

ne morning this past spring, I joined Department of Energy Resources Commissioner Mark Sylvia at Leverett Town Hall to congratulate four of the Commonwealth's newest Green Communities—Ashfield, Chesterfield, Leverett and Rowe—on their achievements, and to hear how they plan to further expand clean energy in their towns. Commissioner Sylvia had made the trip to the Pioneer Valley from his home in Southeastern Massachusetts, and I thought about the number of other Green Communities he'd passed by or through along the way. Even my ride from Westfield skirted or traversed several western Massachusetts communities that have earned the distinction.

With the addition of seventeen communities on July 24, 103 cities and towns across the state have been designated since Governor Deval Patrick signed the Green Communities Act into law in 2008. Green Communities are becoming hard to miss, and approximately 44 percent of Massachusetts residents now live in one. This is a good thing for both municipal budgets and the Commonwealth's clean energy future.

"Surpassing the 100th Green Community mark is a win for every community and our Commonwealth as a whole," said Governor Deval Patrick. "We have developed a nation-leading clean energy agenda because it is the right thing to do for our environment, our energy independence and our public health. This milestone proves again the clean energy revolution is taking hold, and growing, one community at a time."

Richard K. Sullivan Jr. is the Commonwealth's Secretary of Energy and Environmental Affairs. He is a former Mayor of Westfield.

Lieutenant Governor Timothy Murray added: "From Great Barrington in Berkshire County to Tisbury in Dukes County, our communities are committed to promoting clean energy and a green environment. Now over 100 Green Communities are making strategic investments to increase energy efficiency and create jobs, improving our economy and quality of life across Massachusetts."

From our capital in Boston to the tiny town of Rowe, communities across Massachusetts are stepping up with clean energy choices that benefit our economy, environment and way of life.

A Model Program

The Green Communities Designation and Grant Program, the signature program of the Green Communities Act, recognizes and rewards communities that meet five rigorous clean energy benchmarks (see sidebar, page 11). By tapping the proceeds of carbon allowance auctions under the Regional Greenhouse Gas Initiative as well as funding available through the state Renewable Portfolio Standard, the program has funded scores of projects since 2010 tied to energy and cost savings in communities from Provincetown to Pittsfield. These investments include incremental costs associated with purchasing fuel-efficient municipal vehicles, installation of solar panels on schools and municipal buildings, the purchase of high-efficiency streetlights, buying down the cost of energy services contracts, and a range of energy efficiency upgrades.

Not surprisingly, as the program has gained momentum here, it has begun to attract national attention. The American Council for an Energy Efficient Economy cited the Green Communities Act as a key reason for ranking Massachusetts the nation's top state for energy efficiency in its annual state-by-state scorecard last year.

"This whole program that was created by the Green Communities Act has provided a great national model for how to engage cities and towns and motivate their citizens and businesses," says Sylvia, who was the inaugural director of the Green Communities Division. "When I am interacting with my colleagues from other states, the Green Communities program is always mentioned as a best practice. We are excited that other states are looking to emulate the success we have experienced here in Massachusetts."

As a condition of designation, all 103 Green Communities have vowed to reduce their municipal energy consumption by 20 percent—a commitment that collectively equates to the annual energy consumption of more than 13,000 Massachusetts homes and the greenhouse gases from more than 22,000 cars. These accomplishments

support the Patrick-Murray Administration's nation-leading clean energy agenda, including the goal of reducing greenhouse gas emissions by 25 percent below 1990 levels by 2020. At the same time, the program strengthens municipalities by uniting Main Streets and neighborhoods around the common goals of efficiency, environmental quality, and cost savings.

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- MARK SYLVIA, COMMISSIONER, DEPARTMENT OF ENERGY RESOURCES

"As a former municipal official, I know cities and towns interact with their state government regularly on a whole host of issues," says Sylvia. "The Green Communities program takes a new approach to providing services to cities and towns. We are there to support them and help them meet their own energy goals. The best decisions are made at the local level, and the whole idea of this program is to support those local decisions."

Meg Lusardi, director of the Green Communities Division, points out that each community comes into the program with its own set of circumstances, and each comes out of the process with a unique path forward. "I tell communities that there is no cookie cutter approach; you have to respect the culture of your community," she says. "What has impressed me about this program is that we provide the technical assistance and 'how to,' but the work is done at the community level and the amount of grassroots engagement at the community level is remarkable."

Local Impact

While some cities and towns may need a year or two to meet all five criteria spelled out in the Green Communities Act, the Green Community designation is just the beginning of an enhanced relationship with the Commonwealth around clean energy. In addition to eligibility for grants to finance clean energy projects, the designation puts cities and towns in line for special initiatives such as electric vehicle charging stations, additional competitive grant rounds subsequent to their initial Green Communities grants, and Solarize Massachusetts, a state program open only to Green Communities that provides financial incentives for residents and businesses to go solar as a community.

"As a Green Community, Revere looks forward to continuing efforts to increase cost savings through new green technology," says Mayor Daniel Rizzo. "Energy efficient measures are being implemented that will reduce the city's energy costs in accordance with our Green Community standard at City Hall, the Youth Center, and our Senior Center."

STATE PROGRAM HELPS CITIES, TOWNS CUT COSTS WHILE GOING GREEN



Officials in rural western Massachusetts towns share similar sentiments, illustrating how the appeal and value of the Green Communities program transcends socioeconomic, geographic and population differences.

"Just the fact of receiving the Green Communities designation helped us focus on how we could save money by reducing energy consumption," says Ken Elstein, chair of the Board of Selectmen in Belchertown. "Our Green Communities grant ... allowed the town of Belchertown to replace fifty-plus-year-old boilers and purchase other energy-saving infrastructure with no impact to the town budget."

Deerfield Town Administrator Bernard Kubiak says the Green Communities program "certainly gave us the incentive needed to promote energy conservation on a town-wide level and go beyond a building-by-building approach."

The Green Communities Designation and Grant Program is the most visible program offered by the Green Communities Division, but there is also a suite of other tools and services designed to advance clean energy agendas in all Massachusetts cities and towns—Green Communities or not. "Our mission is to help all 351 cities and towns to meet their energy goals," says Sylvia. "We don't leave anyone out."

The division offers all municipalities technical assistance and webinars on various topics. It also sponsors energy efficiency programs in collaboration with MassSave, offers pilot funding for energy efficiency programs at municipal electric plants, and provides guidance on the installation of solar photovoltaic power on closed municipal landfills.

Also available to all cities and towns is MassEnergyInsight, a Web-based tool that informs local energy efficiency and renewable energy investment decisions by helping municipalities track and manage the energy used by their buildings, streetlights and vehicles.

The division also employs four regional coordinators—West, Central, Northwest and Souteast—who provide hands-on, focused assistance to help communities decrease their bills through targeted clean energy investments.

Most Massachusetts cities and towns are taking advantage of this menu of clean energy assistance on an a la carte basis. To date, 228 municipalities are registered and trained on MassEnergyInsight, and 173 are actively using it. But a growing number are going a step further by diving into the Green Communities designation process.

"When we launched the first designation application round for 2010, we thought we'd have five or ten communities apply," says Lusardi. "We got thirty-five, and we were blown away. It's challenging criteria, but cities and towns of Massachusetts have risen to the occasion."

Saving the Green

Asked why they undertook the challenge of becoming Green Communities, local officials often cite dollars and cents. Take, for example, the "Power Down" initiative of the Acton Public Schools and Acton-Boxborough Regional School District. Funded through a Green Communities grant, Power Down earned the school system an Excellence in Energy and Environmental Education Award from the Executive Office of Environmental Affairs; a prestigious Green Flag award from ECO Schools USA, an international sustainability program administered by the National Wildlife Federation; and, most recently, honors from the National Energy Education Project. Not only has the project raised student awareness around environmental stewardship, says J.D. Head, the district's facilities and transportation director, it has helped the schools to reduce their collective electricity consumption by 13 percent over the last two years and "has positively impacted the district's bottom line."

"The Power Down initiative was seeded with just \$25,000 and resulted in greater than \$70,000 in savings to the district in the first year alone," he says. "Every grant dollar spent resulted in three dollars of savings, a three-to-one return on the state's investment into the program."

Arlington Town Manager Adam Chapdelaine says his town is now paying for just half the electricity it used to need for streetlights thanks to a Green Communities grant that funded highly efficient LED fixtures. Winchester Selectman Tom Howley says Green Communities—funded energy efficiency improvements in his town have saved "several million dollars in energy costs—money that would otherwise have to come from our schools and other essential municipal services."

The town of Kingston, which was approved in the inaugural Green Communities designation round in 2010, now prides itself on "the highest percentage of green energy generation in the Commonwealth," with 8 megawatts of wind and 1.2 megawatts of solar to be built, says Mark Beaton, chair of the Kingston Green Energy Committee. Kingston has used Green Communities funding to leverage significant rebates and incentives from its utility company, NStar. The result: total Green Communities and NStar funding for energy efficiency improvements at the town library, elementary school and fire station of \$254,348 are estimated to save the town \$102,296 annually—providing a two-and-a-half-year payback.

The smart energy choices being made by these municipalities represent the tip of the iceberg. Across the state, the Green Communities program is catalyzing a powerful partnership between municipalities and the state as we work together to cut our dependence on imported fossil fuels, support local jobs, save on local energy costs, and create a sustainable energy future. It is in large part due to the leadership of our Green Communities that Massachusetts is in the midst of a clean energy revolution. Cities and towns are essential foot soldiers in this revolution, which will ultimately succeed town by town and neighborhood by neighborhood as communities embrace greener choices that save money, clean up our environment, and change the status quo.

How to Become a Green Community

Every municipality applying for a Green Community designation must demonstrate that it meets five specific designation criteria, and it must provide supportive documentation, such as records of votes and letters from the select board, city council, municipal counsel, or other public officials.

The following five actions must be taken by the community:

1. Provide for As-of-Right Siting

A city or town must provide zoning in designated locations for as-of-right siting for one of the following: renewable/alternative energy-generating facilities, renewable/alternative energy research and development facilities, or renewable/alternative energy manufacturing facilities. As-of-right siting means that development may proceed without the need for a special permit, variance, amendment, or other discretionary approval.

2. Expedite Permitting

The municipality must adopt an expedited application and permitting process, not to exceed one year, for the siting of facilities under the first criterion.

3. Establish an Energy Baseline/20 Percent Energy Reduction Plan

The municipality must establish an energy use baseline inventory for all municipal buildings, vehicles, and street and traffic lighting, and it must put in place a comprehensive program designed to reduce this baseline by 20 percent within five years.

4. Purchase Only Fuel-Efficient Vehicles

All municipal departments must purchase only fuel-efficient vehicles for municipal use when commercially available and practicable.

5. Minimize Life-Cycle Costs

The municipality must require all new residential construction over 3,000 square feet and all new commercial and industrial real estate construction to minimize the life-cycle cost of the facility with energy efficiency and other renewable or alternative energy technologies. The recommended way to meet this requirement is by choosing to adopt the state's "stretch code," an optional energy building code that requires construction practices and building materials that are approximately 20 percent more energy efficient than the baseline state energy building code.

The Green Communities Designation and Grant Program is open to all municipalities served by investor-owned utilities and those served by municipal light plants that adopt the renewable energy charge. To clarify eligibility requirements, the Department of Energy Resources recently issued a guideline (www.mass.gov/eea/docs/doer/green-communities/grant-program/mlp-guideline-may-2012.pdf) and a request for information (www.mass.gov/eea/docs/doer/green-communities/grant-program/mlp-rfi-may-2012.pdf).

The Department of Energy Resources calculates Green Communities grants using a formula that caps awards at \$1 million and provides each community with a \$125,000 base grant—plus additional amounts based on per capita income and population, and for municipalities that meet Criterion 1 with renewable energy generation.

A full description of each criterion, the required documentation, and the process for applying for Green Community designation can be found at www.mass.gov/energy/greencommunities. Regional coordinators are available to walk communities through the process.