WHY GO ELECTRIC?



ENHANCED SAFETY FEATURES

The Tesla Model Y received a 5-star safety rating by the National Highway Traffic Safety Administration (NHTSA) and is the safest vehicle crash tested by the Insurance Institute for Highway Safety (IIHS). Active safety features include Automatic Emergency Braking, Forward Collision Warning, Side Collision Warning, Obstacle Aware Acceleration, Blind Spot Monitoring, Lane Departure Avoidance, and Emergency Lane Departure Avoidance.

S REDUCE OPERATIONAL AND MAINTENANCE COSTS

The South Pasadena Police Department projects a cost savings of approximately \$400,000 over a ten-year period compared to traditional internal combustion engine vehicles.

$\ensuremath{\clubsuit}$ Local greenhouse gas reduction targets

By 2030, the City expects the all-electric fleet to reduce approximately 1,850 metric tons of CO_2 . This reduction amounts to 10% of the total greenhouse gas emissions reduction needed to meet the City's 2030 target of 18,579 metric tons of CO_2e^* reduced. This transition also exceeds the City's Climate Action Plan task of electrifying the municipal vehicle fleet to reduce greenhouse gas emissions by 23 metric tons of CO_2e by 2030.

*CO₂e, or carbon dioxide equivalent, is a metric unit that compares the emissions of greenhouse gases based on their global warming potential.





FUTURE POWER READY SITE

City staff and **Clean Power Alliance** are working together to bring a clean energy backup power system to City Hall to keep electricity on in the event of an outage. Through the **Power Ready Program**, City Hall and the adjacent Hope/Mound parking lot will receive the installation of a solar system canopy, a battery energy storage system, and the necessary electrical infrastructure to connect with the current facility's electrical system – all at no cost to the City.

Providing this energy resiliency will allow the facility to operate for at least four hours in the event of a power outage, such as Public Safety Power Shutoffs, natural disasters, and rolling blackouts. The Power Ready Program specifically allocated a portion of the battery energy storage system's capacity (25%) to be maintained as "Critical Energy Reserve" that is ready for an unplanned outage. The remaining 75% of capacity may be used for daily energy services. The reserve capacity will ensure our city's resilience in managing grid emergencies by maintaining critical operations.



PROJECT SCOPE







10 Tesla Model Y Patrol Use

14 Available for Public Use

10 Tesla Model 3 Administrative/Detective Use

PROJECT FUNDING



~\$530,000

The **Charge Ready Program** assists in establishing the infrastructure and equipment needed for electric vehicle charging stations. In the Charge Ready Program, the City procured, installed, and will maintain the EV chargers, while Southern California Edison funded and installed the needed electrical infrastructure including transformers, conduits, panels, wiring, and meters.





The **Transformative Transportation Strategies & Mobility Solutions Program** funds innovative and transformative transportation and mobility concepts that effectively reduce air pollution and congestion and serve as a model for other agencies to follow. The majority of these funds covered costs of the down payment of the patrol vehicles, while a portion went towards EV chargers purchase and installation costs.



NO COST TO CITY

Clean Power Alliance's **Power Ready Program** is a community benefit offered to its member agencies with the goal to make a public building that serves a critical community purpose energy-resilient. Installing a solar system with battery storage allows for a backup source of energy if there is ever an outage. CPA is providing this benefit at no cost to member agencies.



PROJECT TIMELINE

1 MAY 2021

Councilmember Cacciotti requests staff to explore and research the possibility of transitioning to an electric police fleet, the Charge Ready Program, and installation of battery energy storage.

DECEMBER 2021 2

The Natural Resources and Environmental Commission and Public Safety Commission recommend approval to the City Council of the Police Department's electrification proposal.

3 SEPTEMBER 2022

City Council approves participation in Southern California Edison's (SCE) Charge Ready Program, a Tesla vehicle police fleet, and a lease agreement with Enterprise Fleet Management. The City partners with Unplugged Performance for police vehicle up-fitting.



OCTOBER 2022 The Police Department meets with Enterprise Fleet Management and Tesla's Fleet Division to discuss ordering vehicles.

5 FEBRUARY 2023

MSRC awards \$499,789 in exclusive grant funding to the Police Electrification Project.

MAY 2023 6

City Council approves an award of a contract to Rexel Energy Solutions, ChargePoint Partner, for the purchase of Electric Vehicle Supply Equipment (EV Chargers) and related services.

7 DECEMBER 2023

The Police Department places first Tesla Model Y patrol vehicle in service.



APRIL 2024 🚯

NEXT STEPS 1

SCE, with Public Works staff, begins construction of electric vehicle charging infrastructure at the Police, Fire, and City Hall parking lots.

9 JULY 2024

SCE and Public Works staff complete construction of the first phase of the electric vehicle charging infrastructure.



The City is advancing electrification projects through the
Clean Power Alliance's Power Ready program to install a solar canopy and battery back-up system at City Hall.