

Report on Shutesbury’s Green Communities Grant for Weatherization and Lighting 2023

Shutesbury received a Green Communities implementation grant LED lighting upgrade for our school, Shutesbury Elementary School, and for an envelope sealing project for all of our five major town buildings; the elementary school, the town hall, the highway dept, the fire station and the MN Spear Memorial Library, in October of 2022. The work was completed in the spring and end of summer of 2023. The work was done by a National Grid preferred vendor, who did a thorough Building Envelope Inspection report that assisted the town in producing the application. Due to changes to MGL Ch. 25A, the Town was able to work with a project expediter as the total cost for the weatherization and lighting projects (lighting project described below) fell under \$300,000. The Town Administrator enlisted the help of the Franklin Regional County of Governments (FRCOG) to write the grant. FRCOG did not charge the Town of Shutesbury for this help. The building envelope work was done by a company called Air Barrier, a project expeditor for Energy Conservation, Inc. and an authorized vendor for National Grid.

Estimated fuel savings for weatherization at all of Shutesbury’s municipal buildings are 1,864 gallons of fuel oil, 410 gallons of propane, and 1,883 kWh of electricity. When this project is completed, the town is projected to save \$8,020 on heating fuel alone. This project will result in significant cost savings to the Town and reduce the amount of fossil fuels the town purchases on an annual basis.

The weatherization and insulation projects are anticipated to reduce the Town’s energy consumption by 310 MMBTUs and reduce emissions by 25 tons of CO2, which is a 7% reduction in total energy use from the baseline year. The Commonwealth has committed to achieving net zero emissions by 2050, with one of the primary components of the plan being to reduce emissions from energy demand through electrification. Fully weatherizing all of the Town’s buildings is a necessary step before pursuing any fuel switching projects or projects that would decrease the Town’s dependency on fossil fuels, such as installing heat pumps.

The data is for the following buildings listed in order: the school, fire station, DPW, MN Spear Memorial Library, Town Hall and the School

Data Summary					
Projected Annual Energy Cost Savings (\$)	MMBtu saved per Year	GC\$/MMBtu	Simple GC Payback Period (years)	GHG emissions (tons CO2) saved per year	GC\$/GHG (tons CO2)
\$ 4,693.09	194.4	201.7	8.36	15.78	2,485.81

