

## Carlisle Energy Task Force

On July 8, 2008 the Selectmen charged the Carlisle Energy Task Force (CETF):

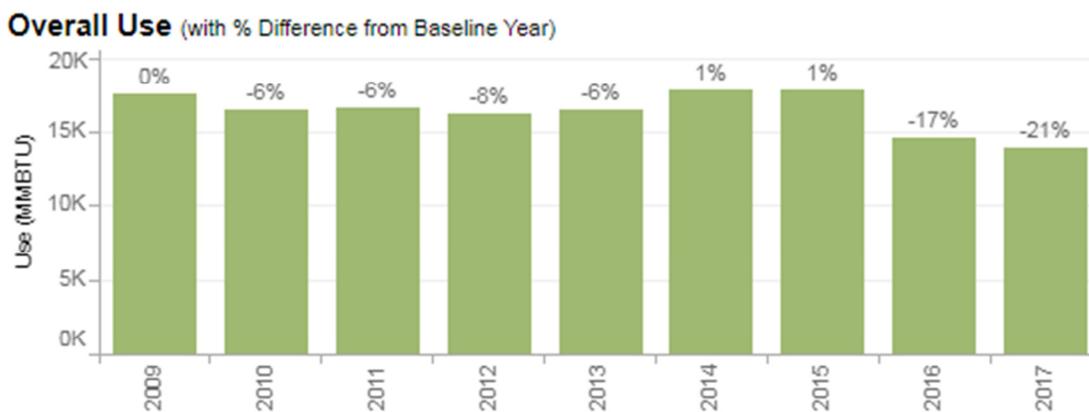
1. To produce a thorough study of energy use and cost in all Town buildings, equipment and contractual services;
2. Working with Town departments, analyze and prepare a composite of potential areas of cost reduction affected by lower consumption, revise contractual relationships, alternative materials or alternative modes of energy production;
3. The analysis should include use of low carbon producing ('green') energy production wherever practical.
4. Coordination with the Carlisle Climate Action Committee and EPA (currently provides benchmarking software to municipalities seeking to save energy and reduce carbon output) is encouraged. To consider the possibility of an ongoing role for a standing Carlisle Energy Committee and make recommendations for the ongoing purpose, charter and make-up of such a Committee to support an ongoing role (if any).

Sponsored by CETF, Article 25 at Town Meeting on May 9, 2011 made permitting of a photovoltaic solar facility at the transfer station "by right," subject to site plan review but not requiring a special permit. Having already adopted the stretch building code at the bequest of the CETF the prior year, the CETF was able to apply to the Massachusetts Office of Energy and Environmental Affairs to become a Green Community, eligible for state energy efficiency grants. As a result, Carlisle became a Green Community on July 19th 2011. The designation carries a goal of reducing municipal energy use by 20% within five years. CETF chose 2009 as a baseline year.

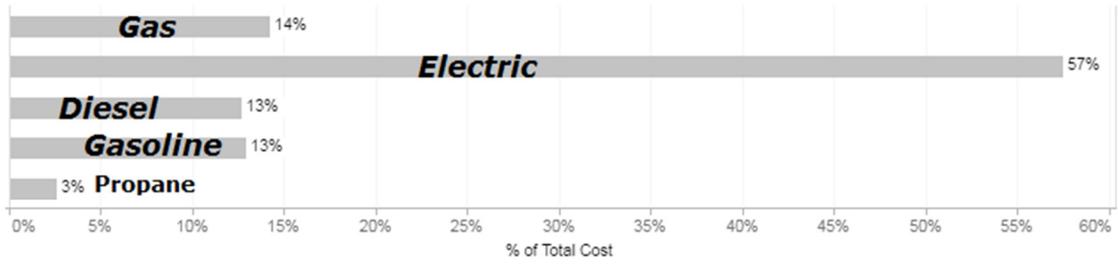
		Green Communities Grant	Utility Incentive	Total
2012	Town Hall Energy Management System, Corey Solar Array, Exterior LED Lighting	\$139,204	\$61,060	\$200,256
2013	Not always possible to wrap up prior year's projects for eligibility to apply for grants	\$0	\$7,275	\$7,275
2014	Energy conservation measures in three municipal buildings, Gleason Library, and Carlisle School	\$48,763	\$13,027	\$61,790
2015	Energy conservation measures: at Gleason Library, installation of heating system controls; at Town Hall, Carlisle	\$116,059	\$5,066	\$121,125

	School, and Gleason Library, retro-commissioning; and at Carlisle School, interior LED lighting retrofits and occupancy controls, refrigeration and kitchen hood controls, variable frequency drives on rooftop units and domestic hot water pumps; and an electricity to natural gas heating system conversion, instantaneous water heater, and interior LED lighting retrofit in the Brick Building.			
2016	Energy conservation measures: town wide LED streetlight conversion; interior and/or exterior LED lighting upgrades in five facilities; a new heat pump at the WWTP; faucet aerators and low flow showerheads and/or programmable thermostats at three facilities; and new insulated bay doors at the DPW.	\$197,267	\$42,145	\$239,412
2017	Not always possible to wrap up prior year's projects for eligibility to apply for grants	\$0	\$3,265	\$3,265
	Total	\$131,838	\$501,293	\$633,131

With the help of the above Green Communities grants CETF was able to meet the 20% municipal reduction in 2017. This is the energy equivalent of 26,627 gallons of diesel fuel per year.



Electricity represents the bulk of Carlisle's energy expense. 2017 saw the replacement of all of Carlisle's street lights with LED fixtures. The Town of Carlisle was able to accomplish this conversion because it bought the fixtures from Eversource for one dollar. This reduced the street light electric bill by approximately \$1,000 per month. Carlisle is now responsible for the repair of the fixtures which have a 20 year expected lifetime. In 2017 the CETF has undertaken to explore options for generating electricity on municipal land to offset the cost of electricity purchased from Eversource.



Current members of the CETF are Deb Bentley, Bob Clarke, Dan Cook, William Risso (chair), Basu Sarkar, Claude von Roesgen, Helen Young, Robert Zogg.