

## **SUSTAINABLE ENERGY COMMITTEE**

Town Meeting established the Sustainable Energy Committee (SEC, the Committee) in 2010, to lead efforts to accomplish the goal adopted at the 2009 Annual Town Meeting (ATM) and revised at 2014 ATM: to reduce town-wide greenhouse (GHG) emissions 25% below 2007 levels by 2020. The SEC develops and works collaboratively to implement initiatives to reduce GHG emissions from Wellesley's municipal, residential, commercial, and institutional sectors.

### **Personnel**

The SEC has seven appointed members, with staggered terms of three years. The Select Board (SB), Wellesley Municipal Light Plant (WMLP), and School Committee each appoint one board member, officer, official, or paid employee. The SB appoints the remaining four members from residents or others with relevant interests and expertise. Members in FY20 were: Laura Olton (Chair, SB appointee), Fred Bunger (Vice Chair, SB appointee), Ellen Korpi (WMLP representative), Lise Olney (SB representative), Cindy Mahr (School representative), Sue Morris (SB appointee), and Richard Lee (SB appointee).

### **Measurement of 2019 Emissions and Trends**

Each year the SEC measures the Town's "carbon footprint" and tracks the change against earlier years. As shown in the table below, Wellesley's total 2019 GHG emissions increased 0.5% above 2018 levels, bringing overall GHG emissions reductions to just under 12% since 2007 and GHG emissions reductions related to buildings to 23% since 2007. In the past year, electricity emissions decreased across all sectors thanks to lower electricity consumption and ongoing electricity grid decarbonization. However, the reductions in electricity emissions since 2018 were offset by a 36% jump in commercial sector natural gas emissions and by smaller increases of 4.5% and 1.2% in residential natural gas and fuel oil emissions, respectively. Although transportation emissions from gas and diesel dropped slightly in 2019 due to several new, lower traffic counts on Route 128, emissions from the transportation sector are still 6% higher than in 2007. Emissions from waste disposal in Wellesley decreased 15% between 2018 and 2019, resulting in a 23% reduction compared to 2007 levels.

Preliminary Greenhouse Gas Emissions (CO <sub>2</sub> e) in metric tons						
Electricity/Natural Gas/Fuel Oil	Share of Total 2019 Emissions	2019 Emissions	2018 Emissions	2018 - 2019 Percent Change	2007 Emissions	2007 - 2019 Percent Change
Residential	29.5%	108,257	107,764	0.5%	136,236	-20.5%
Commercial	12.4%	45,354	40,859	11.0%	61,203	-25.9%
Colleges	9.5%	35,064	37,072	-5.4%	46,668	-24.9%
Municipal	1.9%	6,871	7,235	-5.0%	9,723	-29.3%
<b>Building Subtotal</b>	<b>53.3%</b>	<b>195,545</b>	<b>192,930</b>	<b>1.4%</b>	<b>253,830</b>	<b>-23.0%</b>
Waste	0.4%	1,559	1,837	-15.1%	2,027	-23.1%
Gas/Diesel	46.3%	170,076	170,751	-0.4%	160,468	6.0%
<b>Total Emissions</b>	<b>100.0%</b>	<b>367,180</b>	<b>365,519</b>	<b>0.5%</b>	<b>416,325</b>	<b>-11.8%</b>

Note that these results are marked as preliminary since emissions factors for the electricity grid are updated annually with a one-year lag. GHG inventory results for 2018 have been updated with the recently released 2018 factor. The SEC will finalize the 2019 results in 2021 and publish them in the Report to ATM 2021.

### Green Communities

The SEC coordinated the Town's Green Communities activities and reporting to the Massachusetts Department of Energy Resources. The Committee continued to use MassEnergyInsight software to track municipal energy use and coordinated work on five projects funded by Wellesley's Green Communities Designation Grant of \$137,250:

- Exterior LED retrofit on the Department of Public Works (DPW) campus;
- Exterior LED retrofit on the WMLP campus;
- Interior LED retrofit at water treatment plants;
- Energy evaluation of the Town's water and wastewater infrastructure;
- Sustainability analysis in the Town Hall Annex Feasibility Study; and
- Installation of Wellesley's first Town-owned, public, electric vehicle (EV) charging station at the Waban Street Parking Lot.

In Spring 2020, the SEC worked with the Facilities Management Department (FMD), DPW, WMLP, and Police Department to submit a Green Communities grant requesting \$137,920 to fund the following projects:

- Interior LED retrofit in the High School auditorium and gymnasium;
- Exterior LED retrofit in municipal parking lots; and

- Two hybrid police cruisers.

### Climate Action Plan

The SEC began preparing for a Climate Action Plan (CAP), budgeted for FY21. A CAP process will engage the municipality and community in identifying strategies for achieving new GHG emission reduction goals which the SEC will propose to ATM 2021

### WasteWise Wellesley

The SEC continued to lead WasteWise Wellesley and the 3R (Reduce, Reuse, Recycle) Working Group (DPW, SEC and the Natural Resources Commission (NRC)). WasteWise Wellesley initiatives involve collaborations with Wellesley Public Schools (WPS), WPS Food Services, FMD, Health Department, Wellesley Green Schools, Sustainable Wellesley, EPA, and the Massachusetts Department of Environmental Protection, and include:

- **Cafeteria recycling, food rescue and food waste diversion.** Prior to the pandemic, the elementary school programs continued to operate at Bates, Sprague and Fiske. WMS launched a sixth-grade recycling and food waste diversion pilot. Bates Elementary School continued to participate in EPA's Food Recovery Challenge and won a national Sustainable Materials Management Food Recovery Challenge award.
- **A Metrowest Food Recovery Program.** The Metrowest Food Recovery Program operated until the pandemic. Food For Free picked up kitchen leftovers from Wellesley Public Schools, Olin, Wellesley and Babson Colleges and Bentley University and packaged these leftovers into single-serve frozen dinners to distribute to food insecure individuals and families.

### Sustainable Buildings

The SEC presented Draft Municipal Sustainable Building Guidelines to Town departments, boards and committees for feedback and invited Building Proponents (BOS, MLP, DPW, School Committee, NRC, Wellesley Free Library Board of Trustees and Recreation Commission). As of the end of FY20 all proponents, other than the Select Board, had signed the Guidelines. The Guidelines have already influenced the:

- Net zero energy ready design of Hunnewell School;
- Net zero energy design for the Town Hall Annex;

- Inclusion of sustainability goals in the Morses Pond Feasibility and Design Study; and
- Sustainability language in the Request for Qualifications for the Hardy/Upham Project.

The SEC partnered with Sustainable Wellesley and volunteers to participate in a Rocky Mountain Institute Building Electrification Accelerator. This program provides education on technology, economics, law, politics, equity and community outreach related to building electrification. The Accelerator promises to catalyze sustainable zoning in Wellesley, foster collaborations with peer communities and support the Town's Climate Action Plan. The SEC began to work with the Planning Department on changes to yard setback requirements to ease installation of energy efficiency equipment.

### Municipal Vulnerability Preparedness

The SEC worked with the NRC and a consultant to launch grant-funded Municipal Vulnerability and Preparedness (MVP) Workshops that led to a Summary of Findings regarding Wellesley's climate vulnerability.

### Transportation Working Group

To develop programs to reduce transportation emissions, the SEC organized a Transportation Working Group and joined the town-wide Mobility Working Group. The SEC also worked with the MLP to promote its Bring Your Own Charger Program for residents with electric vehicles and collaborated with DPW, MLP and Police to establish Wellesley's first Town-owned, public EV charging station.

### Solar

The SEC helped the WMLP to promote its residential solar rebate program.

### Green Collaborative

The Green Collaborative hosted well-attended events on electric vehicles, sustainable buildings and zero waste.

### Looking Ahead

Wellesley is not on track to meet its 2020 GHG emission reduction goal. The Town must do more to lower emissions. More ambitious GHG goals and

a town-wide CAP process will drive redoubled efforts. The process will engage municipal, residential, commercial, college and youth sectors and vulnerable populations in raising interest in climate change and in identifying and planning for the implementation of a wide array of climate mitigation actions.

#### SUSTAINABLE ENERGY COMMITTEE

Laura Olton, Chair      Sue Morris, Vice Chair      Lise Olney

Ellen Korpi      Richard Lee      Fred Bungler      Cynthia Mahr