Overview

The Town of Dedham, as a leader among small communities in Metro Boston, is seeking to understand and address their contribution to climate change by taking action to decrease Greenhouse Gas (GHG) emissions over the coming years.

Objectives

- Create a baseline Community Greenhouse Inventory
- Conduct research on requirements set forth by the Global Covenant of Mayors for Climate and Energy

Methods

Data Acquisition and Analysis Tools (MEI, ClearPath, GPC)
Reporting Planning

Results

- Identified key priorities from local CAPS
- Corrected known errors in MEI software
- Analyzed community-wide electricity data
- Obtained residential MSW data
- Updated Municipal vehicle fleet data on MEI
- Obtained community-wide transportation data
- Analyzed community-wide heating data
- Collected community-wide water/wastewater data
- Created Methodology document

Discussion/ Next Steps

- Data acquisition is a lengthy, time consuming process for community-wide GHG analysis and adjusted deliverables to reflect that
- Methods for calculating emissions from different sectors are always changing depending on data that is available
- What works for one community doesn’t necessarily work for another
- Meeting compliance for GCoM is not a straightforward process
- How can GCoM streamline this process in the future?
- How can community-wide GHG inventories be practical for communities with limited staff and resources?
- Need expert opinion on best ways to calculate on-road transportation, solid waste, and water/wastewater emissions based on data was collected/ that is available
- Methodology document will act as living document

References

1 & 2. Global Covenant of Mayors for Climate and Energy
3. Global Protocol for Community-Scale Greenhouse Gas Inventories
4. MassGIS (Bureau of Geographic Information)
5. Massachusetts Bay Transit Authority
6. Boston Region Metropolitan Planning Organization
7. MassDOT – Registry of Motor Vehicles
8. Serevis Energy
9. Metropolitan Area Planning Council
10. U.S. Energy Information Administration
11. American Community Survey – U.S. Census Bureau
12. Massachusetts Department of Environmental Protection
13. Massachusetts Water Resources Authority