





BUILDINGS

Using energy efficiently and encouraging resilient and high-performing buildings.

What's Included

- Green/Net Zero buildings
- Building energy efficiency and conservation
- Resilient retrofits
- Sustainable development

WHY IT MATTERS

Buildings produce a significant amount of greenhouse gas (GHG) emissions, the primary type of pollution that causes climate change. Operating buildings with fossil fuels like oil and natural gas is less efficient, produces more emissions, and poses greater health and safety risks compared to operating buildings with electricity and renewable energy.

Buildings account for 42% of all greenhouse gas emissions in Danvers. We have a significant opportunity to electrify and retrofit existing homes and businesses and construct new buildings that are more resilient to the impacts of climate change.



BY THE NUMBERS



of all greenhouse gas emissions in Danvers come from buildings.²



of housing units in Danvers are 50+ years old, making them strong candidates for energy retrofits and electrification.³



homes statewide must install **heat pumps** or other renewable energy systems each year for the next 25-30 years for Massachusetts to achieve its 2050 emissions reduction goals.⁴

Electric Heat Pump

A heat pump is a highly energy-efficient alternative to furnaces and air conditioners that run on oil and natural gas. Heat pumps use electricity to transfer heat, often between the inside of a building and the outside air.

Net Zero Energy Building

A zero net energy building is designed to generate enough clean, renewable energy onsite to equal or exceed the total amount of energy that the building consumes over the course of a year.



AROUND OUR COMMUNITY

Did you know that Danvers is home to the first state-owned **net zero energy building** in Massachusetts? The Health Professions and Student Services Building at the Danvers Campus of North Shore Community College features onsite renewable energy and a green roof to reclaim rainwater. This innovative building was designed to save an estimated \$142,000 in electricity costs per year.⁵

To support communities like Danvers with implementing green building standards more widely, state agencies provide funding for energy efficiency and conservation projects. For example, the Massachusetts Green Community Designation and Grant Program has awarded \$50.9 million dollars to participating municipalities specifically for energy-related projects.⁶

- ² KLA, Greenhouse Gas Inventory (2022).
 ³ Town of Danvers, Trend Report (2020).
- ⁵ Mass.gov, What is a Net Zero Energy Building?
- ⁴ MA Decarbonization Roadmap, Buildings Sector Report (2020).
- ⁶ Mass.gov, Becoming a Designated Green Community.

The future demands that we take



Climate change will affect us all. *Resilient Danvers* is a platform to share your concerns, priorities, and ideas for how Danvers should take appropriate action, such as building clean energy and transportation systems, supporting affordable and livable neighborhoods, and growing a diverse and sustainable economy.





Attend events to talk with us about the plan



Engage with our online tools and surveys



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