

Energy Committee Presentation on Sustainability to the BHSBC

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Belmont Energy Committee Member
12/7/17



What is the Energy Committee?

Founded to implement the Town's Climate Action Plan.

Appointed by the Board of Selectmen.

Energy Committee Responsibilities

To facilitate, enable, and help the Town of Belmont and its residents, businesses, and institutions to work toward achievement of the **Climate Action Plan** Resolution (Article 6) adopted by Town Meeting on November 18, 2009.



- To **reduce** the community's carbon dioxide emissions eighty percent (80%) by 2050 based on 2007 emissions,
- To annually **assess** progress,
- To **maximize efficiency** within Town operations, purchasing decisions, **construction of capital assets**, and community planning, through appropriate recognition of energy conservation;
- To **promote** efficiency for Town residents, businesses, and institutions, and
- To explore possibilities for implementing **renewable energy** use within the Town.

-Source: Charge of the Energy Committee

What is Sustainability?

It is social, environmental and financial.

Health and well-being is top priority – and is standard practice.

Greatest opportunity for improvement is Zero Net Energy.



What is Zero Net Energy?

Create a highly efficient building.

Eliminate fossil fuel consumption.

Produce enough renewable energy on-site to offset building energy consumption, on a net annual basis.



Zero Net Energy



Why Zero Net Energy?

1. Greatest opportunity to continue Belmont's commitment to sustainability
2. Educating for the future
3. Fiscally responsible

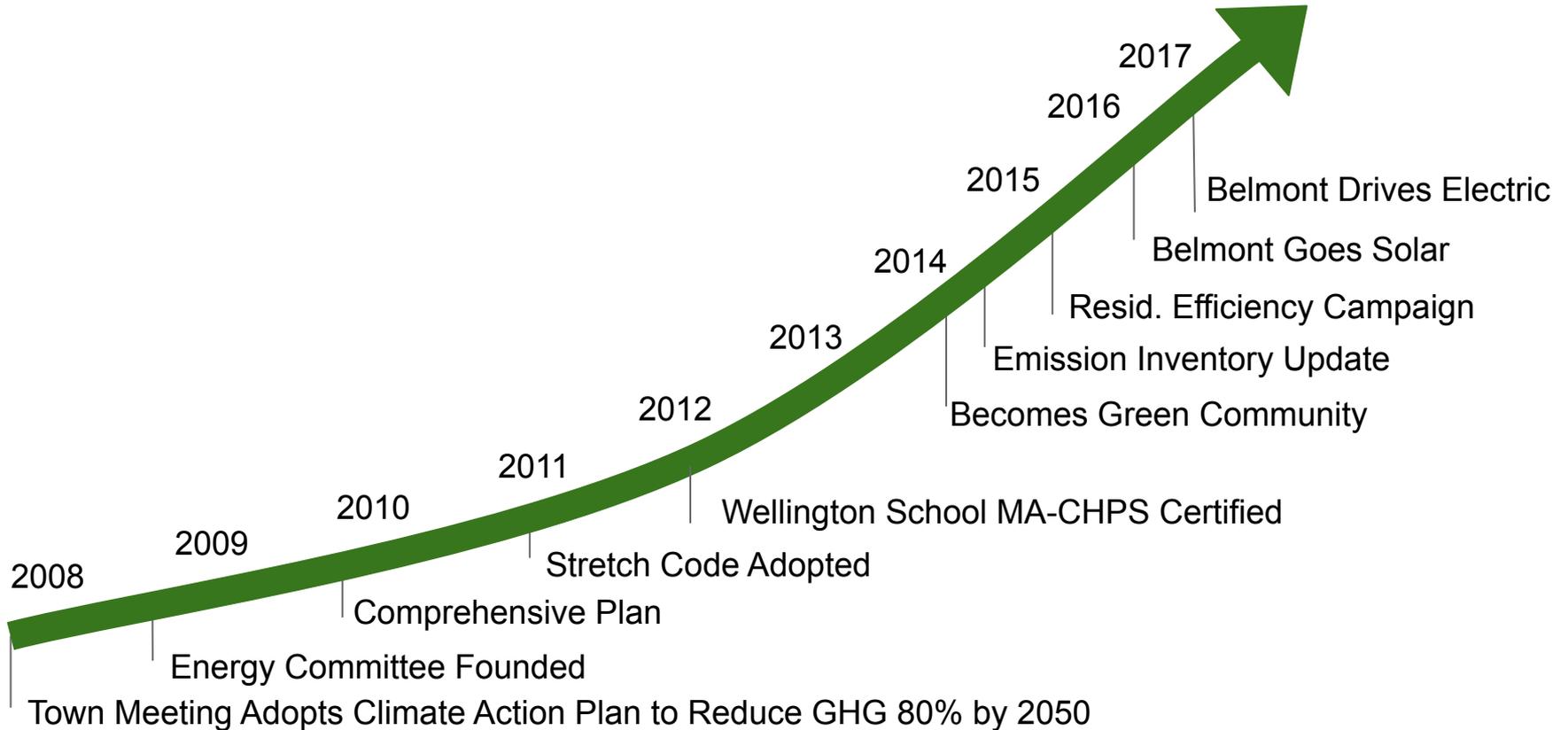


Belmont: A History of Commitment to Sustainability

Belmont officials accept MA DOER Green Communities initial grant award, 2014.



Belmont's Sustainability Trajectory



Indicators of broad-based support from residents



2007 Belmont Light customer survey: **98%** said energy efficiency is important.

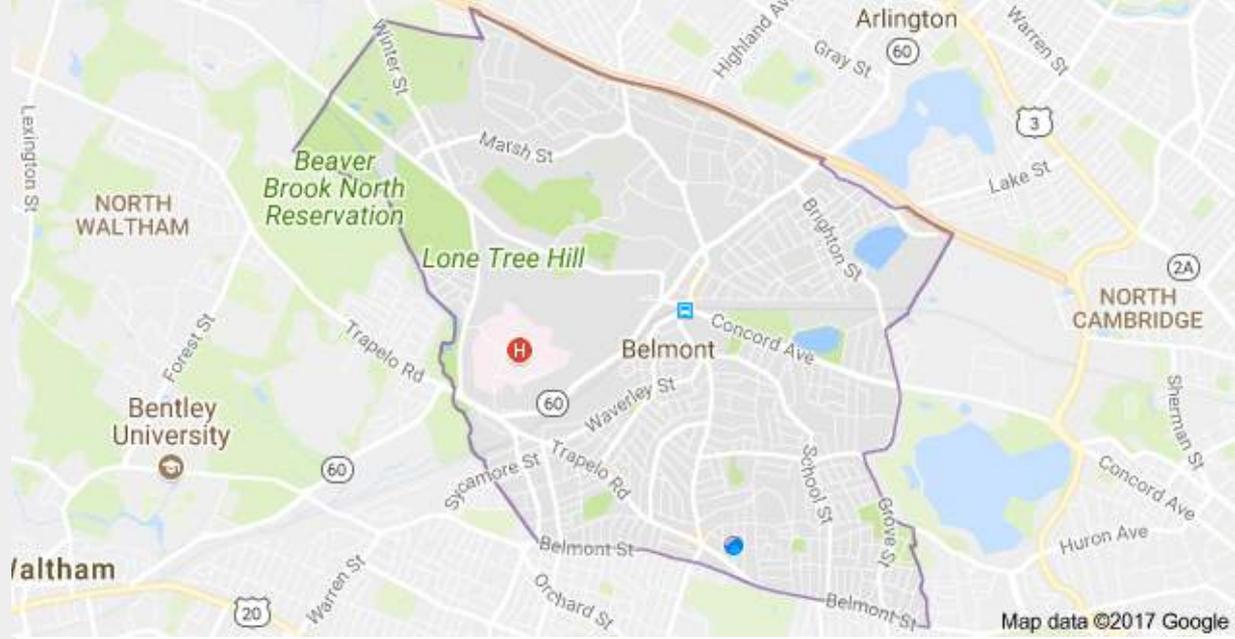
2008 November election included ballot question #4: **70%** of Belmont voters said yes to aggressive Greenhouse Gas Emissions reductions.

2009 **Majority** of Town Meeting voted in favor of the town's 120-page Climate Action Plan.

2011 **Majority** of Town Meeting voted in favor of adopting the Stretch Energy Code.

Belmont residential efficiency campaign

2015:
Highest rate of home energy audits / home weatherization in MA

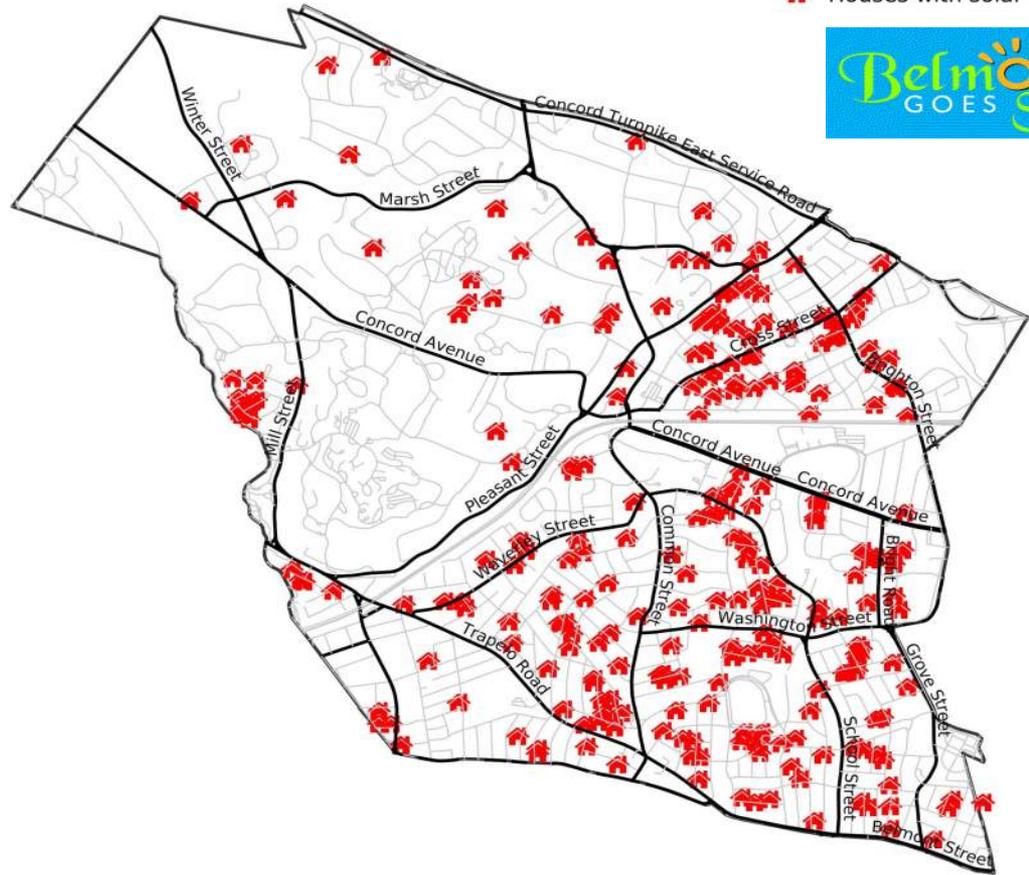


Residential Solar Campaign

2016:
Highest number of signups for any solarize campaign in MA

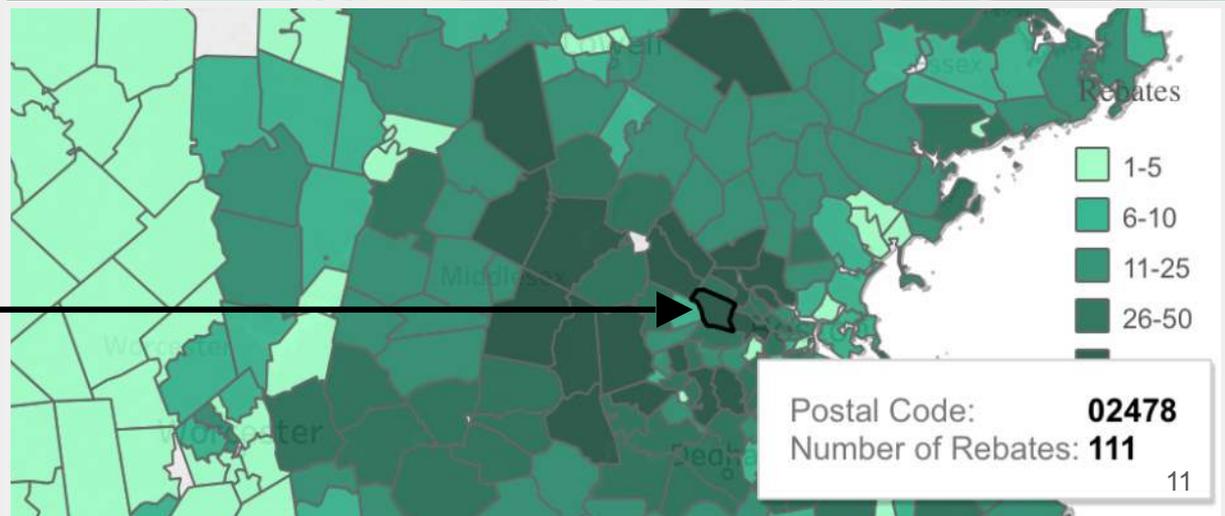


 Houses with solar (Dec. 2017)



Electric Vehicle Campaign

2017:
Most EVs of any zip code in MA



Educational benefits

Zero net energy schools are living laboratories, stimulating learning and innovation.

ZNE schools can serve as a teaching tool for students, STEM programs and the larger community.

This is the future we are educating our students for.

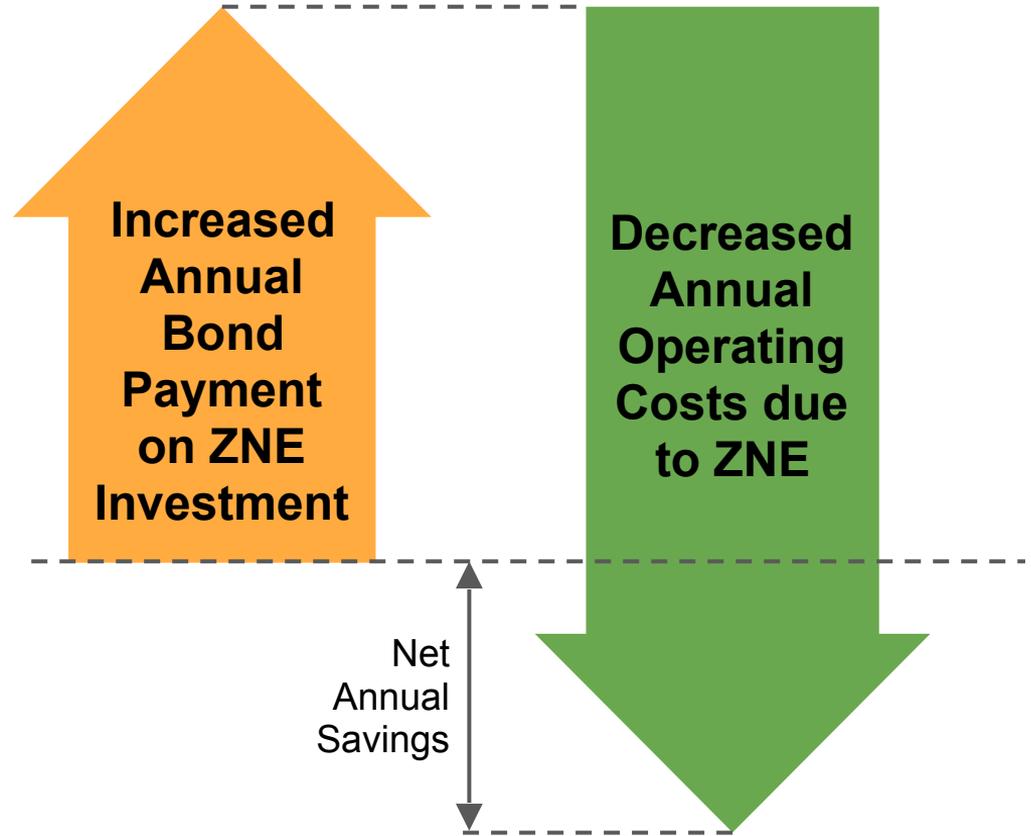


Fiscally responsible

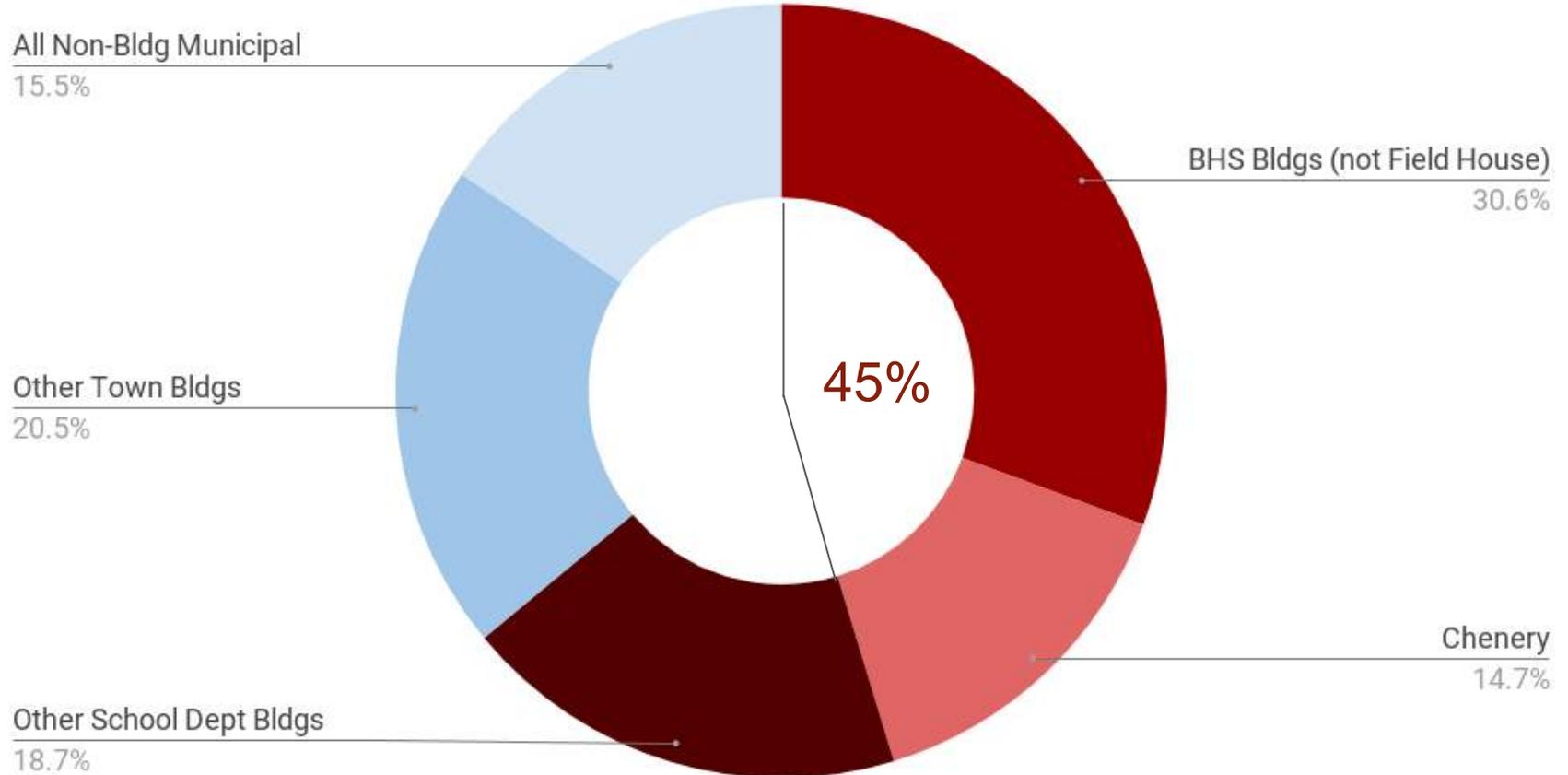
Belmont schools spend **\$1.1MM** annually on energy* or ~14 teacher salaries.

ZNE results in:

1. Lower total cost to taxpayers
2. Positive cashflow from day one.
3. Protection from rising energy prices.



Municipal Energy Use: Energy Savings Opportunity



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Contact Info

Belmont-ma.gov/energy-committee

SustainableBelmont.org