



Town Of Concord

ANNUAL SUSTAINABILITY REPORT

2018

Sustainability Division

Concord has a long history of sustainability, but 2018 marked the inaugural year of Concord's Sustainability Division. The Sustainability Division works closely with other Town departments, residents, businesses, and community groups to integrate sustainability and resilience into all that we do. This report highlights sustainability efforts around energy, natural resources, transportation, waste, and community engagement across Concord.

- We placed a large emphasis on engaging our community broadly
- Pursued and secured a number of grants and awards
- Quantified our GHG emissions to determine a pathway to our 80% by 2050 goal



Energy

Our electricity was 54% carbon-free in 2018



Natural Resources

Our water conservation efforts are gaining traction



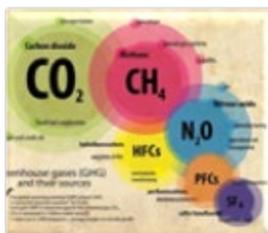
Transportation

Concord now has more than 200 EV owners



Waste

Reuse and recycling efforts are on the rise



Greenhouse Gas Emissions

GHGs have decreased 6% since 2008



Community Engagement

Directly engaged nearly 500 people



Grants/Awards

Awarded \$162,000 for sustainability related projects



Energy Overview

Concord's electricity was **54% carbon-free in 2018 thanks to CMLP's purchase of renewable energy credits (RECs).**

In CY18, CMLP and the Town gave out over:

\$472,500 in energy efficiency and renewable energy rebates and

149 energy audits to residents and businesses

In 2018, Concord participated in MassCEC's HeatSmart program with neighbors, Carlisle and Lincoln. The program promoted air-source and ground-source heat pumps and provided coaching to residents. Heat pumps are clean heating and cooling technologies that can reduce GHGs, reduce energy costs, and improve the comfort of your home.



61 homes installed air-source heat pumps
10 homes installed ground-source heat pumps

Energy Efficiency

Concord Municipal Light Plant and Energy New England offered

26

small businesses were visited by Concord-Carlisle High School (CCHS) students and offered energy audits

146

Mass Save Audits

116 programmable thermostats installed

89 homes insulated or air sealed

60 heating systems replaced

38 water heaters replaced

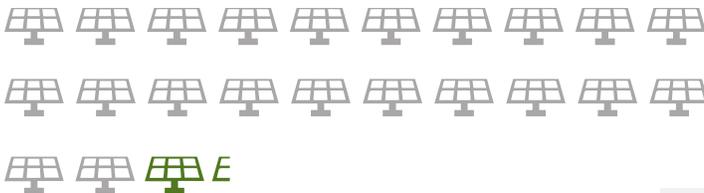
15

energy reduction programs to homes and businesses

236

rebates paid to residents and businesses

Renewable Energy



= 3.5 MW capacity

= 14 solar arrays

= installed in 2018

5

large-scale commercial and utility-scale arrays in town totaling 7.57 MW, which CMLP buys through power purchase agreements



Natural Resources

Volunteer Efforts



Improving river access for paddlers along the Assabet River at two locations



Removed five, 1-ton truck loads of invasive plants in one day alone!

Water Conservation

7

Water conservation consultations

11

Washing machine rebates issued

19

High-efficiency toilet rebates issued

Water Efficiency Video



Transportation

Electric Vehicles

200+ Electric Vehicles (EVs) in Concord

2 New public EV charging stations

1 New electric vehicle in municipal fleet

43 EV Miles enrollees

[EV Miles](#) participants program their electric vehicles to charge off-peak and receive a monthly bill credit for their participation.

5 Number of EV Level 2 rebates

[EV Level 2 Program](#) offers owners a rebate of \$250 to help offset the cost of installing some or all components of a Level 2 system for higher speed charging of an electric vehicle at your home.

Why Drive Electric in Concord?



Watch Our Video

**Electric Vehicle Support
Toll-Free Phone Line and
Email Launched**

833-443-8363
ev@ene.org



Waste



Concord Bike Giveaway

62 used bikes found
new riders!



DropOff Events

40,234 lbs. of electronics
23 tons of scrap metal
295 appliances
7.45 tons of carpet and bulky plastic



Paint Collection

492 residents dropped off paint
177 residents picked up paint for reuse projects



Hazardous Waste Collection Event

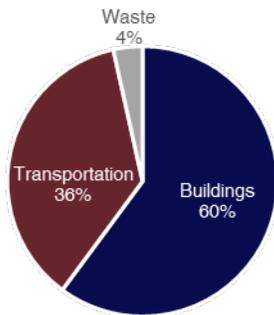
230 vehicles in attendance – the largest hazardous waste collection to date!



Business Recycling Events

47 Concord businesses attended
6,096 linear feet of fluorescent light bulbs recycled
792 lbs. of batteries collected

Greenhouse Gas Emissions



GHG Emissions by Sector (2016)

Concord conducted a baseline (2008) and an updated (2016) greenhouse gas (GHG) inventory of our community-wide emissions.

6% decrease in emissions from 2008 to 2016

Goals

25% reduction in town-wide GHG emissions*

100% carbon-free electricity source

80% reduction in town-wide GHG emissions*

* From a 2008 baseline

2020

2030

2050

Community Engagement



14

new speaking engagements or events



Social media handles launched @ConcordClimate

Climate Action Advisory Board established.

Meetings open to the public every 3rd Wednesday from 7-9 PM

486+

people reached through MVP grant community engagement

Grants/Awards

\$116,500

MA Green Communities

\$33,000

MA Municipal Vulnerability Preparedness Program

\$12,500

Municipal Energy Technical Assistance Grant