



COUNCIL REPORT

DATE: June 10, 2025

CATEGORY: Consent

DEPT.: City Manager's Office

TITLE: **Greenhouse Gas-Free Fleet and Landscaping Equipment Purchasing Policy**

RECOMMENDATION

Adopt a Resolution of the City Council of the City of Mountain View to Adopt a Greenhouse Gas-Free Fleet and Landscaping Equipment Purchasing Policy, to be read in title only, further reading waived (Attachment 1).

BACKGROUND

The City's vehicle fleet represents 33% of greenhouse gas (GHG) emissions from City operations. The City's Sustainability Action Plan 4 (SAP-4), adopted on [October 22, 2019](#), calls for development of a clean-fleet policy under Task T8.1. In addition, the SAP-4 also directs staff to address off-road equipment emissions by expanding the use of electric landscaping equipment and testing new equipment models under Task P3.1.

The City has already taken numerous steps to move its fleet and landscaping equipment toward being GHG-free, such as electrifying several City vehicles. A fleet electrification study was completed in September 2024 to help inform the development of a clean-fleet policy. The proposed policy in (Exhibit A to Attachment 1) would streamline implementation of these specific SAP-4 recommendations, continue to reduce City operational GHG emissions, and provide leadership to the community.

The City's current policy requires staff to purchase equipment and vehicles at the lowest cost available. Vehicles and equipment that use GHG-free fuels (e.g., electric) may in some instances cost more than their fossil fuel (gasoline and diesel) counterparts.

The proposed Greenhouse Gas-Free Fleet and Landscaping Equipment Purchasing Policy was brought to the Council Sustainability Committee for consideration on April 29, 2025, and the Committee unanimously recommended City Council adoption of the policy. City Council adoption of the proposed policy would result in the prioritization of the purchase of vehicles and equipment that use GHG-free fuels to meet climate goals and demonstrate leadership to the community.

ANALYSIS

Greenhouse Gas-Free Fleet and Landscaping Equipment Purchasing Policy

Clean fleet and equipment purchasing policies generally consider GHG-free vehicles or equipment (e.g., electric)¹ as a priority option before fossil fuel vehicles or equipment that use gasoline or diesel. Staff evaluated 19 clean fleet policies across the Bay Area region, the state, and country to inform the draft policy. Seven (7) policies evaluated were local to the Bay Area, including the cities of Menlo Park, Palo Alto, San Jose, Berkeley, Dublin, Richmond, and City/County of San Francisco.

When evaluating these policies, several common themes emerged. These policies promote, when possible, the purchase of zero-emission vehicles to replace the end-of-life light- and heavy-duty fleet vehicles. When a fully electric or zero-emission option is not suitable, the next preferred choice is a hybrid electric vehicle, when applicable. In situations where electric or hybrid vehicles are not feasible, some policies encourage the use of renewable diesel as an alternative, which the City currently uses.

The proposed policy for the City of Mountain View (Exhibit A to Attachment 1) takes into consideration these findings and models its requirements and exceptions after similar jurisdictions. In addition, the proposed policy incorporates input from all City departments to ensure feasibility of implementation.

In short, the proposed policy states that GHG-free vehicles and equipment will be prioritized in City purchases unless there are operational or charging infrastructure issues that cannot be resolved. The proposed policy covers the entire City on-road vehicle fleet, which is comprised of approximately 250 active vehicles, about 5% of which are already electric. About 60% of the fleet is light-duty,² and 40% of the fleet is medium-³ and heavy-duty.⁴ The proposed policy also covers off-road vehicles and landscaping equipment to reduce emissions as well as improve local air quality for the health of City workers and the public. The policy aligns with current state regulations regarding fleet electrification, such as the California Air Resources Board (CARB) Advanced Clean Fleet Regulations as adopted in late 2023 and effective January 1, 2024. If state

¹ Electricity for City of Mountain View operations is provided by Silicon Valley Clean Energy (SVCE), which is largely carbon-free. Vehicles and equipment operating on SVCE electricity have a small carbon footprint compared to using fossil fuel equipment.

² Light-duty vehicles have a gross vehicle weight rating (GVWR) less than 8,500 pounds, such as sedans, SUVs, and smaller trucks.

³ Medium-duty vehicles have a GVWR between 8,501 and 10,000 pounds and include vehicles such as trucks and vans.

⁴ Heavy-duty vehicles have a GVWR greater than 10,001 pounds and include vehicles such as street sweepers and other large specialty vehicles.

or federal regulations governing fleet electrification change, the proposed policy would ensure a smooth transition for the City as it continues to advance fleet and equipment electrification.

While the policy prioritizes electric fleet and equipment purchases, fossil fuel vehicles and equipment may still be needed due to safety and performance issues of newer/innovative GHG-free technology. It may also require that the City pilot GHG-free equipment and vehicles before deploying for full service or making a bulk purchase. In addition, a GHG-free alternative may not exist in the market at the time of purchase, or the City's infrastructure may not be sufficient to support the transition within a time frame that is adequate for vehicle replacement needs. Thus, the proposed policy may allow exceptions under certain circumstances. The exception process requires review of alternatives and review and input from multiple departments, including the Sustainability Division, before making a final decision to purchase fossil fuel vehicles or equipment.

California Air Resources Board Regulations for Government Fleets and Landscaping Equipment

Due to recent action taken by the federal government, the state of California can no longer implement the previously adopted Advanced Clean Cars II regulations, which mandated that all new passenger vehicles sold in California must be zero-emission vehicles by 2035. Therefore, there is no current regulation in place governing light-duty vehicle purchases. **The proposed policy in (Exhibit A to Attachment 1) would promote the accelerated replacement of light-duty vehicles in the City fleet to achieve our municipal decarbonization goals.**

Medium- and heavy-duty vehicles purchases are governed by the CARB's Advanced Clean Fleets Regulation. This regulation is considered extremely ambitious and pushes boundaries of models available in the market. Suitable electric alternatives for these weight classes can be difficult to find or unavailable. Currently, due to the CARB regulation, 50% of annual medium- and heavy-duty vehicle purchases need to be zero-emission. There are exceptions for some vehicles which are particularly challenging, such as emergency vehicles. Staff recommends including medium- and heavy-duty vehicles in the proposed policy to transition to fossil fuel-free vehicles over time and even in the face of a shifting regulatory environment if regulations are lifted.

Landscape equipment purchases are regulated by CARB's Small Off-Road Engine Regulations, which prohibit the sale of gas-powered equipment, such as leaf blowers and mowers, starting in 2024. The proposed policy is in line with this regulation by calling out a transition to electric equipment as a priority and providing a framework to operationalize these purchases.

It is important to note that the current federal administration may take actions that impact the state's ability to enact the CARB's rules. Thus, local action, such as adopting the proposed policy, demonstrates the City's continued leadership in the community and supports the City in meeting its climate goals.

Fleet Study Results

As mentioned earlier, a fleet electrification study was completed in September 2024 by Optony, a consultant firm that specializes in renewable microgrids and fleet electrification. The study provided electric vehicle replacement recommendations for the fleet in addition to electric vehicle charging needs for three primary City sites: the Municipal Operations Center (MOC), City Hall, and Shoreline Maintenance Facility. The recommendations in the study were developed to comply with state regulations and accelerate additional electric vehicle purchases where feasible. This effectively translates into electrifying all light-duty vehicles by 2035 and all medium- and heavy-duty vehicles by 2045.

Total Cost of Ownership

The fleet study included a total cost of ownership (TCO) analysis which encompasses all costs associated with owning and operating an asset or system throughout its entire lifecycle, including purchase price, fueling costs, and operations and maintenance costs. The electric vehicle (EV) TCO assumes that the City will replace fossil fuel vehicles at their end of life with electric vehicle equivalents.

The TCO does not include the cost of upgrading electrical infrastructure to accommodate EV charging, which is a separate one-time cost to transition to an electric fleet. It also does not include an estimated dollar value for the public health benefits from reduced pollution and GHG emissions. TCO is dependent on vehicle usage; high-mileage vehicles result in greater cost savings when transitioning to EVs due to greater potential savings on fuel and maintenance costs. TCO can also be correlated with the size of the vehicle. In some cases, the TCO of a vehicle can be reduced by selecting a smaller vehicle upon replacement, which was also evaluated as part of the study.

The study found that the TCO of light-duty EVs in the Mountain View fleet is generally similar to fossil fuel vehicles. The TCO of fleet electrification for light-duty vehicles up for replacement in the next five years (2025 to 2030) is estimated at \$5.5 million. This figure does not include incentives, such as federal Inflation Reduction Act (IRA) direct pay incentives, estimated at \$7,500 per vehicle for vehicles under 14,000 pounds, and \$40,000 per vehicle for heavy-duty vehicles. It is unclear how much the City will be able to claim in IRA incentives. There are some indications that the incentives may not remain standing for the entirety of the City's fleet transition. Staff will continue to track any changes in the incentives.

The TCO of medium- and heavy-duty trucks can be significantly higher for EVs. Medium- and heavy-duty vehicles have high-vehicle purchase costs due, in part, to low-production levels, limited availability, and large batteries. However, some investment in electric medium- to heavy-duty vehicles will be required due to the previously mentioned Advanced Clean Fleets Regulation and the City's decarbonization goals.

Heavy-duty emergency vehicles, such as fire engines, are exempt from the Advanced Clean Fleets Regulation. Due to the unique nature of fire engines, and the especially large cost differential between electric and fossil fuel fire engines, additional study would be required to fully understand cost and operational implications of fire engine electrification. The City recently purchased several new fire engines, which are not due for replacement for the next 15 years.

City Charging Infrastructure Needs

The fleet study estimates that 113 new charging ports need to be installed by 2040 across all of the City's facilities to support the electrification of the City's fleet, resulting in a cost of \$3.978 million.

This includes a high level of investment at the three main charging sites (City Hall/Mountain View Center for the Performing Arts, MOC, and Shoreline Maintenance Facility), which totals \$3.176 million for the installation of 78 new charging ports by 2040.

Over the next five years, 29 total charging ports (five existing charging ports plus 24 new charging ports) will need to be installed at the three main charging locations at a cost of \$755,800:

- City Hall/Mountain View Center for the Performing Arts: Four (4) new Level 3⁵ (fast charging) ports. Currently, there are four existing Level 2⁶ (standard) ports for the city vehicles.
- MOC: Ten (10) new Level 2 (standard) ports and eight new Level 3 (fast charging) ports. Currently, this site has one Level 2 (standard) port.
- Shoreline Maintenance Facility: Two (2) new Level 2 (standard) ports. Currently, there is no charging available at this site.

Current Initiatives Supporting the Clean Fleet and Equipment Transition

Electric Vehicle and Equipment Purchases

In parallel to developing the proposed policy, staff continues to work towards the transition to a GHG-free fleet and equipment stock, replacing existing vehicles with zero-emission vehicles where feasible.

⁵ Level 3 EV chargers typically take about 30 to 60 minutes to fully charge a car battery.

⁶ Level 2 EV chargers typically take about 8 hours to fully charge a car battery.

The Community Services Department purchased three heavy-duty EVs in the past few months to electrify its Parks operations. The City is leasing four electric community shuttles that will go into service later this spring. The City was also awarded a federal grant to purchase an additional four electric community shuttles that are anticipated to arrive in 2027. Additional EV purchases are planned in the Mountain View Police Department (MVPD), including piloting electric patrol vehicles and School Resource Officer vehicles.

Staff will also apply for federal IRA direct pay incentives if they are available. These incentives may provide up to \$7,500 for an electric light-duty vehicle and up to \$40,000 for electric medium- and heavy-duty vehicles.

The City has had success in electrifying landscape equipment in the Parks and Open Space Division. Approximately, one-half of the City's handheld landscape equipment, such as push mowers, weed whackers, and blowers, has been transitioned to electric. The City recently purchased two electric ride-on mowers for use in parks. Two new City parks, Evelyn Park and Villa-Chiquita Park, will use all-electric landscaping equipment. Including landscape equipment in the proposed policy helps the City to continue on this leadership path, plan for charging needs of electric landscaping equipment, and consider any other safety or infrastructure needs to fully transition.

Electric landscape equipment tends to be about 30% to 35% more expensive than fossil fuel equipment. As new technology emerges, proactive deployment of landscape equipment allows staff to familiarize themselves with equipment usage and gather data, such as equipment and battery lifespans. Furthermore, some operational techniques, such as battery storage, can support longer equipment life.

Charger Installations and Funding/Partnership Efforts

In the next few months, mobile EV chargers will be installed at the MVPD (a unit with three charging ports) and the MOC (a unit with two ports) for a total cost of approximately \$193,000. These stations are powered by solar and battery energy storage and are not tied to the building's electrical infrastructure. The chargers will support new EVs for park maintenance and the pilot of electric Police patrol vehicles. The MVPD currently does not have charging stations installed, so the mobile chargers will fill a gap in infrastructure needs and support two patrol EVs being purchased. The mobile nature of the charging stations, which can be moved via a forklift or trailer, makes them a good fit for MVPD as the Police/Fire Administration Building will be demolished and rebuilt in the next few years. The fleet study estimated that 22 charging ports will be needed for full electrification of MVPD vehicles.

Staff has also proposed funding in the Fiscal Year 2025-26 Capital Improvement Program (CIP) to begin installation of the necessary chargers and to purchase electric vehicles over the next few

years. The funding would be used primarily to support EV charging at the MOC as this is the primary site for parking and charging City vehicles.

The City has submitted grant applications to try to reduce the cost to install charging stations. Last year, staff applied for a \$3.1 million grant from the California Energy Commission (CEC) which was not awarded to the City.

Staff is in the process of applying for the Pacific Gas & Electric's (PG&E's) EV Fleets program with assistance from Optony and Silicon Valley Clean Energy (SVCE). This program fully pays for a dedicated meter to charge medium- and heavy-duty vehicles along with additional incentives for electrical panel upgrades and wiring up to the point of the EV charger. This is anticipated to result in installing a dedicated EV charging meter at the MOC. Additional sites, such as the Shoreline Maintenance Facility, are also being considered. Under the program, the City can secure \$112,000 in PG&E infrastructure incentives. This does not include the value of the meter itself and the design support from PG&E. For comparison, a comparable but smaller city in the Bay Area received a value of approximately \$200,000 from the program, so a comparable or higher project value for Mountain View is anticipated.

Another CEC program is offering grant-funded municipal fleet charging optimization software to public agencies and subsidized EV chargers. The program is being implemented locally through the EV-charging software company, BetterFleet. The City is exploring sites for participation, such as the MOC. The CEC grant funding is aimed at helping cities shift EV charging from peak hours, such as 4:00 p.m. to 9:00 p.m., to other times to reduce strain on the local electricity grid while providing utility bill savings. Staff is working with BetterFleet to finalize a draft scope of work and to consider launch of a partnership in the coming months.

FISCAL IMPACT

There are costs associated with the implementation of the GHG-free Fleet and Landscaping Equipment Purchasing Policy. For light-duty electric vehicle purchases, switching from a fossil fuel vehicle to a clean vehicle can result in operational and TCO savings in some cases. Staff is also applying for incentives, where available, for electric vehicle purchases. For the light-duty vehicle segment, the fossil fuel TCO is approximately \$8.5 million, whereas, the electric TCO is approximately \$10.2 million.

The total estimated cost to install EV charging for the fleet is approximately \$3.98 million with approximately \$1.0 million needed for charging in the next five years to transition to a clean fleet. Staff has included \$500,000 of CIP funding in the CIP Budget for Fiscal Year 2025-26 for planning, implementation, and installation of the infrastructure.

The PG&E EV Fleets program will help reduce the cost to install EV chargers by potentially paying for new electrical meters, panel, and wiring at the MOC, and potentially additional sites, such as

the Shoreline Maintenance Facility. However, the City would still need to pay for the costs of the electric vehicle charging stations. Staff will continue to explore grants and other incentives to reduce City costs for electric vehicle charging stations.

There will likely be additional funding needs to support the transition to electric operations, such as an update to the Fleet Building at the MOC. There are certain requirements for electric vehicle maintenance which will require the building to be significantly expanded and staffing models to be updated to support safe operations. A cost analysis would be needed to quantify the full cost of these additional funding needs.

Electric landscaping equipment is, on average, 30% to 35% more expensive than fossil fuel equipment. An analysis of potential fuel savings of transitioning from gas to electric has not been completed yet, but staff will report on the impacts of the policy, if adopted, as a part of the Local Government Operations Greenhouse Gas Emissions Inventory. It should be noted that fossil fuel landscaping equipment creates harmful air pollution, which has a public health cost; although, this dollar amount is not easily quantifiable. Transitioning to electric equipment is expected to improve local air quality and public health.

If the proposed policy is adopted, the next step would be to integrate anticipated costs, savings, and incentives into the City's operation of the Equipment Replacement Fund (ERF). The ERF was established to stabilize the annual funding required for the replacement of certain City equipment, and it receives consistent annual contributions from various sources, helping to absorb fluctuations in annual expenditures for equipment replacement from fiscal year to fiscal year. Following adoption of the policy, staff would integrate anticipated costs and savings into the ERF's operations, aligning with the City's financial needs and accounting standards.

LEVINE ACT

California Government Code Section 84308 (also known as the Levine Act) prohibits city officials from participating in any proceeding involving a "license, permit, or other entitlement for use" if the official has received a campaign contribution exceeding \$500 from a party, participant, or agent of a party or participant within the last 12 months. The Levine Act is intended to prevent financial influence on decisions that affect specific, identifiable persons or participants. For more information see the Fair Political Practices Commission website: www.fppc.ca.gov/learn/pay-to-play-limits-and-prohibitions.html

Please see below for information about whether the recommended action for this agenda item is subject to or exempt from the Levine Act.

EXEMPT FROM THE LEVINE ACT

☒ General policy and legislative actions

CONCLUSION

The proposed policy would complete SAP tasks directed by the City Council and streamline the purchasing and infrastructure needs to transition to vehicles and equipment that use GHG-free fuels. Exceptions may be granted under certain circumstances, and staff will provide updates to the CSC and/or City Council, as appropriate. There is a fiscal impact to transitioning to equipment and vehicles that use GHG-free fuels. In the case of light-duty vehicles, there may be TCO savings, and staff anticipates this segment will be the most significant area impacted by this policy given that 60% of the City's fleet is light-duty. Electric heavy- and medium-duty vehicles tend to have a higher TCO than their fossil fuel counterparts. Electric landscape equipment also has a moderate-cost premium that would need be covered.

ALTERNATIVES

1. Do not adopt the Greenhouse Gas-Free Fleet and Landscaping Equipment Purchasing Policy.
2. Direct staff to modify the Greenhouse Gas-Free Fleet and Landscaping Equipment Purchasing Policy and return to City Council for consideration.

PUBLIC NOTICING

Agenda posting and emails sent to community members interested in sustainability.

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Attachment: 1. Resolution
Exhibit A: Greenhouse Gas-Free Fleet and Landscaping Equipment
Purchasing Policy