Board of Building Regulations and Standards (BBRS) Stretch Code.”¹

As a Green Community, Lenox received grant funding from the state, and the town has invested a portion of this funding into going solar. Lenox hired a part time sustainability coordinator to set up a grant program to help local homeowners and businesses go solar. Through this solar mini-grant program, homeowners and businesses are eligible for a \$2,000 grant to install solar photovoltaic (PV) or solar thermal systems. In keeping with its Green Communities designation, Lenox also asks homeowners installing solar to perform an energy audit prior to installing the system. Audits are provided for free through the local utilities and the state provides up to \$2,500 in weatherization and efficiency upgrades to homes. As of August 2012, 14 homeowners had taken advantage of the solar mini-grant program, which has funding for up to 30. More than 200 homes have completed energy audits. A number of local businesses are also in the processes of installing PV systems.

¹ Criteria for Green Communities designation are quoted from the Green Communities Designation and Grant Program page on the Massachusetts Executive Office of Energy and Environmental Affairs website. <http://www.mass.gov/eea/energy-utilities-clean-tech/green-communities/gc-grant-program/>

Lenox also partnered with Pittsfield, a larger neighboring city of nearly 45,000 people to participate in the SolarizeMass program. [SolarizeMass](#), which is a partnership between the Massachusetts Clean Energy Center (MassCEC), the Green Communities Division of the Massachusetts Department of Energy Resources, and participating communities around the state, is a marketing, outreach, and education effort to increase the deployment of small scale solar systems through a five-tiered pricing structure for PV systems, which makes solar less expensive as more community members go solar. Solarize Pittsfield-Lenox runs through September 2012.

To qualify for SolarizeMass, Lenox had to streamline its permitting process for solar installations. Through the program, MassCEC assisted Lenox in securing the services of a solar vendor, which was chosen through a competitive bid process. Lenox’s sustainability coordinator and a volunteer solar coach organized trainings and the solar coach is available to answer questions that community members may have about going solar and to connect them with the vendor. As of August 2012, Solarize Pittsfield-Lenox had reached [Tier 3](#) – \$3.90/watt, or 20 percent less than the average installed cost per watt of an installed small-scale solar PV system in Massachusetts.

“We’ve gotten a lot of interest, we’ve had 300 people show up to the informational sessions that we’ve had, and we’re hopeful that we’ll get to tier 5,” said Greg Federspiel, Town Manager, of the Solarize program.

Lenox currently has a small solar demonstration project on a local school. The town is looking at two much larger installations – one at the wastewater treatment plant and one on a capped landfill. Together, the installations, which are expected to come online in the spring of 2013, will be just under 3 megawatts, and will meet all municipal electric needs, including Town Hall operations, the electricity needs of local schools, and Department of Public Works Operations.

Before deciding on these two sites, the town considered both wind and solar. With wind, there were concerns over potential negative impacts to homeowners living in proximity to the installations and the economics were not as clear cut. "We always start out with the dollar savings we can realize, both in municipal operations, and with the general population as a whole," Federspiel noted.

Lenox issued an RFQ for the sites and selected Broadway Electric, a full service electrical contractor based in Boston. The town is

pursuing a 20-year power purchase agreement (PPA), with an option to buy-out after the first seven years. As part of the project, Broadway Electric will also be installing ground-mounted demonstration projects at both the local elementary and high schools. Data on system production will be displayed on computers in the schools, allowing students to see how the solar systems are performing in real time. When the installations come online, Lenox expects to save at least one-third to one-half on its electric bill annually.

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