Electric Vehicle Planning and Acquisition Policy: Achieving EO 594 Targets by 2030

I. Policy Effective Date:

This policy replaces the Operational Services Division Office of Vehicle Management's (OSD/OVM) EV First Acquisition Policy as of May 8, 2024, and is consistent with Executive Order 594 ("EO594"), Leading by Example ("LBE"): Decarbonizing and Minimizing Environmental Impacts of State Government, as well as the statutory framework set forth in the Global Warming Solutions Act ("GWSA") and subsequent legislation.

II. Statutory Framework:

In 2021, the Massachusetts Legislature amended the GWSA to require the Commonwealth to achieve "at least" net zero greenhouse gas emissions by 2050. Due to the accelerated impacts of climate change and its devasting impacts on Massachusetts and globally, scientists and the U.N. have begun to call for wealthy nations to zero out carbon emissions even sooner, by 2040.

The 2025/30 CECP requires that the Commonwealth have, by 2025, 200,000 registered EVs and 900,000 by 2030. The 2025/30 Clean Energy and Climate Plan ("CECP") defines ZEV as a "Zero Emission Vehicle, which includes battery electric vehicle (BEV) and hydrogen fuel cell vehicle (HFCV)." The CECP clearly envisions the transition to EVs to be focused on expanded adoption of BEVs and HFCVs that do not have internal combustion engines:

> [T]he Commonwealth will rapidly transition the vehicles on our roads to EVs. Electric vehicles, whether battery electric vehicles (BEV) or hydrogen fuel cell vehicles (HFCV), provide superior automotive performance while achieving dramatic reductions in global warming pollution compared to vehicles with petroleum-fueled internal combustion engines. Over the next few years, auto manufacturers are proposing numerous new electric models in all vehicle classes, including sedans, tractor-trailers, and buses. The benefits of BEVs include lower emissions of GHGs and air pollutants, stable and generally lower fuel costs, and generally lower maintenance costs.

Consistent with the 2025/30 CECP, in 2023, DOER ceased providing MOR-EV incentives for PHEVs.

The prioritization of vehicles set forth herein is based upon Executive Order 594, Leading By Example, which provides that the Commonwealth shall "prioritize strategic electrification of buildings, central plants, and vehicles, and/or use of zero-carbon fuels," and requires increasing percentages of the fleet to be electrified by dates certain.

The prioritization set forth herein further reflects the requirement of the Leading By Example Guidelines of acquisition of BEVs and HFCVs as the first priority; PHEVs are the second priority. The Commonwealth's policy, therefore, is to rapidly eliminate the combustion of fossil fuels in the state fleet by prioritizing the purchase of BEVs. The guidelines provide:

> These ZEV acquisition requirements are intended to eliminate the combustion of fossil fuels in the state fleet through the transition to zero-emission technologies,

thereby supporting the broader emissions reduction and ZEV fleet targets of the Order. When a vehicle is identified for replacement, acquisitions of ZEVs must be prioritized over vehicles powered primarily by internal combustion engines utilizing fossil fuels.

Pursuant to Section 177 of the Clean Air Act (CAA), Massachusetts has adopted California's Advanced Clean Car II standards, which will phase out the sale of new internal combustion passenger vehicles in the state by 2035. This regulation is a part of Massachusetts' federally enforceable CAA State Implementation Plan. In addition to reducing greenhouse gas emissions, there are substantial public health benefits associated with the rule. While the rule will permit the sale of BEVs, HFCVs, and PHEVs, the purpose of the policy is to hasten full decarbonization of the transportation sector—that is, to eliminate reliance on fossil-fuel powered internal combustion engine vehicles.

III. Definitions:

Section 5A of EO594, Electric Vehicle Acquisitions, as interpreted by the LBE Section 5A Guideline, governs three categories of Electric Vehicles (EVs):

a. BEV (Battery Electric Vehicle): a vehicle powered entirely by battery and produces no tailpipe emissions.
b. FCEV (Fuel-Cell Electric Vehicle): a vehicle that uses a fuel cell to directly power an onboard electric motor and produces no tailpipe emissions.
c. PHEV (Plug-In Hybrid Electric Vehicle): a vehicle powered by both a battery pack, which can be externally recharged, and an Internal Combustion Engine (ICE).

IV. Electric Vehicle Plans:

Executive Branch agencies under the purview of OSD/OVM which is an agency of EOAF, are hereby required to develop Electric Vehicle (EV) Plans by January 31, 2025. These plans should set out how agencies will achieve or exceed EO 594 targets that require 20% of the state fleet to be comprised of EVs by the end of fiscal year 2030. Plans shall also document progress agencies have made to deploy EVs in their fleet, working toward the EO 594 target for EVs to comprise five percent of the entire state fleet by the end of fiscal year 2025.

V. EV Plan Components:

EV Plans should specifically set out how agencies under OSD/OVM's purview will acquire electric vehicles to meet the EO 594 2030 target. Plans should include:

a. A roster of all vehicles utilized by the agency currently, their ages and uses
b. Identification of which gas-powered vehicles present the best opportunities for replacement by an EV alternative in the next five years
c. The timetable for when acquisition of EV vehicles would be possible based on current vehicle life and opportunities for replacement, and which types of EV will be purchased
d. The potential level of funding, or range of funding, needed to enable the planned for EVs to be purchased over a five-year period. Understanding the life-cycle costs of EVs, including fuel savings, should be factored into cost projections.
e. A schedule for vehicle replacement and acquisition of proposed EVs between now and 2030

f. The charging infrastructure needs and any changes to operational requirements that are necessary to ensure there is appropriate support to enable the successful transition to EVs
g. The potential level of funding, or range of funding, needed to support timely installation of charging infrastructure to support EV acquisition

VI. Plan Support and Approval:

Agencies will be supported by OSD/OVM and the Department of Energy Resources' (DOER) Leading By Example Division, and any fleet consulting support deemed necessary in developing EV Plans. OSD/OVM and LBE shall develop a template for agencies to use in developing their EV Plans to ensure consistency of content across the executive department. Agencies shall consult with DCAMM or DOER as applicable about the installation of electric vehicle charging infrastructure at sites. EV plans and acquisition decisions shall be coordinated with the charging infrastructure decision-making.

During the development of EV Plans, benchmarks and incremental timelines to ensure their timely completion shall be shared with OSD/OVM.

Final plans should be approved by the relevant agency head, the Assistant Secretary for Operational Services and EEA's Undersecretary for Energy for submission to the Secretary of EOAF and the Climate Chief.

VII. Plan Implementation and Reporting:

After plans are submitted to EOAF and the Climate Office, agencies will be expected to work with OSD/OVM to acquire vehicles consistent with their plan. OSD/OVM and Lead by Example team will report to A&F and the Climate Office on a quarterly basis on progress and challenges in meeting agency plans and EO 594 targets. EV Plans should be reviewed and updated annually through Fiscal Year 2028, at which point new plans to reach longer-term EO 594 goals should be developed.

VIII. Plan Changes:

Agencies are encouraged to work with OSD/OVM on EV acquisitions that go beyond the goals established in their plans. Where an agency seeks to reduce its commitment to EV acquisition as set out in its plan because it believes goals or acquisitions are not possible to meet, they can seek approval of a plan revision from OSD/OVM and if denied, can appeal the plan change denial to A&F and the Climate Office.

IX. Prioritization of Acquisitions:

Section 5A of EO594, Electric Vehicle Acquisitions, provides that fleets "shall prioritize the acquisition" of EVs "without any internal combustion engines, including, but not limited to, battery electric vehicles and fuel cell vehicles."

Agencies shall strictly adhere to the prioritization of BEVs and FCEVs in vehicle acquisition. If an agency requests PHEVs instead, they shall provide a statement of compelling reasons for the exemption from this policy. The exemption shall be presented to OSD/OVM and if denied, can be appealed to EOAF and the Climate Office.

Further, EOAF has implemented a systematic review of Capital Investment Plans for compliance with the mandates of Executive Order 594, the Climate and Clean Energy Plan, and all other relevant climate standards.

X. Acquisition Determinations:

In developing EV Plans and schedules for EV acquisition, agencies shall prioritize the selection of the most fuel-efficient and/or least carbon-emitting vehicle option based on their justified needs and primary use/function of the vehicle.

a. The acquisition hierarchy noted below should be followed when selecting vehicles:
    1) Battery Electric Vehicle (BEV)/Fuel Cell Electric Vehicle (FCEV)
    2) Plug in Hybrid Vehicle (PHEV)
    3) Hybrid Electric Vehicle (HEV), Alternative Fuel Vehicle (AFV), or other innovative technologies as determined and approved by OVM
    4) Internal Combustion Engine Vehicle (ICE) that is the most efficient in its class
b. When selecting a vehicle to fulfill the intended primary use/function, agencies shall prioritize the following:
    1) Acquisition hierarchy is followed.
    2) Vehicles are sized appropriately.
    3) Fleet optimization evaluation is conducted to combine vehicle functions and reduce fleet size.

XI. Acquisition Considerations:

EV Plans and acquisition decisions should consider factors that include:

a. Whether there is an ongoing need for a vehicle to fulfill the business needs of the agency.
b. A determination of the cost benefit to acquiring a vehicle, or if the business need may be met through other means.
c. Whether vehicles can meet the operational requirements of the agency in question and are likely to be supported by necessary charging infrastructure at the time of potential purchase
d. The vehicle's specifications, including its range or any required upfitting, sufficient passenger and/or cargo capacity, as well as upfit functionality, to fulfill the primary use of the vehicle.
e. The reduction of carbon emissions. Vehicles that exceed the idling thresholds set forth by OSD/OVM should be prioritized for replacement with suitable EV options.
f. Availability of the vehicle and whether an EV option can or will be sufficient to replace an existing vehicle.