

# Town of Harvard Energy Advisory Committee Report



# Agenda

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- Charter and FY19 Goals
- Energy Use FY07-FY18
- Energy Cost FY07-FY18
- Emissions FY07-FY18
- Green Community Projects
- Community Choice Aggregation
- Municipal Vulnerability Preparedness Subcommittee
- Energy Policy Subcommittee

# Charter

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- Advise town officials on energy related issues to improve energy efficiency, improve energy-use policies and practices and reduce town energy consumption and costs.
- Engage community on energy conservation, environmental impact and sustainability policies and practices.

Goal – Reduce energy consumption for FY19 to 20% lower than FY09 baseline.

# Goals

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- Use
- Cost
- Emissions



- Engage  
Community



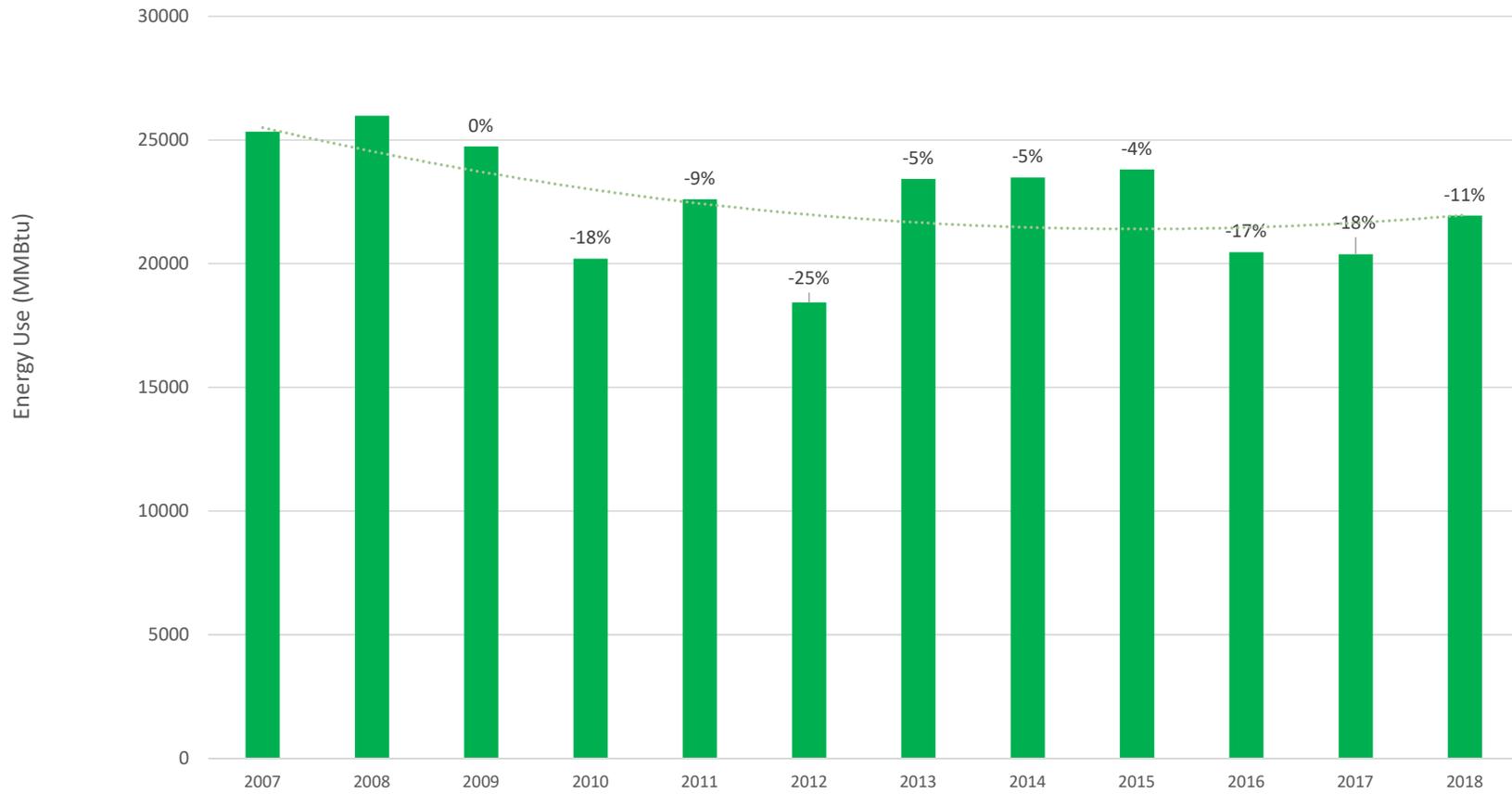
# Goals

	1 Green Community
<b>DONE 2/1/19</b>	a. Complete 2017 Grant Projects, pay all invoices and submit final report by Dec 31, 2018.
<b>DUE 3/22/19</b>	b. Obtain final proposals for 2019 Grant Application by 11/15/18; submit application for 2019 grants by deadline in Feb 2019.
<b>DONE 12/3/18 - SUCCESSFUL USE MRPC IN FUTURE</b>	c. Annual Report 2018 - Work with MRPC Assistance (grant) to complete the report by 12/3/18 and evaluate for future.
	2 Town Energy Use and Building Assessment
<b>IN PROCESS</b>	a. Re-assess/Audit all buildings and update, obtain funding and execute opportunities for energy reduction.
<b>UPDATED</b>	b. Update Energy Usage with FY18 energy use data and analyze. Review monitoring data where applicable.
<b>IN PROCESS</b>	c. Engage with all Department Heads/Building Owners/Facility Directors and Permanent Building Committee to identify opportunities. Influence job description for Town Facility Director to include energy related responsibilities.
	3 Community Choice Aggregation
<b>IN PROCESS</b>	a. Obtain DPU approval of Aggregation plan. Work with broker to select options that meet the needs of the Town. Implement in 2019.
<b>SURVEY ISSUED 2/18</b>	b. Communicate CCA details and determine needs of the Town through surveys and forums.

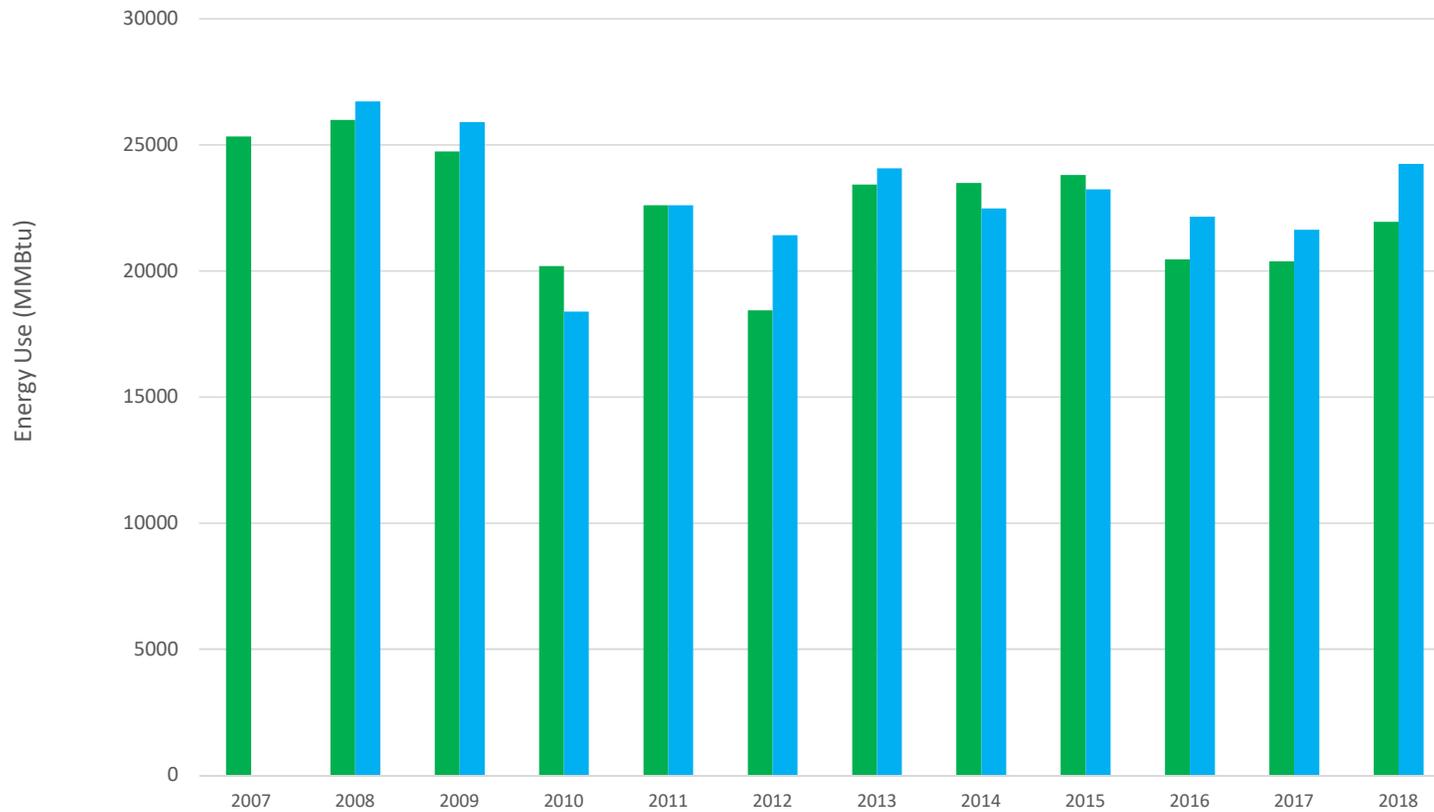
# Goals

<b>IN PROCESS</b>	4	<b>Municipal Vulnerability Preparedness - hire consultant and execute to meet deliverables for all phases of the grant (\$35k) funded effort.</b>
<b>PENDING</b>	5	<b>Town Solar strategy – Work with Town to issue RFP and select contractor to work with and determine opportunities in the Town.</b>
<b>SUBCOMMITTEE CREATED - MEMBERS AND PLAN PENDING</b>	6	<b>Town Energy Policy - create subcommittee and establish plan to create a Town Energy Policy and Action Plan</b>
<b>PENDING</b>	7	<b>Public Education on Sustainability and Environmental Concerns - Host two forums. Include residential energy conservation.</b>
<b>ONGOING</b>	8	<b>Communications - Improve HEAC information and communications (web page, cable, email list, etc.).</b>
<b>DONE</b>	9	<b>HeatSmart - Close out funding and program and document lessons learned.</b>

# Energy Use – Overall Town

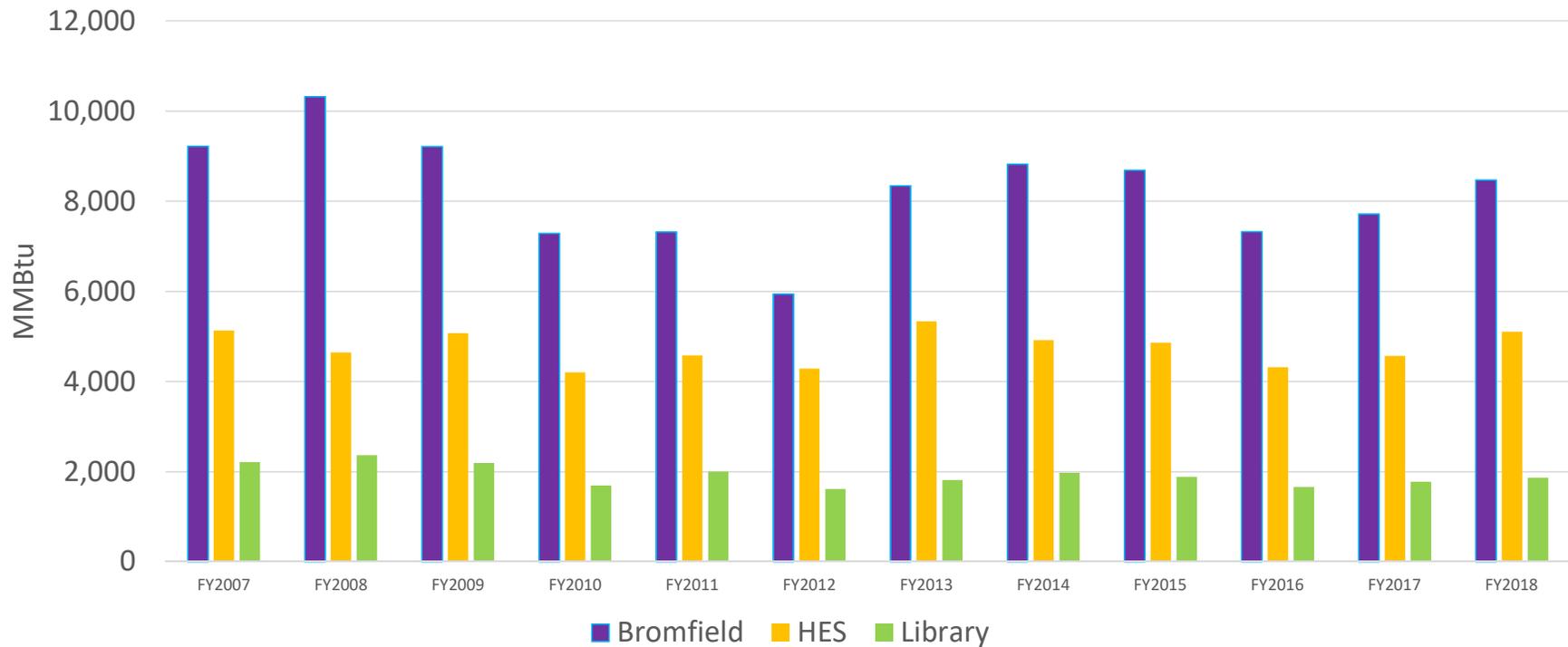


# Energy Use – Weather Normalized



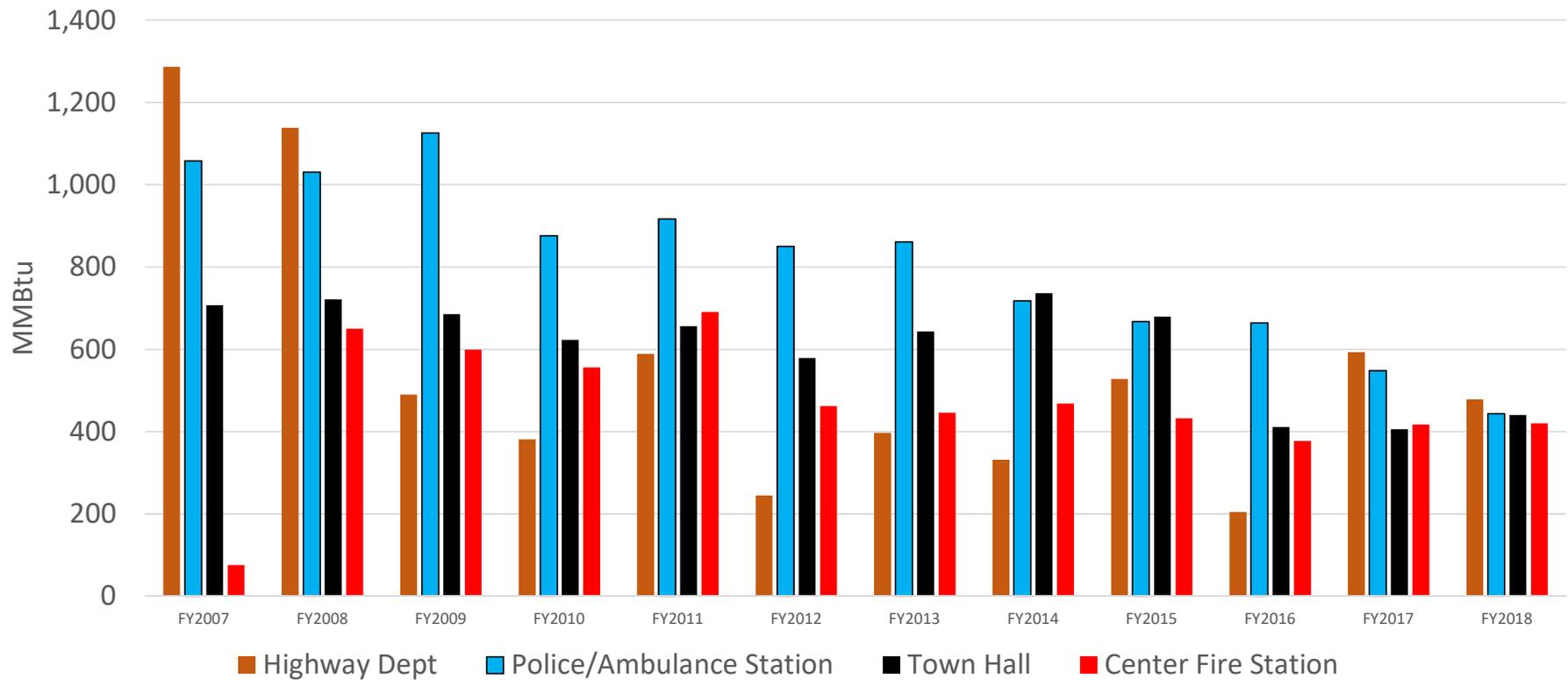
# Energy Use – By Building

Bromfield HES & Library Energy Use – Top 3 Highest Buildings

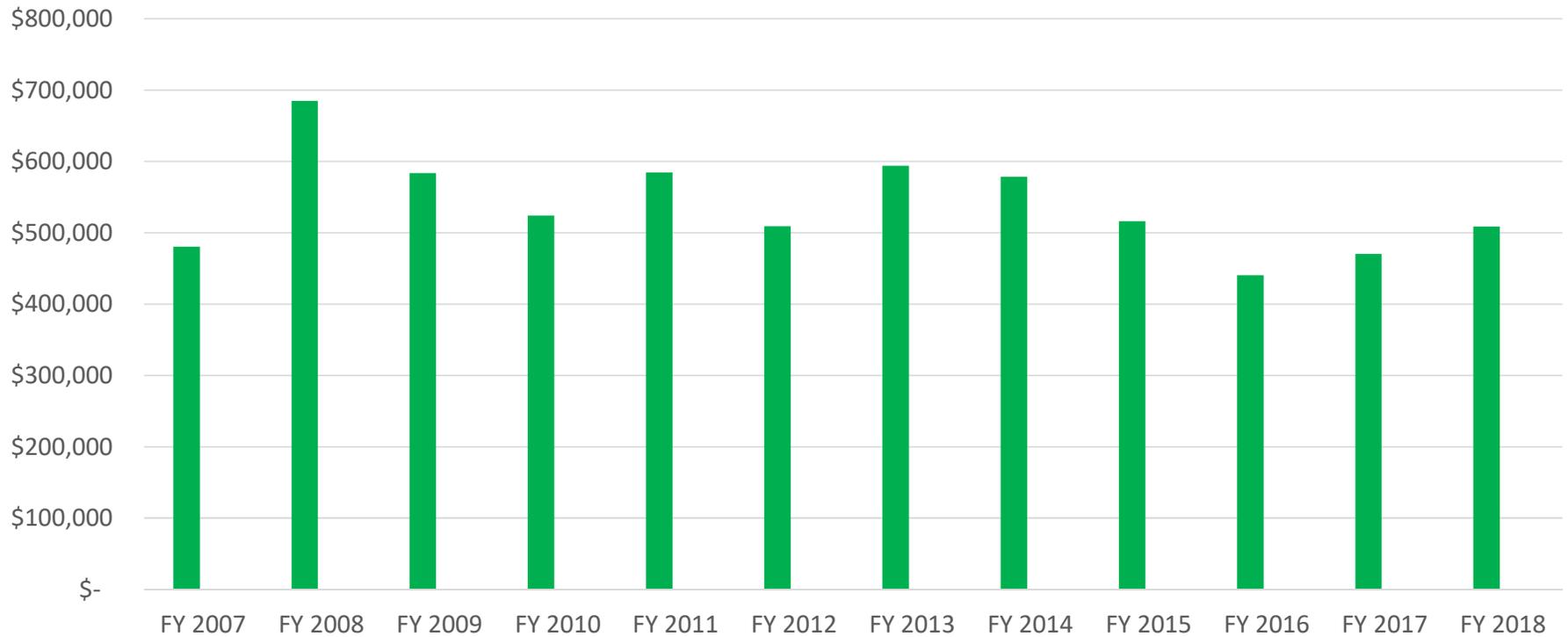


# Energy Use – By Building

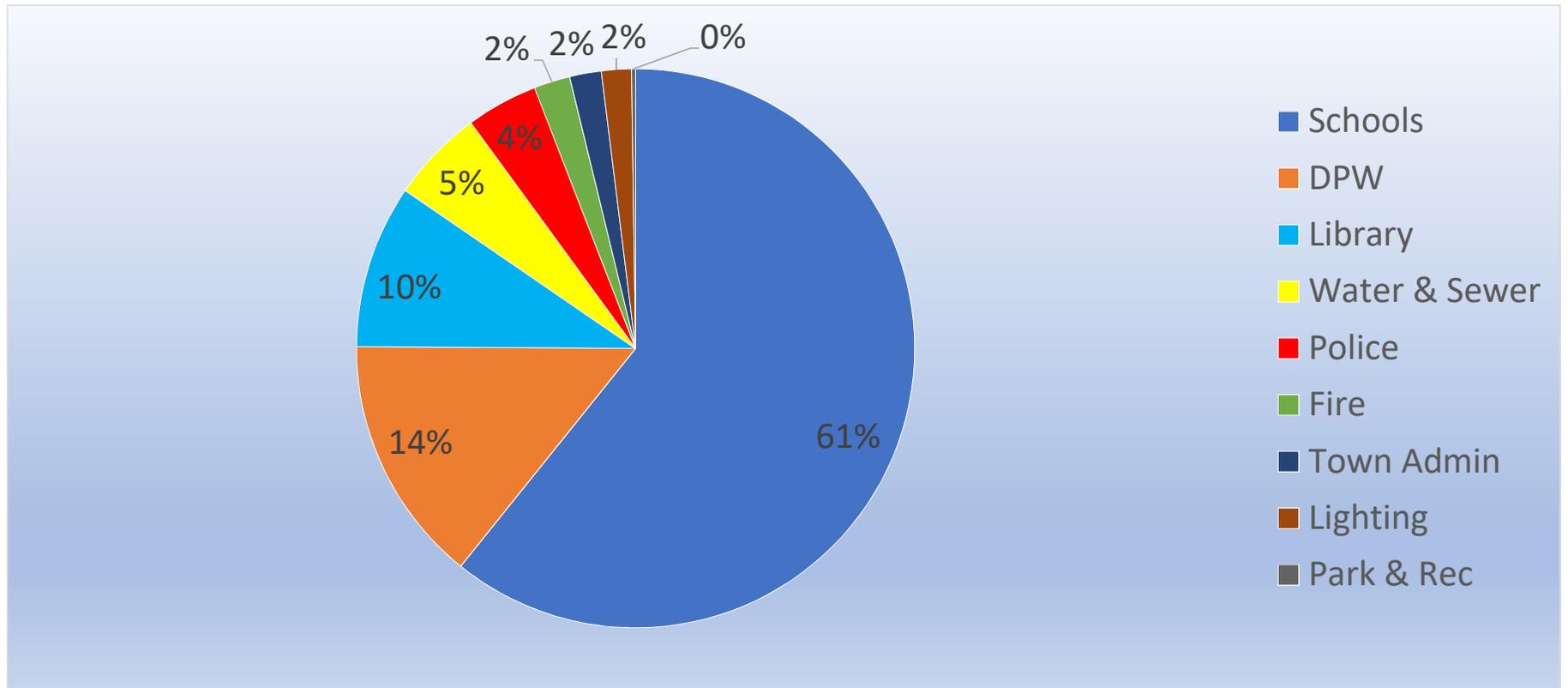
Energy Use - Buildings (4th-7th Highest)



# Energy Cost – Overall Town



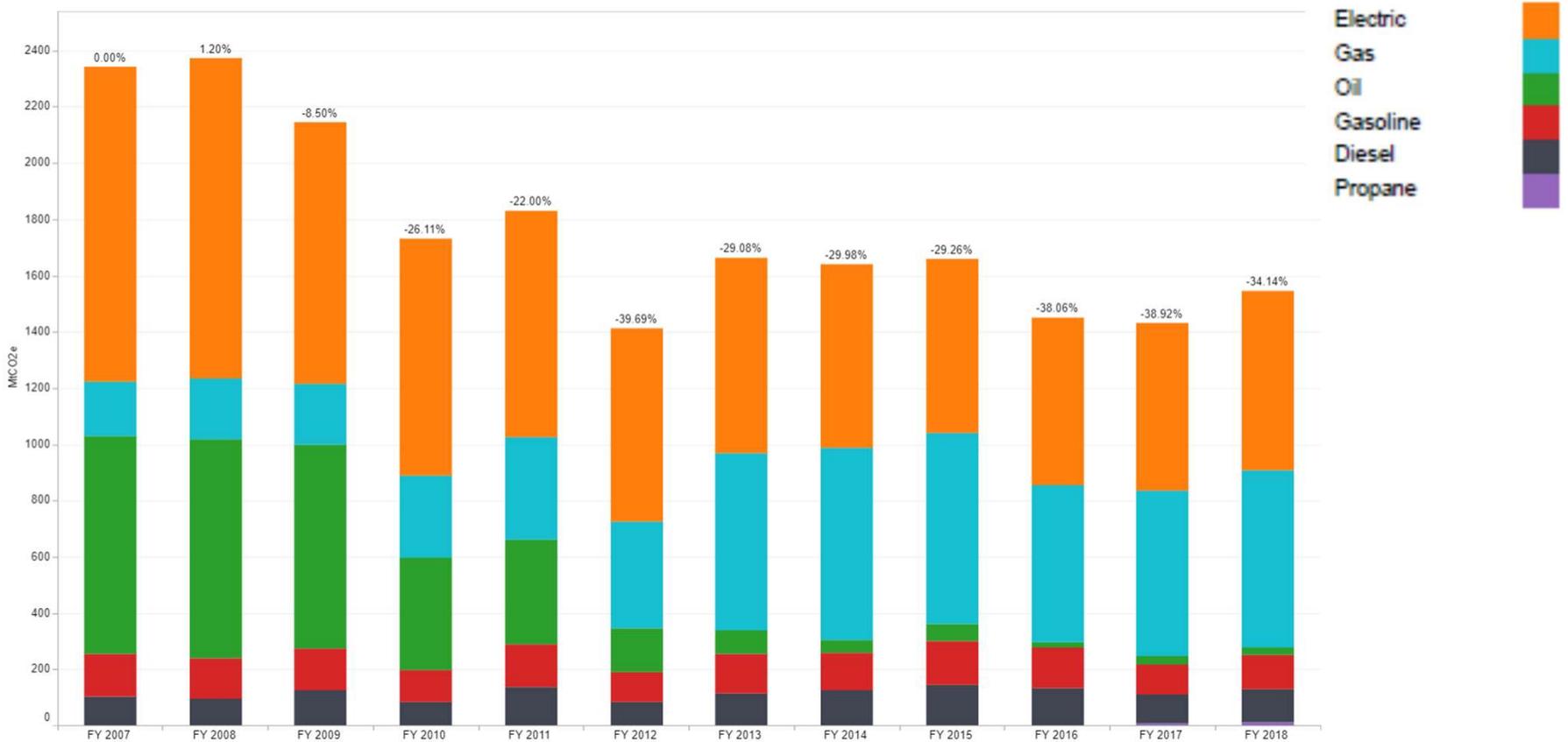
# Energy Cost – FY18 by Dept



# Emissions Down – Greenhouse Gases by FY

Metric Tons CO2 Equivalent

Emissions over Time  
Total Greenhouse Gases by Fiscal Year.

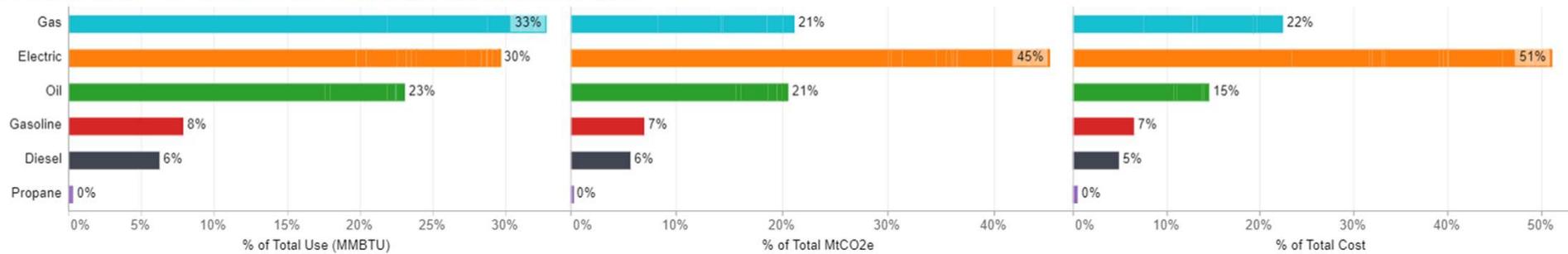


# Use/Cost/Emissions

## Overall Use, Emissions and Cost by Fuel as a Percent of Total

Emissions factors updated 1/4/2012 using Massachusetts-specific greenhouse gas emissions factors.

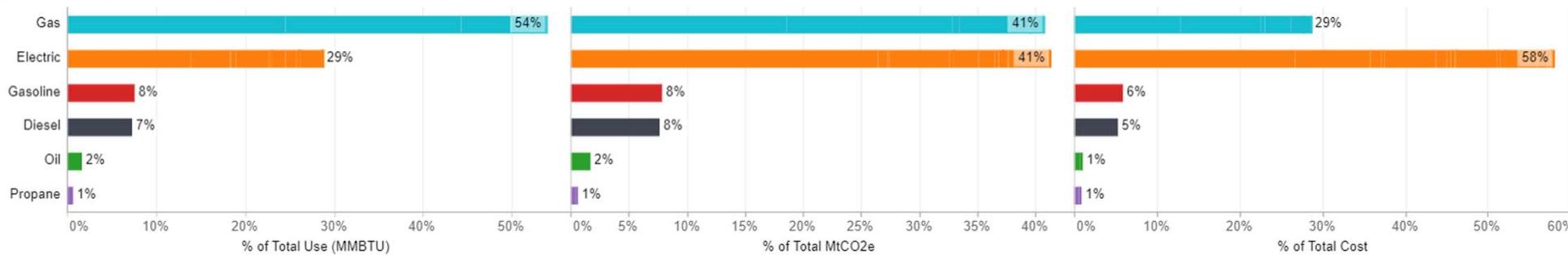
FY07



## Overall Use, Emissions and Cost by Fuel as a Percent of Total

Emissions factors updated 1/4/2012 using Massachusetts-specific greenhouse gas emissions factors.

FY18



# Green Community Energy Reduction Projects

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- Green Community Competitive Grant 2019 - Apply March for July Start
  - Lighting – Bromfield Misc remaining - convert to LED
  - Lighting – Library - Convert to LED
  - Lighting – Old Library - Convert to LED
  - Training – Building Operator Certification

# Community Choice Aggregation

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- Approved at Town Meeting Oct 2016
- Colonial Power selected as broker Jun 2018
- Plan for DPU approval submitted July 2018. Usually approved within 6 months.
  - Second set of DPU Information Requests (14) received Mar 13 due Mar 27.
- Survey issued for residential feedback Feb 2019; ~60 responses so far.

# Municipal Preparedness Subcommittee

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- Eric Broadbent & Planning Dept applied for grant May 2018. Award June 2018 - \$15k for Municipal Preparedness Study & \$20k for Agricultural Study.
- Subcommittee formed Sep 2018 , Chris Ryan leading since Oct 2018. Selected Harriman Associates as MVP Consultant Oct 2018.
- Agricultural workshops Feb-Mar 2019. Community-wide workshops scheduled for Apr 2019.
- Analyses and report due Jun 2019.
- Harvard has significant resources to protect to retain its rural/agricultural character.

# Energy Policy Subcommittee

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- Created Nov 2018; Leader Paul Green. Enrolling members.
- Scope – Consider all activities in Town (not just municipal). Focus on energy use and its impact on climate change. Reduce greenhouse gas emissions and align with MA state efforts.
- Short Term → Gather community input and develop policy statement.
- Long Term → Develop action plan to implement policy and obtain Town approval.