



City of Framingham Climate Action Plan

Summary Slides



Background on the Climate Action Plan

What is a Climate Action Plan?

A Climate Action Plan serves as a detailed roadmap for reducing greenhouse gas emissions as well as improving local resilience to climate change.

Why Develop a Climate Action Plan?

In connection with state climate and energy planning, the City of Framingham has set a target to achieve net zero emissions city-wide by 2050*. Achieving this goal will require coordinated actions to reduce emissions while supporting the community to deal with the growing impact of climate change.



What is Climate Change?



Greenhouse Gas (GHG) Emissions: Human activities, such as burning oil and coal, release gases that trap heat in the atmosphere and causes climate change.

Achieving **net-zero emissions** means reducing GHG emissions as close to zero as possible, with remaining emissions reabsorbed from the atmosphere*.



Mitigation: Reducing GHG emissions to address the root cause of climate change.

Example actions include reducing fossil fuel consumption and developing landscapes that capture carbon. *Think sustainability.*

Climate Change: Long-term shifts in temperatures and weather patterns.* Shifts can be natural, but since the 1800s, human activities have intensified these changes.

Climate change is contributing to more unpredictable weather and increasing the presence of extreme heat, storms, droughts, and more.



Adaptation & Resilience: Addressing the effect of climate change we experience.

Example actions include creating infrastructure to reduce flooding and reducing heat by planting trees. *Think resilience.*



* Definitions from UN: [What Is Climate Change?](#) & [For a Livable Climate: Net Zero Commitments Must be Backed by Credible Action](#) | United Nations

** Definition from [Overview of Greenhouse Gases](#) | US EPA

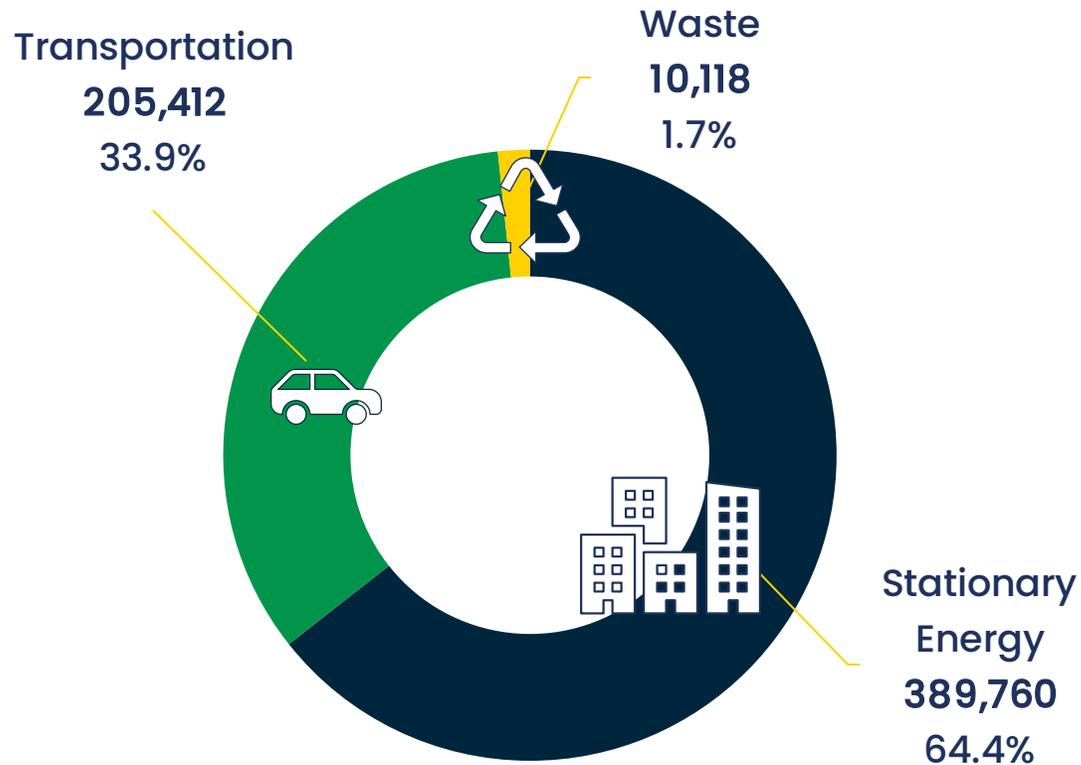
*** Definition from <https://www.climaterealityproject.org/blog/climate-adaptation-vs-mitigation-why-does-it-matter>



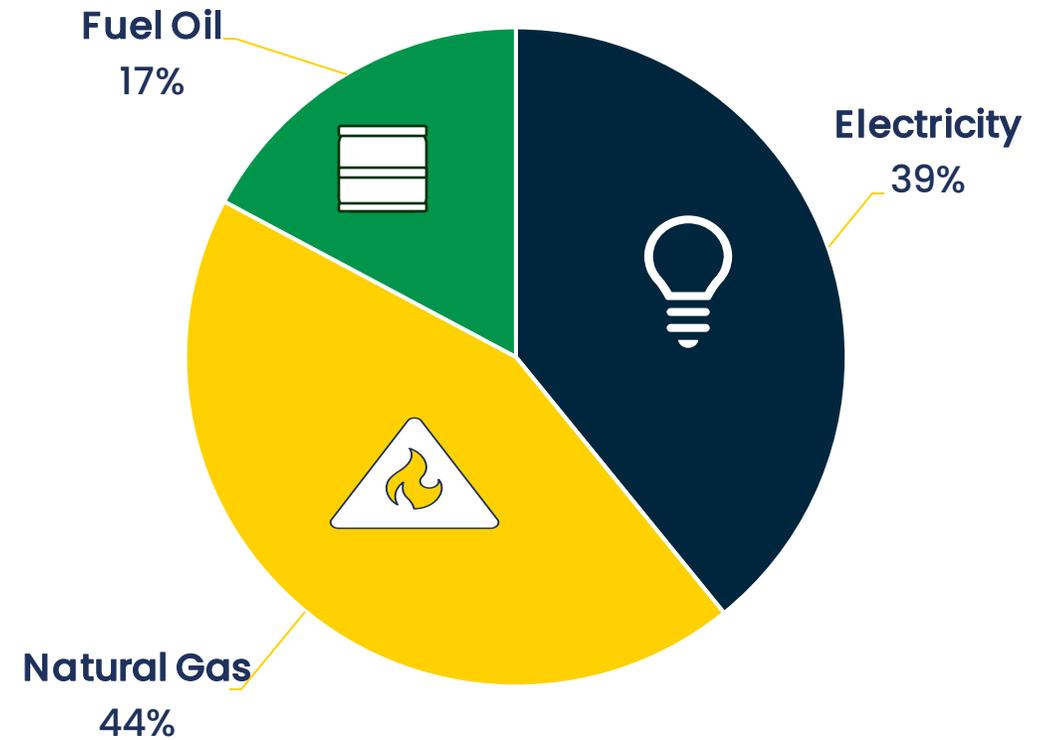
Framingham's GHG Emissions Inventory (2017)



Community-Wide Emissions (MTCO₂E) by Sector



Percentage of Building Energy Emissions by Source Energy



TOTAL: 605,290 Metric Tons of Carbon Dioxide Equivalent Emissions

Climate Change Impacts

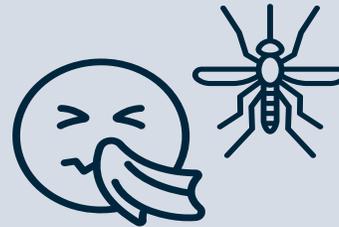
Climate change is already having significant local impacts and can contribute to:



More severe storms and weather that bring heat waves, flooding, and high winds



Reduced water quality in local lakes and ponds



More allergies, ticks, and mosquitos



Expensive groceries and food shortages



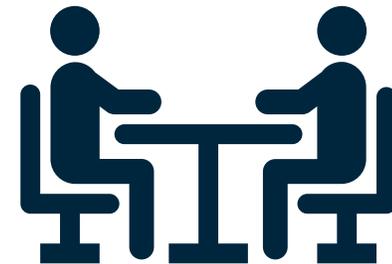
Equity and Environmental Justice

Environmental Justice: all people have a right to be protected from environmental hazards and to live in and enjoy a clean and healthful environment.*

Environmental justice is the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits. Massachusetts defines "environmental justice populations" based on factors including income, race and ethnicity, and linguistic isolation.

Equity: The condition of fair and just inclusion into a society.**

Equity will exist when those who have been most marginalized have access to opportunities, power, participation, and resources and all have avenues to safe, healthy, productive, and fulfilling lives.



* [Environmental Justice | Mass.gov](https://www.mass.gov/info-details/environmental-justice)

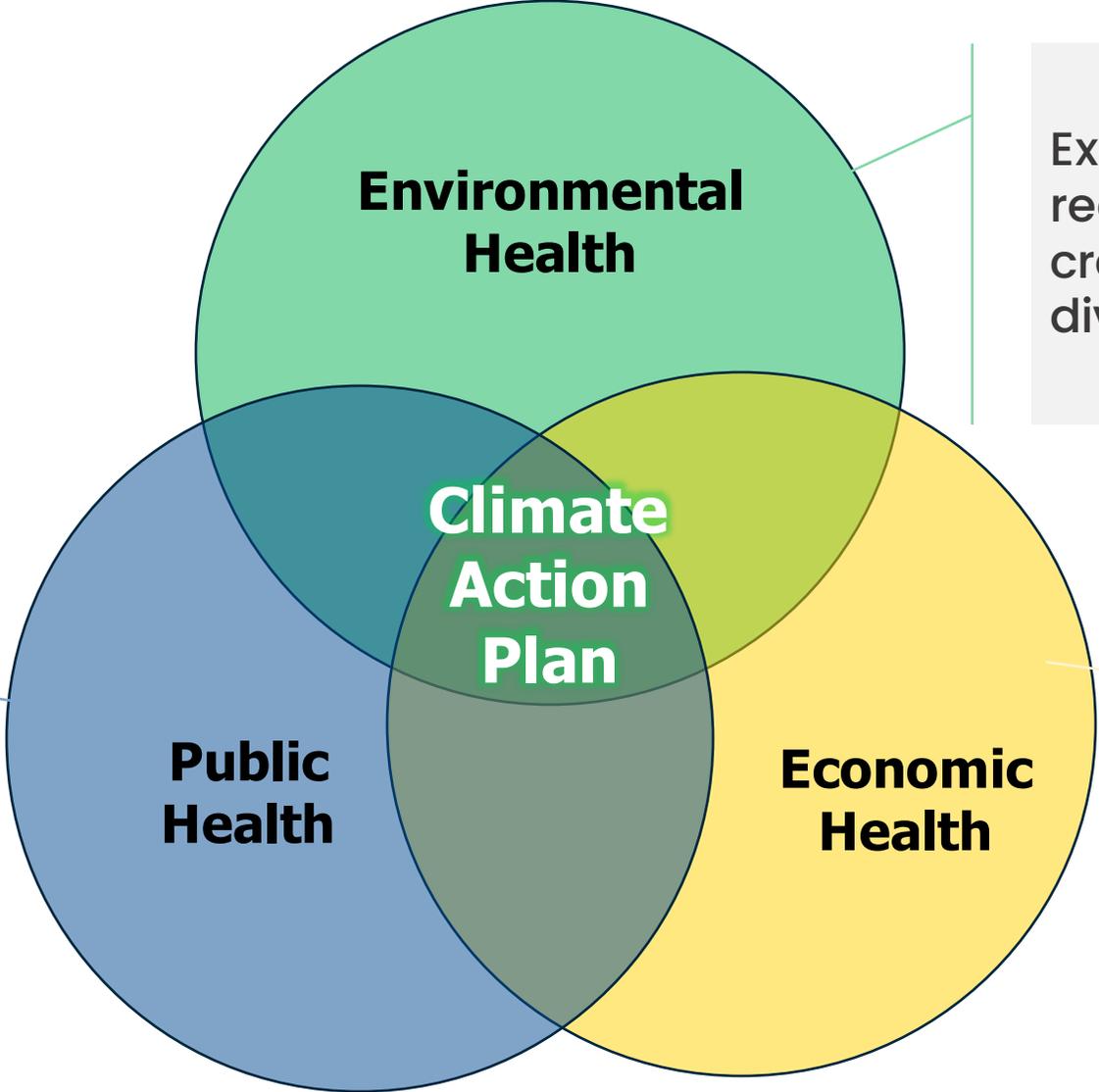
** MAPC agency definition with inspiration from *Policy Link*, King County Office of Equity and Social Justice



Intersections of Climate Planning



Example: Strategies that reduce air pollution may improve respiratory health or improve social resilience to climate change impacts.



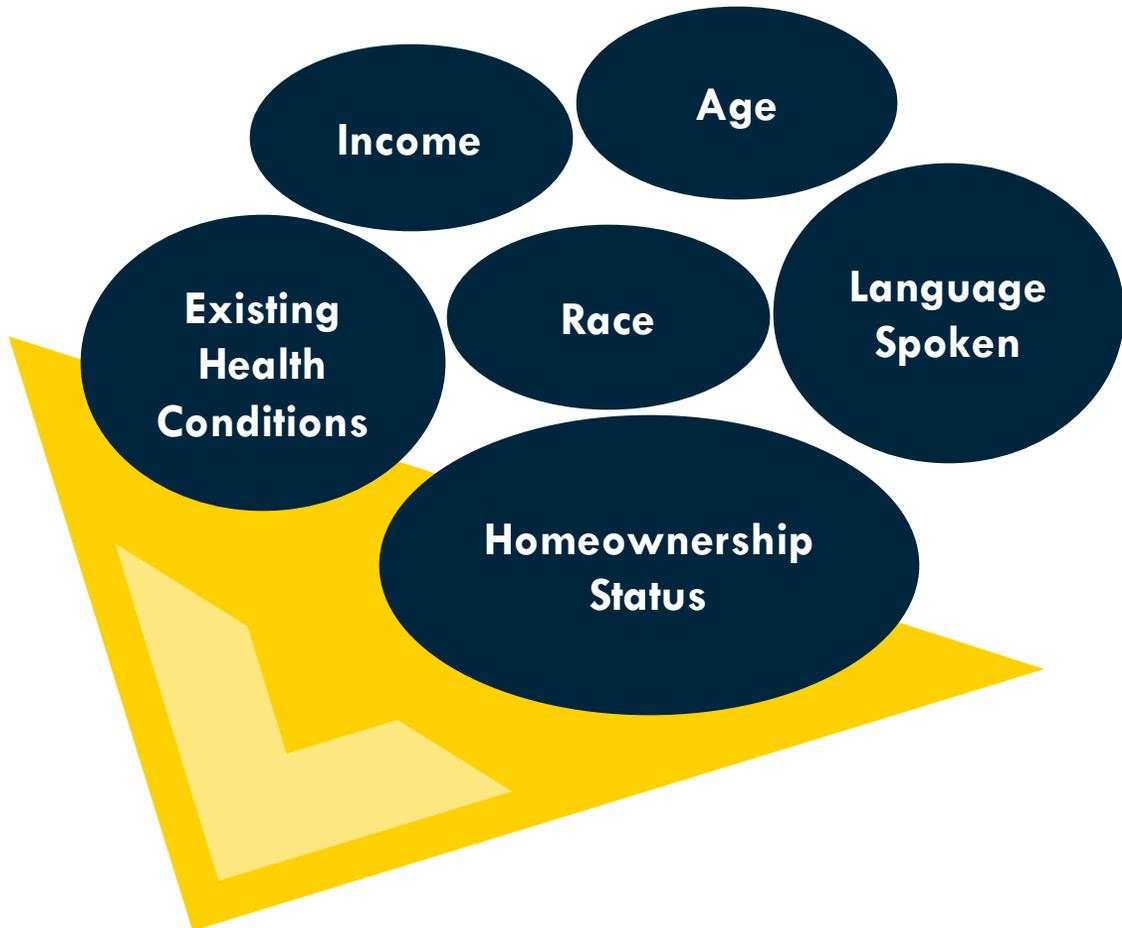
Example: Strategies that reduce emissions will create a more stable and diverse energy supply.



Example: Strategies that include building clean energy infrastructure can create well-paying green jobs.

Experiencing Climate Change

Existing social factors shape how people experience climate impacts and climate action strategies



- **11% of residents are linguistically isolated.** Outreach materials may not effectively reach residents, preventing residents from benefitting from participating publicly or learning about energy efficiency opportunities.
- **24% of residents are low income.** Households with a lower median household income may not have the resources to adopt clean energy technologies or repair homes damaged from chronic or extreme flooding events.
- **35% of residents identify as people of color.** Neighborhoods that experienced redlining often have more paved surfaces and fewer trees, which increases the local temperature.

Experience of Climate Impacts



Shaping the Planning Process



We should ask ourselves throughout this process:

Who has been historically impacted?



Who will be most impacted by the types of changes to our climate that we expect to see?



How will the benefits of this strategy be distributed?



Plan Focus Areas

Strategies and actions for the plan will be developed through 5 categories:



**COMMUNITY
RESILIENCE**



ENERGY



MOBILITY



ENVIRONMENT



**BUILDINGS &
INFRASTRUCTURE**



Your Input Needed!



Now that you know more about climate change, environmental justice, and the Framingham Climate Action Plan, we want to hear from you!

Instructions:

1. Each of the Plan Focus Areas are listed on the following pages. Go through and read the Descriptions to familiarize yourself with them.
2. Go through each Plan Focus Area one at a time. Discuss as a group your current experiences with them. Have you personally been impacted by climate-related change in any of them?
3. Next, brainstorm goals you think the City of Framingham should have for each of the Plan Focus Areas. What do you hope that area will be like in the future?
4. Finally, share any suggestions that come to mind for how to achieve that future goal.

MOBILITY



Description:

Increasing options for more people to walk, bike, take public transportation, or use electric vehicles will help reduce transportation-related greenhouse gas emissions so our community has cleaner air to breathe.

What Goals Do You Have? What do you hope that area will be like in the future?

Ideas of How We Achieve the Goals:



ENVIRONMENT



Description:

Restoring, protecting, and expanding natural systems provides a natural defense against climate change and can lessen the impact of flooding and urban heat as well as store carbon emissions.

What Goals Do You Have? What do you hope that area will be like in the future?

Ideas of How We Achieve the Goals:



COMMUNITY RESILIENCE



Description:

The ability of our residents to withstand, cope with, and recover from the impacts of climate change.

What Goals Do You Have? What do you hope that area will be like in the future?

Ideas of How We Achieve the Goals:



ENERGY



Description:

To decrease harmful emissions, we need to meet the energy needs of our homes, businesses, & vehicles with 100% renewable sources of energy (energy from sunlight, wind, the movement of water, & geothermal heat).

What Goals Do You Have? What do you hope that area will be like in the future?

Ideas of How We Achieve the Goals:



BUILDINGS & INFRASTRUCTURE



Description:

More efficient heating & cooling will have benefits including more comfortable homes & workplaces, improved community health, greater resilience in the face of extreme weather, & reduced energy costs.

What Goals Do You Have? What do you hope that area will be like in the future?

Ideas of How We Achieve the Goals:

