

Dedham's Sustainability Advisory Committee

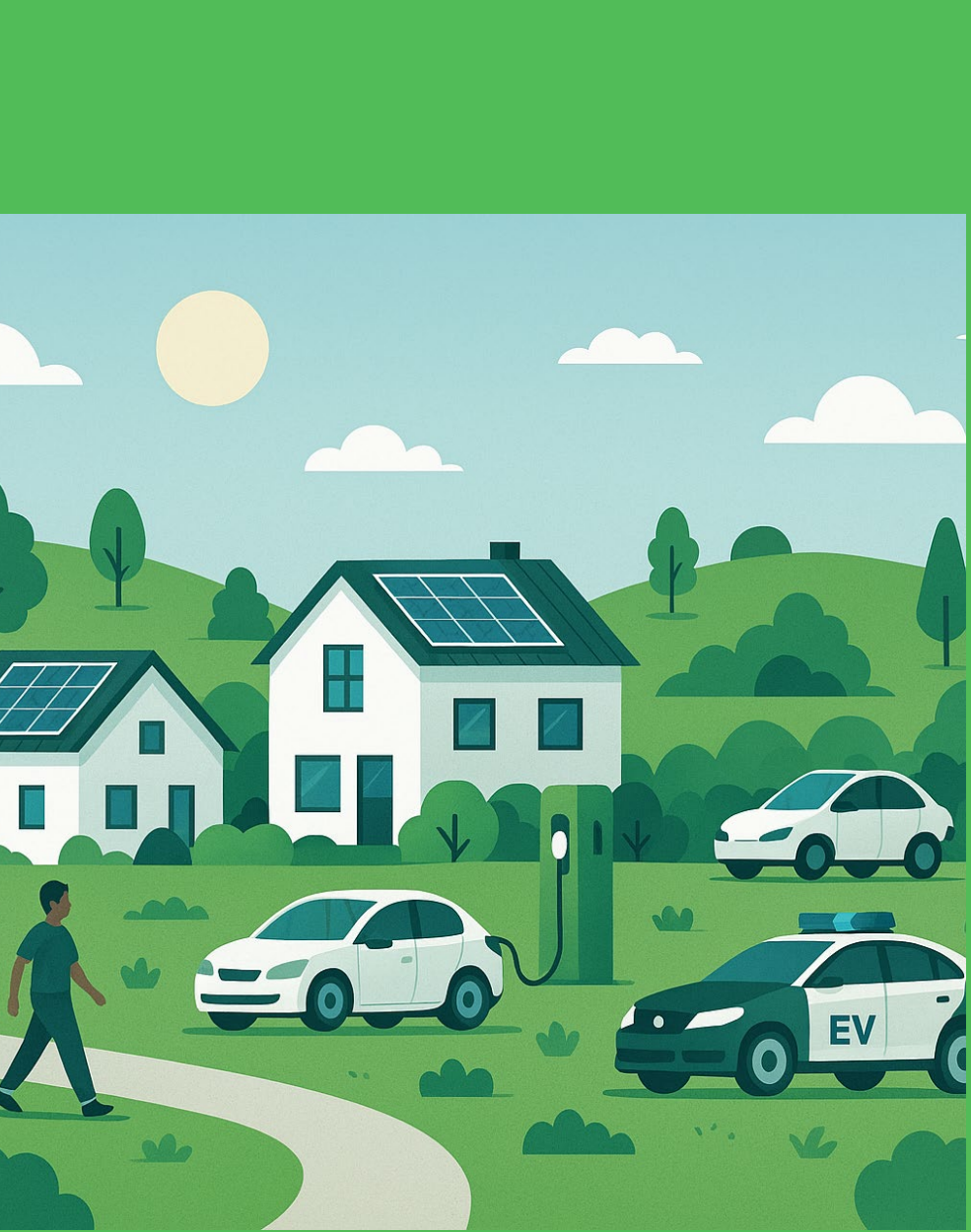
Dedham's Climate Leader Communities – Q & A

Inside:

- ✓ 2010: Dedham Joined Green Community Program
- ✓ 2025: Dedham's Effort to Join Climate Leader Community
- ✓ Key Questions
- ✓ Three Examples

November 2025





2010

Dedham Joined Green Community Program



May 2010

As-of-right siting, renewable energy, R&D, and manufacturing



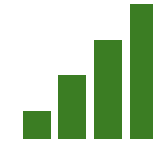
May 2010

Stretch Energy Code Adopted



July 2010

Fuel Efficient vehicle policy and annual reporting



October 2010

Energy Reduction Plan: 20% over five years



November 2010

Expedited permitting over one year; included priority development sites



Since designation, **\$659,000** awarded to Dedham for energy savings projects



2025

Dedham's Effort to Join Climate Leader Community



Green Community Status

Green Community since 2010

CY2024 Annual Report was approved on 3/27/2025

Eligible for state grants and technical assistance



Local Committee

The Sustainability Advisory Committee advises, coordinates, and leads clean energy initiatives

Committee helps implement sustainability goals



Specialized Stretch Energy Code

Adopted the Opt-In Specialized Energy Code at Town Meeting on May, 2024

Code strengthens building energy efficiency standards for new construction



Municipal Decarbonization Commitment

Commit to eliminate on-site fossil fuel use by 2050

Serves as the foundational roadmap for long-term climate action



Municipal Decarbonization Roadmap

A guide to building and vehicle upgrades (e.g., equipment replacement, major renovations)

Dedham received a technical assistance grant to draft the roadmap



Zero-Emission Vehicle (ZEV) First Policy

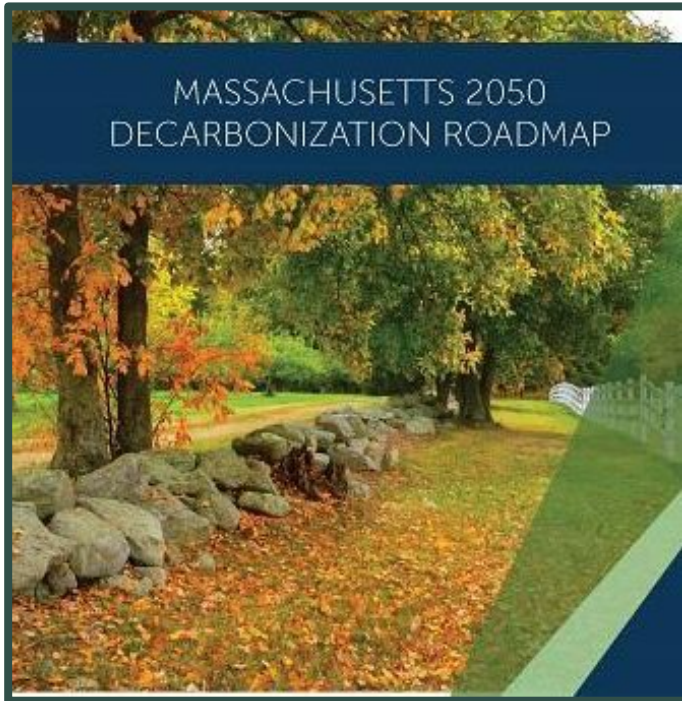
Policy commits to replacing internal combustion engine vehicles with hybrid or electric vehicles

✓ = indicates completed task.

Core questions around the Decarbonization and EV Policy

As we have talked to several different constituencies within Dedham, three central questions have been raised:

1. How can a phased EV transition for the municipal fleet provide both short-term fiscal predictability and long-term operational savings for Dedham taxpayers?
2. How will the decarbonization roadmap affect existing town and municipal buildings?
3. How does a decarbonization and EV policy deliver broad, community-wide benefits?



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Question: How can a phased EV transition for the municipal fleet provide both short-term fiscal predictability and long-term operational savings for Dedham taxpayers?

Replace vehicles (below 8,500 pounds) incrementally as they reach their end-of-life.

- **Operational savings** from lower and more stable fuel costs
- **Key Point:** scheduled maintenance for EVs averages less than \$0.07 per mile, compared to approximately \$0.10 per mile for Internal Combustion vehicles and savings of \$949 per vehicle ^{1, 2}



Case Study

“The city of Brockton’s thirteen EVs have travelled 65,132 miles over the past two years eliminating \$6,470 on approximately 2,850 gallons of gasoline if the City had acquired similar gasoline powered vehicles. The estimated gasoline savings translates to a total of 55,841 pounds of greenhouse gas (GHG) emissions avoided.”³

¹: <https://www.ecopreserve.net/is-maintaining-an-ev-less-expensive-than-a-gas-vehicle>

²: <https://www.aaa.com/autorepair/articles/true-cost-of-ev>

³: <https://www.mass.gov/doc/massevip-fleets-case-study-brockton/download>

Question: How will the decarbonization roadmap affect existing town and municipal buildings?

The roadmap is designed to align with any scheduled renovations or equipment upgrades, where applicable, to support a smoother implementation.

- **Heating Efficiency:** heat pump technology is 3 to 4 times more efficient at energy conversion than fossil fuel heating systems.¹
- **Operational Savings:** a switch to heat pumps in buildings saves approximately \$1,100 per year.²
- **Key Point:** The Department of Energy estimates that every dollar invested in weatherization can return \$1.72 in energy savings.³



Case Study

The town of Beverly states “that its 4.36 MW solar program is expected to offset nearly all municipal electricity consumption and avoid carbon dioxide emissions equivalent to over 390,000 gallons of gasoline annually.”⁴

1: <https://gshp.org.uk/wp-content/uploads/2024/12/In-Situ-Heat-Pump-Performance-Analysis-of-Ofgem-Data-2017%E2%80%932022-1.pdf>

2: <https://healthybuildings.hsph.harvard.edu/cobe-case-study-modernizing-school-heating-with-ground-source-heat-pump>

3: https://www.energy.gov/sites/prod/files/2021/01/f82/WAP-fact-sheet_2021_0.pdf

4: <https://www.beverlyma.gov/713/2022-Solar-Program-on-Six-City-Sites#:~:text=Summary,at%20our%20newest%20solar%20sites!>

Question: How does a decarbonization and EV policy deliver broad, community-wide benefits?

The benefits to Dedham are significant.

- **Improved Public Health:** Reduced respiratory illness.¹
- **Better indoor air quality:** improved air quality in our schools and municipal buildings.
- **Key Point:** Executing the roadmap enhances public health, builds a more resilient community, and creates long-term economic stability by transitioning to clean energy.



Case Study

Dedham can follow the Arlington case study, which demonstrates that prioritizing energy efficiency and leveraging over \$2 million in Green Communities grants can significantly reduce municipal energy consumption and associated costs, while also accelerating the adoption of sustainable infrastructure.

¹ <https://pmc.ncbi.nlm.nih.gov/articles/PMC7165692/>

[https://pmc.ncbi.nlm.nih.gov/articles/PMC6824974/#:~:text=\(84\)%20The%20federal%20Clean%20Air,%2C%20CO%2C%20and%20O3.&text=There%20have%20been%20few%20studies,resultant%20effect%20on%20asthma%20morbidity.](https://pmc.ncbi.nlm.nih.gov/articles/PMC6824974/#:~:text=(84)%20The%20federal%20Clean%20Air,%2C%20CO%2C%20and%20O3.&text=There%20have%20been%20few%20studies,resultant%20effect%20on%20asthma%20morbidity.)

Dedham's Sustainability Advisory Committee

A vote to accept the Decarbonization Roadmap and the EV First policy will allow the Town of Dedham access to State funds for technical assistance grants up to **\$150K per application** and decarbonization accelerator grants up to **\$1.0MM per application**.

The Dedham Sustainability Advisory Committee appreciates your support in this effort.



Sustainability Advisory Committee

David Costello, Chair
David Ward
Emily Walton
Andy Belden
Michael De Winter
Leigh Hafrey
Deb Harrison
Michelle Persson Reilly