

REPORT OF THE SUSTAINABLE ENERGY COMMITTEE

Town Meeting established the Sustainable Energy Committee (SEC) in 2010, to lead efforts to accomplish the goal adopted at the 2009 annual Town meeting to reduce Town-wide greenhouse gas emissions 10 percent below 2007 levels by 2013, to monitor and report progress toward that goal, and to propose further goals for emissions reductions to Town Meeting. The 2014 Annual Town Meeting adopted the SEC proposal to establish a new goal to reduce Town-wide emissions 25 percent below 2007 by 2020.

MEASUREMENT OF 2015 EMISSIONS AND TRENDS

Each year the SEC measures the Town's "carbon footprint" and tracks the change against earlier years. This carbon footprint measurement is an estimated number calculated from a variety of inputs, some actual and some estimated. It is based on actual municipal and college data, actual electric and natural gas use by households and businesses, and estimates for heating oil consumption, fuel efficiency in the transportation sector and the conversion factors that translate energy use into greenhouse gas emissions. The methodology is guided by the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions established October 2012 and calculated using ICLEI – Local Governments for Sustainability software.

Greenhouse Gas Emissions (eCO ₂ in 000 metric tons)						
				2014 - 2015		2007 - 2015
	Share of Total	2015	2014	Percent	2007	Percent
Electricity/Natural Gas/Fuel Oil	2015 Emissions	Emissions	Emissions	Change	Emissions	Change
Residential	30.8%	112,341	114,818	-2.2%	132,862	-15.4%
Commercial	13.3%	48,457	50,066	-3.2%	57,922	-16.3%
Colleges	10.7%	39,250	39,468	-0.6%	45,886	-14.5%
Municipal	2.1%	7,816	7,749	0.9%	9,287	-15.8%
Building Subtotal	56.9%	207,863	212,101	-2.0%	245,956	-15.5%
Waste	0.5%	1,756	1,694	3.7%	2,027	-13.4%
Gas/Diesel	42.6%	155,502	155,391	0.1%	160,468	-3.1%
Total Emissions	100.0%	365,121	369,185	-1.1%	408,451	-10.6%

Emissions trends in 2015 continue to tell basically the same story as in prior years. Emissions are declining, but not fast enough to achieve our 2020 goal unless the pace accelerates. In 2015 estimated emissions from electricity, natural gas and fuel oil used to heat, cool, light and power the appliances and electronics in Wellesley homes, businesses, colleges and municipal buildings, as well as to light our streets and power our water treatment facilities, declined 2.0 percent from the prior year.¹ However, estimated emissions from the transportation (gas/diesel) sector, which accounts for 42 percent of total emissions, are basically flat from 2014 to 2015.

¹ 2014 emissions have been revised since the Report to the 2015 Annual Town Meeting was printed, to include additional data received after the report went to print. The effect is to increase emissions from buildings, and total emissions, by 5,478, a 1.5 percent increase in total emissions.

COMMITTEE ACTIVITIES IN 2015 AND 2016

Together with the Department of Public Works and the Natural Resources Commission, the SEC has formed the 3R (Reduce/Reuse/Recycle) working group to address issues affecting the waste sector. Focusing first on food waste, the group has engaged with the School Department's Food Services division and Bates School to pilot a process to recover appropriate left-over food and supply it to food pantries. Through the 3R Working Group, Wellesley is the first town in New England to endorse the EPA's Food Recovery Challenge.

The SEC endorsed the proposed plastic bag ban being considered at this Annual Town Meeting. Particularly since Wellesley's Recycle and Disposal Facility has stopped recycling plastic bags, it is important to remove these fossil fuel products from the waste stream through a reduction in their manufacture and use.

The SEC and the Natural Resources Commission jointly brought a motion adopted by the Board of Selectmen to endorse proposed Massachusetts legislation creating a new incentive structure to speed up the repair of gas leaks. In 2014 National Grid reported 121 gas leaks in Wellesley. These leaks emit methane, a particularly potent greenhouse gas. Leaks in the high pressure lines along Route 9 are the first priority.

The Municipal Light Plant (MLP) has initiated a project to create a standard legal framework for non-profits in Wellesley that wish to install solar panels to generate electricity. The MLP is working with Wellesley College and Babson College on this initiative and several other institutions have expressed interest as well. The pace of solar installations will be significantly affected by the action or inaction of the Massachusetts legislature to extend the solar renewable energy credit (SREC) program, which is now fully subscribed.

Finally, the SEC has pursued the creation of a half-time staff position to increase the Committee's capacity to initiate projects that contribute to achieving the 2020 target for lower carbon emissions adopted by Town Meeting and to prepare the annual estimate of carbon emissions required in the SEC bylaw. Funding for this position is included 50-50 in the SEC and MLP budgets for FY2016.

In FY2016 the SEC will participate in the process to develop a Unified Plan for Wellesley, with a goal to fully reflect in the plan the Town's commitment to sustainability, broadly speaking, and to the reduction of greenhouse gas emissions in particular.

The SEC also will continue its focus on food waste through activities such as a joint project with a class at Olin College evaluating small scale anaerobic digestion systems for using food waste to locally manufacture natural gas. The 3R working group also intends to work with local merchants to recover unsold edible food to food pantries and to improve waste collection in downtown Wellesley.

The SEC will renew its efforts with the MLP to increase the share of electricity obtained from renewable sources.

SUSTAINABLE ENERGY COMMITTEE

Ellen Korpi, Chair	Ellen Gibbs	Laura Olton	Patti Quigley
Scott Bender	Katharine Gibson		Patrick Willoughby

