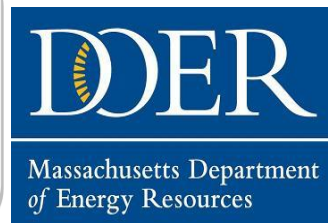




Climate Leader Communities GUIDANCE Zero-Emission-First Vehicle Policy



INTRODUCTION

In 2021 [An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy](#) amended the Global Warming Solutions Act of 2008 and requires the Secretary of Energy and Environmental Affairs to set limits on greenhouse gas (GHG) emissions for 2025 and 2030, including both economy-wide emissions reduction requirements and specific limits on major sources of global warming pollution.

Transportation is the largest source of GHG emissions in the Commonwealth, responsible for 37% of statewide emissions in 2020. The [2025/2030 Clean Energy Climate Plan \(CECP\)](#) presents primary strategies to reduce pollution from the transportation sector including: (1) reducing growth in total vehicle miles travelled (VMT) by improving alternatives to personal vehicles and (2) transitioning most vehicles on the road to electric vehicles (EVs).

Municipalities seeking Climate Leader Community certification are to demonstrate their commitment to GHG emission reductions by replacing fleet vehicles powered by fossil fuels over time with those that are powered by electricity or other means that emit no greenhouse gases.

COMPLIANCE

To meet this requirement, municipalities need to adopt by action of the local official or body with authority to enact municipal policies a written Zero-Emission Vehicle First policy that requires municipal departments and divisions to purchase only zero-emission vehicles (**See Appendix A, Model Policy**). Both general government and school districts are required to enact a Zero-Emission Vehicle First policy for a municipality to meet this requirement, and letters documenting adoption must be provided and signed by the appropriate municipal authorities, as noted below. Letters from other municipal officials are not acceptable.

For letters from the general government and school district:

- **General Government** – The general government must provide a letter from the Chief Executive Officer of the city or town stating that it has adopted the Zero-Emission First Vehicle Policy. The Chief Executive Officer is defined as the manager in any city having a manager and, in any town, having a city form of government, the Mayor in any other city, and the Board of Selectmen in any other town unless some other officer or body is designated to perform the functions of a Chief Executive Officer under the provisions of a local charter or laws having the force of a charter.
- **Public School Districts** - For a municipality to meet this requirement, its public school district must provide a letter from the School Superintendent stating that it has adopted the Zero-Emission-Vehicle First Policy. Please note that even if the school has no vehicles, or only has vehicles that are exempt from the Policy, adoption of the Policy by the school must be provided since the school may acquire non-exempt vehicles in the future.

- **Regional School Districts** – Regional School Districts that are part of a municipality’s energy baseline and participate in the Green Communities grant program must also adopt the Zero-Emission-Vehicle First Policy and provide a letter from the Superintendent stating that it has adopted the Policy.

Sample adoption letters are provided in **Appendices B and C**.

In addition, the municipality is required to develop and maintain a vehicle inventory for all on-road four-wheeled vehicles, both exempt and non-exempt. A plan for replacing non-exempt vehicles with vehicles that meet the policy must also be developed and maintained. This inventory of all vehicles and replacement plan for non-exempt vehicles must include school vehicles as applicable.¹

While exempt vehicles are not required **at this time** to meet the zero-emission requirements, exempt vehicle purchases should prioritize the most fuel-efficient model available and consider fuel-reduction and emissions-reduction technology, such as diesel particle filters, selective catalytic reduction systems, exhaust gas recirculation, NOx adsorbers, oxidation catalysts, anti-idling devices, etc.

Where the municipality or school district contracts vehicle services, it should seek out companies for competitive bidding that offer the use of electric and/or fuel-efficient vehicles.

FLEET EV CHARGING INFRASTRUCTURE

Prior to the procurement of battery electric vehicles (BEVs) or plug-in hybrid electric vehicles (PHEVs), municipalities should confirm whether additional EV charging capacity is required and feasible to support new vehicles. Where space or capacity is limited, sites may require flexibility in the use of planned or existing EV charging stations. Municipalities should also seek to leverage grants and incentives to support the cost of new EV charging infrastructure and equipment.

VEHICLE PROCUREMENT

These zero-emission vehicles (ZEV) acquisition requirements are intended to eliminate the combustion of fossil fuels in fleets through the transition to zero-emission technologies, thereby supporting broader emissions reductions in the community. When a vehicle is identified for replacement, acquisitions of ZEVs must be prioritized over vehicles powered primarily by internal combustion engines utilizing fossil fuels. Acquisitions must adhere to the following vehicle efficiency hierarchy:

- Priority 1: BEVs (and fuel cell electric vehicles (FCEVs))
- Priority 2: PHEVs
- Priority 3: Hybrid electric vehicles (HEVs)
- Priority 4: Most fuel-efficient internal combustion or vehicles that run on alternative fuels in accordance with requirements of the Green Communities Fuel Efficient Policy

As the numbers and types for zero-emission vehicles are released in the marketplace, the ZEV purchasing requirements will be revised accordingly. **Those acquiring vehicles should check this Guidance for updates prior to ordering new vehicles.**

INVENTORY

Municipalities are required to maintain an annual vehicle inventory for ALL vehicles and a plan for replacing any vehicles with vehicles that adhere to the ZEV hierarchy.

¹ This includes municipalities with local public-school districts and municipalities that include regional school districts in their Green Communities energy baseline.

Climate Leader Communities utilizing MEI and maintaining the full municipal fleet within the database will have met this requirement for the ZEV policy.

To inform your purchasing decisions, information on makes and models of vehicles, including fuel economy comparisons, can be found at: <http://www.fueleconomy.gov> We encourage use of this valuable resource for informing decisions as well as statewide contract VEH110.

VEHICLE RECYCLING

Recycling of vehicles – i.e., moving a previously purchased and used vehicle from one municipal department to another municipal department in need of a vehicle is only allowed if the vehicle being recycled to a new department is more fuel efficient than the vehicle it is replacing.

APPLICABILITY

All Municipalities seeking Climate Leader Communities certification must adopt a Zero-Emission-Vehicle First Policy.

Future Financial Considerations

Contingency language regarding potential future budgetary constraints in Zero-Emission Vehicle First Policies will not be accepted. DOER recognizes that predicting and committing future budgets is difficult and will work with municipalities on a case-by-case basis should they encounter difficulty complying with their Policy due to a budget issue in a particular year.

FOR MORE INFORMATION

Websites:

www.fueleconomy.gov

Electric vehicle resources and calculators offered by DOER's Leading by Example Program

[Leading by Example Clean Transportation](#)

Statewide contract **VEH110**

“Purchase of Light Duty Vehicles: Passenger Cars, SUVs, Trucks, Vans, SSVs and PPVs”

located on <https://www.commbuys.com> .

Contact your [Regional Coordinator](#)

APPENDIX A – Model Zero-Emission Vehicle First Policy

This model policy was prepared to assist municipalities in developing a zero-emission-first vehicle policy. This model policy is intended for illustration purposes. Communities are free to utilize the format provided.

Municipality / School District	
ZERO EMISSION FIRST VEHICLE POLICY	
Effective Date	
Revisions	
Select Board Approval Date	
School Superintendent Approval Date	

1) DEFINITIONS

- a) **Acquisition** - In the context of this guideline, acquisition refers to the purchase or lease of on-road vehicles (whether used or new) by and for the (city/town/school district) either to replace an existing fleet vehicle or to expand a fleet.
- b) **Alternative fuel vehicles (AFVs)** - Dedicated, flexible fuel, or dual-fuel vehicles designed to operate on at least one alternative fuel (such as electricity, biodiesel, propane, or natural gas) to reduce carbon emissions.
- c) **Battery electric vehicle (BEV)** – An electric vehicle that draws propulsion energy solely from an on-board electrical energy storage device during operation that is charged from an external source of electricity.
- d) **Electric vehicle supply equipment (EVSE) or electric vehicle charging station** – An electric component assembly or cluster of component assemblies designed specifically to charge batteries within electric vehicles by permitting the transfer of electric energy to a battery or other storage device in an electric vehicle.
- e) **Exempt vehicles** - Vehicles that are exempt from the Green Communities [Fuel Efficient Vehicle Policy](#) include off-road vehicles, motorcycles and heavy-duty vehicles with a manufacturer’s gross vehicle weight rating (GVWR) of more than 8,500 pounds. Examples include fire engines, ambulances, and some public works vehicles.
- f) **Fleet vehicles** - In the context of this guideline, refers to on road vehicle assets owned or leased and operated by the (city/town/school district).

- g) **Fuel-cell electric vehicle (FCEV or FCV)** - An electric vehicle that draws propulsion energy solely from an on-board energy storage device during operation, where energy stored as hydrogen is converted to electricity by a fuel cell, that is recharged from an external source of hydrogen.
- h) **Fuel Efficient Vehicle (FEV) Policy** - Issued by the Department of Energy Resources (DOER) to fulfill the requirements of the Green Communities Act. The [FEV Policy](#) requires designated Green Communities to acquire fuel-efficient vehicles; applies to all light-duty vehicle acquisitions with a gross vehicle weight rating (GVWR) of 8,500 pounds or less.
- i) **Gross vehicle weight rating (GVWR)** - The maximum safe operating weight of a vehicle, as specified by the manufacturer, including passenger and cargo loads.
- j) **Heavy-duty vehicle** – A vehicle with a manufacturer’s gross vehicle weight rating (GVWR) of more than 8,500 pounds.
- k) **Hybrid electric vehicle (HEV)** - Powered by an internal combustion engine and a small electric motor that uses energy stored in a battery. Under light load, for instance during initial acceleration, only electricity is consumed. The vehicle is typically fueled with gasoline to operate the internal combustion engine, and the battery is charged through the engine and regenerative braking, not by plugging in.
- l) **Light-duty vehicle**– A vehicle with a GVWR of less than 8,500 pounds.
- m) **Plug-in hybrid electric vehicle (PHEV)** – An electric vehicle with an on-board electrical energy storage device that can be recharged from an external source of electricity and that also has the capability to run on another fuel.
- n) **Telematics** - A system that is installed in a vehicle that records and transmits information about the vehicle such as the current odometer, maintenance needs, and fuel/electricity consumption.
- o) **Zero emission vehicle (ZEV)** – Zero emission vehicles include battery electric vehicles, plug-in hybrid electric vehicles, and fuel-cell electric vehicles; if the most recent definition of ZEVs per the Massachusetts Zero Emission Vehicle Commission diverges from this scope, the Commission definition shall take precedence.

PURPOSE

The purpose of the Zero-Emission First Vehicle Policy is to set standards and guidelines for the purchase, operation, and maintenance of the (city/town/school district) fleet vehicles that will advance the economic, energy, and climate sustainability of municipal operations by achieving long-term reductions in energy costs, energy consumption, and greenhouse gas (GHG) emissions. The primary objectives of this policy are to:

- Accelerate the adoption of emissions-reduction technologies and the transition of the fleet to all electric or other environmentally advantageous vehicles
- Minimize the long-term environmental and financial impacts of fleet vehicles
- Optimize the composition of the fleet to achieve maximum fuel efficiency
- Advance the installation of electric charging infrastructure across municipal facilities
- Prioritize the utilization of grants, rebates, and incentives to support the acquisition of vehicles and technologies that will improve efficiency and reduce GHG emissions.

This policy shall not require a department to take any action which conflicts with local, state, or federal requirements nor mandate the procurement of products that do not perform adequately for their intended use, exclude adequate purchasing competition, or require the purchase of vehicles that are not commercially available or practicable.

APPLICABILITY

This policy applies to all divisions and departments of the (city/town/school district). It applies to road-worthy passenger vehicles, pick up and utility trucks, and SUVs. It does not apply to specialized equipment or off-road vehicles.

GUIDELINES VEHICLE PROCUREMENT

Electric-first procurement

Vehicle procurement should be prioritized as follows:

1. Battery-electric vehicle (BEV)
2. Plug-in hybrid vehicle (PHEV)
3. Hybrid electric vehicle (HEV) or other alternative fuel vehicle (AFV)
4. Standard vehicle operated by an internal combustion engine fueled by fossil fuels

The fleet policy is electric-first, meaning that electric vehicles shall be prioritized when the (city/town/school district) purchases or leases light-duty vehicles for its operations, followed by plug-in hybrid vehicles, then hybrid electric or other alternative fuel vehicle.

Fuel-efficient requirements for standard vehicles

If it is determined that a ZEV does not meet operational needs, the purchased or leased vehicle must be the most fuel-efficient class, drive train, and model available that will fulfill the intended municipal function. When determining the most fuel-efficient vehicle for a given class, the municipality will utilize the fuel efficiency limits contained in the most [recent guidance for the Fuel-Efficient Vehicle Policy](#) established by DOER's Green Communities Division.

- I. These limits are based on the most recently published U.S. Environmental Protection Agency combined city and highway MPG ratings (see www.fueleconomy.gov). The EPA maintains a [database](#) on vehicle fuel efficiency that is updated throughout the year as new models are released.

Inventory

If the (city/town/school district) is utilizing MEI and maintains the full municipal fleet within the database, they have met this criterion for the ZEV policy. Otherwise, the (city/town/school district) will maintain an annual vehicle inventory for ALL vehicles and a plan for replacing any vehicles with vehicles that adhere to the ZEV hierarchy establish by this policy. The (city/town/school district) will review on an annual basis the Vehicle Inventory, along with this policy to plan for new acquisitions as part of planning for the new fiscal year budget.

The following information shall be included in a vehicle inventory list and said list shall be updated on an annual basis and provided to the Green Communities Division:

Model	Make	Model Year	Year/month Purchased	Vehicle Fuel Source	Drive System: 2 WD, 4WD or AWD	> 8500 pounds ? (Y or N)	Exempt or non-exempt	MPG Rating	Vehicle Function
Ford	Explorer	2021	01/21	HEV	4WD	N	NE	Hybrid	Police Cruiser
Ford	F250	2016	08/2017	Diesel	4WD	Y	Exempt	N/A	DPW - Maintenance
Ford	Focus	2014	07/2014	Gasoline	2WD	N	NE	32	Assessors
International	Dump Truck	2011	09/2011	Diesel	RWD	Y	Exempt	N/A	Sander/Snowplowing
Chevy	Bolt	2022	09/2022	BEV	2WD	N	NE	BEV	Inspector

II. Zero-Emission First Replacement Plan

All vehicles shall be replaced with following the electric-first hierarchy as indicated by this policy. Vehicles shall be replaced when they are no longer operable and will not be recycled from one municipal department to another unless the recycled replacement is more efficient than the vehicle it is replacing. In addition, when considering vehicle replacement, the function of the vehicle will be reviewed for potential replacement with a more fuel-efficient vehicle, including a zero-emission non-exempt vehicle.

III. Questions / Enforcement

All other inquiries should be directed to the department/division responsible for fleet management and/or fleet procurement. This policy is enforced by the Chief Administrative Officer and/or his/her designee(s).

Appendix B – Sample Municipal Government Letter
Letter must be on Municipal Letterhead

MA Department of Energy Resources
Green Communities Division
100 Cambridge Street – 9th floor
Boston, MA 02114

{date of letter}

At a public [AUTHORIZING BODY] meeting held on [DATE], the [AUTHORIZING BODY] voted to adopt the attached Zero-Emission-First Vehicle Policy.

Thank you.

Signature and Typed Name of Chair

Appendix C - Sample School Adoption Letter

Letter must be on School letterhead

MA Department of Energy Resources
Green Communities Division
100 Cambridge Street – 9th floor
Boston, MA 02114

{date of letter}

Please be advised that the Public Schools of [Municipality] hereby adopted the attached Zero-Emission-First Vehicle Policy.

Thank you.

Signature and Typed Name of Superintendent of Schools