

City of Cambridge Department of Public Works

Katherine F. Watkins. Commissioner

147 Hampshire Street Cambridge, MA 02139 theworks@cambridgema.gov

Voice: 617 349 4800 TDD: 617 499 9924

February 21, 2023

TO: Yi-An Huang

City Manager

FROM: Katherine F. Watkins, DPW Commissioner

RE: Awaiting Report

In response to awaiting report O-1 from February 13, 2023 regarding the Clean Fleet timeline, Greenhouse Gas Reduction Goals and an implementation plan for a clean fleet, we are pleased to report the following.

NEW CLEAN FLEET POLICY

Consistent with the discussion at the November 21, 2022 meeting of the Health and Environment Committee, on February 21, 2023, the City issued the new Clean Fleet Policy. This Policy supports the City's transformation to net zero municipal operations by 2050; covers vehicle acquisitions, operations, maintenance, and charging infrastructure; and sets targets for greenhouse gas reductions, zero emission vehicles and charging infrastructure.

While developing the new Policy, the City has made significant strides in reducing greenhouse gas emissions and electrifying the fleet. In 2021, citywide emissions from the municipal fleet were 19% lower than the 2008 baseline. Currently the City has 15 ports in place for fleet charging and 26 more ports are underway. The City has added or is awaiting delivery of 26 zero emission vehicles or plug-in hybrid. Examples include 2 all-electric rubbish packers currently on order and a third all-electric rubbish packer that will be ordered pending council approval of the appropriation, 3 plug-in hybrid rubbish packers, 1 electric passenger van, 3 all-electric cargo vans, 3 Police Department vehicles, 2 F-150 Lightning Fire Department vehicles, 11 plug-in or battery electric passenger vehicles, 3 fire apparatus with electric Auxiliary Power Units, and plans to continue making advances. In addition, the fire headquarters renovation will include the electrical infrastructure to support electrified fire apparatus upon completion.

ANNUAL CLEAN FLEET REPORT

The Clean Fleet Policy requires an annual report that includes a summary of all vehicles purchased in the past year, as well as progress in meeting the targets. The report will be published by September 30th for the previous fiscal year. The **first report will be available on September 30, 2023**.

RIGHT-SIZING VEHICLES

One of the elements of the new Clean Fleet Policy is a commitment to right-size vehicles, while meeting operational needs. While there is more work to be done, there are already some good examples of this across the city. A very visible effort on right-sizing is the Water-By-Bike program that supports watering trees with summer interns using bicycles. This has been an incredibly effective method of watering trees and engaging with the community on the importance of maintaining trees.

DEPARTMENT IMPLEMENTATION PLANS

By the end of 2024, each department will create an Implementation Plan to meet the goals of the new Policy. The Implementation Plan will outline projected vehicle acquisitions for the first five years, followed by longer term plans in five-year increments. The Plan will include fleet vehicles, heavy equipment, charging infrastructure, fleet maintenance and staff training needs. The City's Clean Fleet Committee will work with departments to support the development of the plans and identify additional resources needed such as the services provided by Volpe or consulting firms.

Outside assistance through Volpe and engineering consulting firms has been invaluable in the process to date. The City contracted with Volpe for the 2019 study, which is foundational to the work that has been done on Clean Fleets. DPW is currently engaging an Engineering Consulting firm to develop an electrical capacity assessment at 7 locations including the Robert W. Healy Public Safety Facility, War Memorial Recreational Center Garage, East Cambridge Firehouse, and First Street Garage. This assessment will help identify locations and cost estimates for the expansion of fleet charging. Additional electrical capacity assessments are anticipated as we continue to build out the electrification of the fleet.

In addition to the City hiring consultants, we anticipate taking advantage of Eversource's Phase 2 Make-Ready program. This program will fund fleet assessment services and charging infrastructure. The City will be applying for these services and looking to take advantage of this opportunity.

NEXT STEPS

While the City has made progress on reducing the greenhouse gas emissions associated with our municipal fleets, there is still much work to be done. As manufacturers work toward electrification in all classes of vehicles, the City will continue to explore options for all of our vehicle purchases, keeping in mind environmental impacts, operational needs, and cost effectiveness. The annual reports required in the new Clean Fleet Policy will be helpful to track progress and identify areas that need additional attention.