



Town of Scituate

CASE STUDY

BACKGROUND

Demonstrating an early interest in wind energy with the adoption of a wind energy siting by-law in the 1980s, Scituate's recent experience with renewable energy adoption began in 2006 when a group of residents—who soon became the Scituate Renewable Energy Committee—proposed the idea of a town-owned turbine to the Board of Selectmen. The town applied for and received a Massachusetts Technology Collaborative grant to erect a met tower to measure the local wind resource and determine project feasibility. Project consultant KEMA, Inc., hired through the grant, recommended and Scituate subsequently adopted an updated wind siting by-law. Scituate DPW Director Al Bangert took the project under his wing, championing it with other town officials and ushering it through succeeding phases of contractor selection and contract negotiation. Built on land leased from the town, with the town receiving all of the electricity through a power purchase agreement, the 1.5 MW turbine came online March 29, 2012.

Incorporated in 1636, the seaside town of Scituate's year-round population of 18,000 swells to 30,000 in summer.

ACTIONS

The turbine is the largest and most visible undertaking of the town and its Renewable Energy Committee, and the wind project helped to catalyze the town's other recent clean energy accomplishments, including:

- ♦ Designation as a Green Community in 2011
- ♦ Selection as a Solarize Mass pilot community in 2011
- ♦ Commenced installation of 3 MW solar array on town's capped landfill (summer 2012)
- ♦ Adoption of a \$5.9 million Energy Savings Performance Contract (ESPC) for energy and systems improvements in all town and school buildings

Community Engagement

Scituate has integrated the wind turbine into school-based and community education, arranging for the turbine developer to present programs to local students—from 5th grade science classes to the high school career day. Also under development is a town web site that will track how much electricity the turbine is generating, how much it's saving the town in electricity bills, and the amount of carbon dioxide from conventional power plants it is displacing.

RESULTS

- ♦ Renewable energy net metering is helping Scituate's bottom line. Example: A month after the wind turbine was installed (April 2012), the town received its first net metering credit from National Grid of nearly \$44,000 for power generated by the turbine—completely offsetting the town's \$26,000 monthly electric bill, with ample funds to spare.
- ♦ The combined generating capacity of the wind turbine and solar array are expected to produce 100 to 110 percent of the town's electrical needs. Revenue from the two projects is projected to be \$500,000 annually. Combined with anticipated reductions in energy costs through ESPC program improvements, this revenue will provide Scituate with budget flexibility.
- ♦ Green Communities grant of \$168,000 is financing energy efficiency projects in several municipal facilities, including some taking place through an energy performance contract.
- ♦ Scituate residents and businesses installed 30 solar PV systems with total capacity of 115.2 kilowatts in 2011 when Scituate was one of four Massachusetts Green Communities selected for a Solarize Mass pilot project

RECOMMENDATIONS

Scituate Town Administrator Patricia Vinchesi points to the importance of public outreach and education. To build public support for the wind turbine, for example, the town organized a turbine blade signing ceremony that drew 1,200 people, who not only signed the blade but also became engaged in the project. "The key to success is support not only from town officials and staff, but residents and environmental groups," she says. "Going 'green' is not costly and the Commonwealth's initiatives to partner with towns have streamlined what was once a cumbersome process. It took six years and thousands of dedicated hours by the Renewable Energy Committee for the wind turbine, but all the other projects have come together in less than two years." DPW Director Bangert adds that there are three elements to local clean energy project success: leadership at the top (amidst many other competing demands, the Board of Selectmen made the wind project a priority), an enthusiastic municipal staff, and a citizens group (in Scituate's case, Sustainable Scituate and the Renewable Energy Committee) to advocate the project(s). Says Town Administrator Vinchesi: "It's something every community can do."