

Learn How Blandford is Working Toward Reducing Municipal Energy

How is the Town Working to Reduce our Municipal Energy Use?

In 2017 Blandford became one of the 271 communities (out of 351) in Massachusetts to achieve Green Communities certification, which granted our Town \$138,425 to fund energy conservation measures in the Town Hall, at the Water Treatment Plant, and the Highway Garage. This designation is quite an achievement and reflects the hard work and tireless effort Blandford has exhibited in meeting the Green Communities Designation and Grant Program's Criteria. We invested the funding into seven energy conservation projects across the town. The majority of these projects were lighting retrofits, where the existing inefficient lighting was replaced with efficient LED technology. Six municipal buildings have had partial or complete lighting retrofits since 2017. These buildings include: Town Hall, the Water Treatment Plant, the Highway Garage, the Library, the Historical Building, and the Post Office.

The remaining Green Community's grant funding was used to install variable frequency drives on the hot water circulation system at Town Hall and to fund administrative support for grant administration.

Combined, the total cost of these projects was \$164,803. Incentives from utilities paid for \$33,742 of the project cost, while the Green Community designation grant covered \$131,061. In total the completed projects are anticipated to save Blandford 80,321 kWh of electricity annually and \$14,045 in annual cost savings. To see what this energy use reduction means in terms of Greenhouse Gas emissions equivalencies, click here:

<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

Now that we have completed our first round of projects we can apply for additional funding via the competitive Green Communities grants program. Some communities have received as many as seven rounds of funding adding up to over a million dollars.

What is the Green Communities Program

The Green Community Designation and Grant Program provides a road map along with financial and technical support to municipalities that 1) pledge to cut municipal energy use by an ambitious and achievable goal of 20 percent over 5 years, 2) modify or affirm that local permitting for renewable energy projects takes no more than one year, 3) adopt by right permitting for specific targeted renewable energy projects, 4) pledge to purchase fuel efficient vehicles, and 5) adopt the 'stretch' energy building code. Participation in the Program has grown steadily since the first group of 35 municipalities achieved designation status in July of 2010 to include more than three-fourths (77%) of the diverse cities and towns of the Commonwealth and over two-thirds of the population. The benefits of designation extend beyond the program itself, inspiring cities and towns to undertake additional energy-related initiatives, improve coordination between municipal staff and departments, and increase messaging with the public at large about energy-related issues and actions.

Across the Commonwealth cities and towns have accessed designation grants of over \$44 million for energy efficiency projects.

Benefits of Being a Green Community

- Cut municipal energy costs and strengthen the local economies
- Access grants for clean affordable and resilient energy projects; economic development benefits for the city or town and the Commonwealth

- Reduce greenhouse gas emissions
- Promote energy-efficient building construction that drives the market for better built and lower cost homes
- Foster renewable energy and clean energy technologies
- Become a clean energy leader and a better place to live, work, and play

Click here for a map of all the certified Green Communities: <https://www.mass.gov/doc/map-of-271-gcs-and-grant-summaries/download>.

Project Details

Electrical Retrofits

Beginning in 2017, a series of electrical retrofits were completed in the following six municipal buildings: Town Hall, the Water Treatment Plant, the Highway Garage, the Library, the Historical Building, and the Post Office. The electrical retrofits were completed by Energy Source and included the replacement or retrofit of existing light fixtures and lamps with more efficient fixtures and lamps.

Installation of VFDs at Town Hall

In January 2020 four new variable frequency drives were installed on four existing hot water circulation pumps at the Town Hall. This project will reduce pump power consumption because the flow that is being bypassed back will be conserved and this will result in electricity savings. Tighter pump controls will also be implemented so that pumps will only turn on when needed during unoccupied hours and when outside air conditions are below 40 degrees. The VFD controls will be integrated into the existing Energy Management System. Overall, the new system will save the Town on electrical costs and operational and maintenance costs.

Context

Governor Baker in his State of the State address committed Massachusetts to be carbon neutral by 2050. "I'm committing the commonwealth to achieving an ambitious climate goal: net-zero greenhouse gas emissions by 2050," Baker told legislators, supporters and other state officials gathered in the House chamber at the State House on January 22, 2020.

To achieve that goal, the governor reiterated his support for a regional [Transportation Climate Initiative](#) (TCI), in which northeast states would work together on transportation issues with a goal of reducing emissions. Blandford hosted a Listening Session for rural leaders on the Transportation Climate Initiative in June 2019. Participants expressed support for TCI, and indicated that when investment funds become available, the Commonwealth needs to distribute the funding equitably across the state, focusing on transit—including micro-transit, such as electric vans for Councils on Aging, electric and hybrid vehicle purchase incentives and subsidies, advancing East-West passenger rail, assuring broadband internet access to facilitate home-based businesses and adding an additional Mass Pike exit.