Town of Wellesley

Zero-Emission-Vehicle-First Fleet Policy

Effective Date	March 25, 2024
Revisions	
Select Board Approval Date	March 25, 2024
School Committee Approval Date	February 12, 2024
Board of Public Works Approval Date	December 11, 2023
Municipal Light Board Approval Date	November 29, 2023

BACKGROUND

The Town of Wellesley's Select Board, School Committee, Board of Public Works, and Municipal Light Board approved the following policy to govern the replacement and purchase of all non-exempt municipal vehicles with the most sustainable vehicle option, as defined below.

This policy replaces Wellesley's "Fuel Efficient Vehicle Policy" adopted in 2017.

PREAMBLE

Whereby unanimous declaration of the Select Board and School Committee the Town has pledged to reduce its municipal energy use by 20% using a 2015 baseline as required by Wellesley's participation in the Green Communities Program as established by the Green Communities Act M.G.L. Chapter 25A Section 10.

Whereby the Town adopted a goal to reduce greenhouse gas (GHG) emissions to net zero by 2050, 75% below a 2007 baseline by 2040, and 50% below this baseline by 2030.

Whereby Wellesley's Climate Action Plan (CAP) calls on the Town to:

- "Electrify municipal vehicles, wherever possible, and consider hybrid vehicles where electric vehicles do not meet performance needs;"
- "Seek departmental input in updating the municipal Fuel-Efficient Vehicle Policy to accelerate this transition;" and
- "Expand municipal electric vehicle charging infrastructure."

Whereby Wellesley's Sustainable Mobility Plan calls for accelerating the shift to electric vehicles.

Therefore, we the Wellesley Select Board, School Committee, Board of Public Works, and Municipal Light Board do hereby approve the following Zero-Emission-Vehicle-First Fleet Policy.

I. 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 Town and 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 Town and 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. 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.

II. PURPOSE

The purpose of this Zero-Emission-Vehicle-First Fleet Policy (ZEV Policy) is to set standards and guidelines for the purchase, operation, and maintenance of the Town's 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 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.

III. APPLICABILITY

This policy applies to all Town of Wellesley departments. 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.

IV. VEHICLE INVENTORY

Maintain inventory of all Town vehicles as required by the DOER Green Communities Division, the Town will maintain an inventory of all Town- and School-owned vehicles, and will update this inventory and provide it to the Green Communities Division on an annual basis

This inventory will include the following information: model, make, model year, month and year purchased, vehicle fuel source, VIN, drive system, weight class, exempt or non-exempt, miles per gallon, annual miles driven, total fuel consumption, department, and vehicle function.

The Town and 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.

V. REPLACEMENT PLAN

Departments shall develop a plan, to be incorporated into their capital budgets, to replace all vehicles with the electric-first hierarchy as indicated by this policy by May 15, 2024. Said plan will consider life-cycle cost, outline the process by which the Town will replace vehicles, include a plan for electric vehicle supply equipment, and consider opportunities for piloting and deploying vehicle-to-grid technology. 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.

VI. PROCUREMENT

a. Zero-emission first procurement

Vehicle procurement should be prioritized as follows:

i. Battery-electric vehicle (BEV)
ii. Plug-in hybrid electric vehicle (PHEV)
iii. Hybrid-electric vehicle (HEV) or other alternative fuel vehicle (AFV)
iv. Standard vehicle operated by an internal combustion engine fueled by fossil fuels

The fleet policy is Zero-Emission-Vehicle-First, meaning that battery-electric vehicles shall be prioritized when the Town purchases or leases motor vehicles for its municipal operations, followed by plug-in hybrid electric vehicles, then hybrid electric or other alternative fuel vehicle.

Beginning in FY26, all light-duty passenger vehicles purchased or leased are required to be BEVs, unless otherwise allowed for by this policy.

Departments may request an exemption from the BEV replacement provision for light-duty vehicles. All exemptions shall require approval by the department's governing board.

b. 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 Town will utilize the fuel efficiency limits contained in the most recent guidance for Criteria 4 published by the MA Department of Energy Resources' Green Communities Division (https://www.mass.gov/guides/becoming-a-designated-green-community).

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. As increasing numbers of fuel-efficient vehicle models are released, the minimum combined MPG requirements of the Green Communities Program may be revised.

c. Exempt vehicles

Vehicles exempt from the Green Communities Fuel Efficient Vehicle Policy include off-road vehicles, motorcycles, and heavy duty vehicles with a gross vehicle weight (GVWR) of more than 8,500 pounds. Examples include fire engines, ambulances, and some public works vehicles.

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 opportunities exist, particularly if grants and new technologies are or become available, the Town will explore opportunities to pilot electric options for heavy-duty and exempt vehicles.

Where the Town or Schools contract vehicle services, they will seek out companies for competitive bidding that offer the use of electric and/or fuel-efficient vehicles.

d. Evaluation of fleet and vehicle size

The Town will procure vehicles and equipment of minimum size according to assessed needs. Specifically, the Town will ensure that purchase plans require vehicle class and model of the smallest size and weight appropriate for each vehicle's tasks. All positions requiring vehicle use shall be evaluated as to the required vehicle class size necessary to conduct the job.

The Town will evaluate ways to reduce its fleet size. Departments will also investigate whether vehicles can be shared between departments. When retiring a vehicle from the fleet, the Town will evaluate whether replacement is necessary.

e. Evaluation of leasing

If it is determined that an electric vehicle (BEV or PHEV) is not currently available to meet the Town's needs, the Town should consider leasing a standard vehicle to allow for flexibility to transition to an electric option if it becomes available during the life-cycle of that vehicle.

VII. POLICY IMPLEMENTATION

a. Electric Vehicle Charging

Where possible, efforts will be made to install charging equipment at locations convenient for vehicle users to minimize operational inefficiencies. However, flexibility may be required of vehicle operators and Town staff to adjust procedures to accommodate charging locations.

Electric vehicles garaged in Wellesley should be scheduled to charge only during off-peak hours (as defined by Wellesley Municipal Light Plant) unless it would negatively impact town operations.

b. Funding

The purchase of policy-compliant vehicles and equipment may be more expensive in the initial years. Departments should estimate the upfront investment required for vehicle purchases and budget accordingly in capital budget requests.

The Town shall evaluate existing capital requests for vehicles and evaluate opportunities to fund additional upfront costs.

The Town shall take advantage of grant funding to offset the upfront costs of electric vehicles and charging apparatus.

VIII. VEHICLE OPERATION AND MAINTENANCE

Where applicable, the Town will use available resources to build awareness and educate its employees regarding responsible vehicle operation as detailed below.

a. Anti-idling

Vehicle idling produces both excessive waste of fuel and air pollution. As a part of this policy the Town hereby recognizes the importance of enforcing the existing Anti-Idling Law, as allowed by M.G.L. Chapter 90 Section 16A, and Wellesley's Anti-Idling violation fine. Additionally, Town staff should reduce idling as much as possible in vehicle operations. The Town will also incorporate anti-idling education into other public health and sustainability forums.

b. Reinforce operator awareness

The Town and its employees will encourage energy-saving driving habits (i.e., awareness of sudden acceleration or sudden stopping), and regular preventative maintenance of vehicles.

c. Reduce vehicle miles travelled (VMTs)

The Town will reinforce employee awareness of vehicle miles travelled during work hours as well as for commuting, and will encourage alternate travel practices such as carpools, vanpools, bicycling, and walking.

d. Vehicle maintenance

A well-maintained vehicle will optimize fuel use and reduce air pollution. Preventative maintenance that ensures optimal vehicle operation shall be performed regularly for each vehicle.

Vehicles will be inspected regularly and prior to extended use to ensure correct tire pressure, oil, and coolant levels, and to identify possible signs of other fluid leaks.

The Town will dispose of hazardous materials such as waste oil, lubricants, antifreeze, and batteries safely through environmentally responsible practices and in accordance with all applicable state and federal regulations.