MEMORANDUM

TO: **UTILITIES ADVISORY COMMISSION**

FROM: **UTILITIES DEPARTMENT**

DATE: **September 4, 2019**

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SUBJECT: **Discussion of Updates to Customer Programs to Accelerate Electric Vehicle Adoption**

Request

This is a report to facilitate Commission and community input and discussion. No action is required.

Background

CPAU receives revenues from participating in the Low Carbon Fuel Standard (LCFS) Program managed by the California Air Resources Board (CARB)[1] to fund electric vehicle (EV) related customer programs. LCFS regulations by CARB contemplate a wide range of uses of these funds, provided the spending is used to benefit current and future electric vehicle drivers in California[2].

Council approved a plan for the use of LCFS revenues in October 2016 (Staff Report #7301), with the primary focus of the program being to promote EV charging and to educate the community on the benefit of EV transportation. They delegated authority to the City Manager to annually make changes to LCFS programs and implementation details.

This plan is part of a broader City-wide collaboration on EVs involving the City of Palo Alto Utilities (CPAU), Development Services, the Publics Work Department, and the Sustainability Office. These departments have worked together to develop and implement a portfolio of programs to facilitate the adoption of Electric Vehicles (EV) in Palo Alto. These actions are outlined in the Sustainability Implementation Plan (SIP) with the overarching objective of lowering the community's greenhouse gas emissions (Attachment A). Staff presented the current version of the EV SIP to the UAC in June 2019.

Revenues from the sale of LCFS credits have increased annually since 2015, up from $0.25 million in 2015 to approximately $1.5 million anticipated in year 2018[3]. Based on experience gained though implementing CPAU's existing EV Rebate Program over the past two years, projections for increased funding levels, customer

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[1] CARB's LCFS program overview is provided here: http://www.arb.ca.gov/fuels/lcfs/lcfs.htm

[2] CARB regulations require CPAU's Low Carbon Fuel Standard revenues generated from residential EV charging to be used to benefit current and future electric vehicle drivers in California. CPAU is also required to educate the public and customers on the benefits of EV transportation, and provide rate options that encourage off-peak charging and minimize adverse grid impacts (17 CCR Sec. 95491(d)(3)(A)(2) – (4))

[3] LCFS credits are allocated by CARB based on number of EVs registered in Palo Alto. As the number of EVs in Palo Alto increases from current levels of approximately 4,000 vehicles, LCFS revenues are also expected to increase through 2030, until the end of the current LCFS regulation. The market prices of credits have also increase from $90 in 2016 to $190 per LCFS credit in 2019.

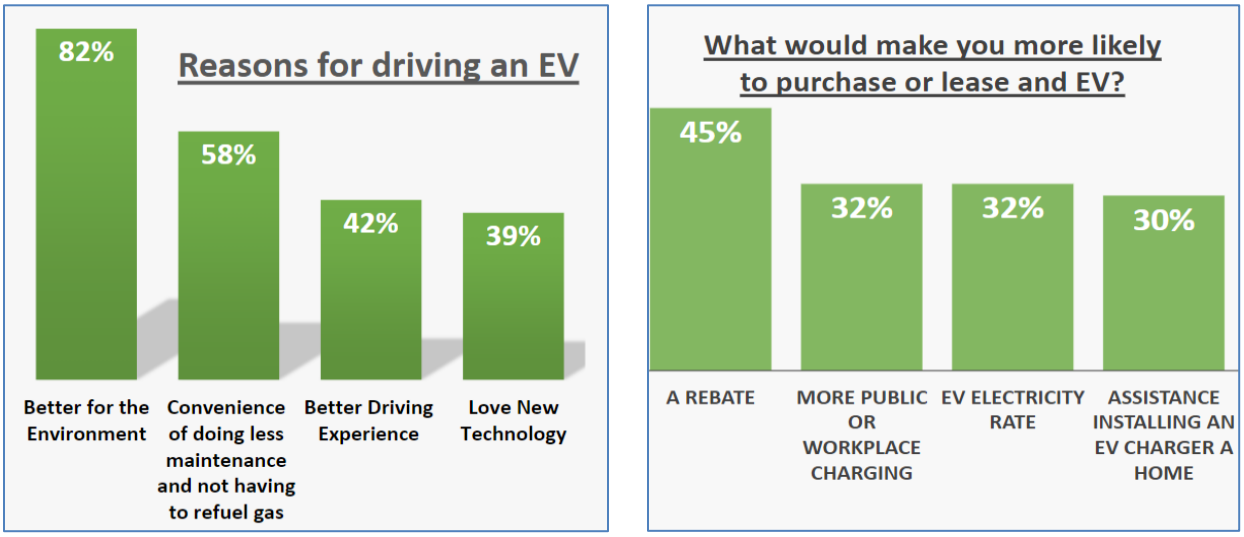
feedback, and internal and external stakeholder input, staff is recommending to the City Manager an update to EV programs as outlined in this report. Commission and community input on these customer program proposals will inform staff to finalize and implement these programs. Some of these actions may require additional approvals from the City Council.

Discussion

A. Community Survey Results

In 2018, staff with Commission input, conducted a residential survey on overall customer needs. Highlights of survey results relevant to EVs are summarized in Figure 1 below.

Figure 1: Highlights of the 2018 Residential Customer Survey Results Related to EV Adoption[4]



B. Programs to Meet Community Needs

Survey results demonstrated customer needs for EV programs in the following categories:

1. Rebates
2. EV Charging Infrastructure
3. EV Electricity Rates
4. Education and Technical Assistance

Attachment B outlines a portfolio of planned and potential programs funded by LCFS that staff intends to implement to meet these needs and regulatory requirements. EV electricity rates could be implemented upon the implementation of advanced meters and upgrading of the customer billing system in the coming years (2023-24). In the meantime, an 'all-electric home' electricity rate is being developed for adoption in 2020 and will help facilitate EV adoption. Additional commercial EV charging rates are also under considerations[5].

[4] More details of the survey and results could be found in the Utilities Advisory Commission Report dated 10/03/2018.

[5] Due to the abundance of solar photovoltaic electricity mid-day, programs to encourage EV charging during these periods and discouraging charging during late afternoon and early evening peaking periods are under considerations. Use of LCFS funds to encourage such EV charging programs minimize the adverse impacts EV charging may have on the grid.

The list of programs was developed based on project ideas provided by both internal and external stakeholders. It is intended to serve all customers in Palo Alto, though strategies for each customer segment differ. Attachment B summarizes planned and potential programs by sector.

The following programs serve the customer needs identified in the surveys and meet regulatory requirements:

- *Promote EV adoption by providing rebates for new EV purchases:* Most customers list rebates as the most important factor that can facilitate their purchase of an EV. Currently Federal tax incentives of up to ($7,500) and State rebate program (up to $4,500 for battery EVs) are available to Palo Alto consumers. Customers of Pacific Gas and Electric (PG&E) outside of Palo Alto have also been eligible for an $800 rebate, but CPAU has not instituted such a rebate. Recent updates to CARB's LCFS regulations require utilities receiving LCFS funds to contribute a portion of those funds to a State-run rebate program that would replace utility programs like PG&E's. As a "medium publicly-owned utility[6]", CPAU must contribute 20% of its LCFS credits[7] or credit proceeds from residential EV charging to this program when it is launched (likely by mid-2020), at which point Palo Alto and all California residents are expected to receive an additional EV point-of-purchase rebate of approximately $1,500.
- *Promote EV charging infrastructure:* CPAU intends to devote most LCFS funds to expanding EV charging infrastructure. Funds will be used in a variety of ways:
    - The funds will be used to offset the cost of utility infrastructure upgrades triggered by residential customer EV installations. Nonprofits will be eligible for this service as well.
    - Rebates will be provided to multi-family units[8] to install EV charger infrastructure, and they will receive technical assistance as well. Staff intends to focus most of its LCFS expenditures on this sector to broaden charger access for this customer segment. EV charger installation in multi-family buildings is technically challenging and expensive, and the owners of these facilities often have less ready cash than large commercial customers and less in-house technical expertise. Nonprofits, who face similar challenges, will also be eligible for this service.
    - Some funds will be used as matching funds for a grant program. The California Energy Commission intends to fund a program to expand charging infrastructure in Santa Clara and San Mateo counties. CPAU is partnering with Silicon Valley Power and several regional Community Choice Aggregators to participate in this program. See Attachment E for a press release describing the program. Staff intends to promote fast charging at neighborhood commercial centers and workplace charging through this regional rebate program.
    - Lastly, some funds will be used to promote charging infrastructure for the City's fleet and for workplace charging at City facilities.
- *EV Education and Outreach:* Staff will continue to engage in customer education and outreach, such as EV ride and drives, customer outreach, and resources and tools like online calculators. Some of this outreach will be funded by LCFS funds.

[6] Title 17 CCR Sec. 95481(a)(41).

[7] Regulation requires 20% of credits sales proceeds in CY 2019-2022 and 25% of sales proceeds 2023 onwards. The larger utilities are required to contribute a larger percentage of credit proceeds towards this point-of-purchase rebate program

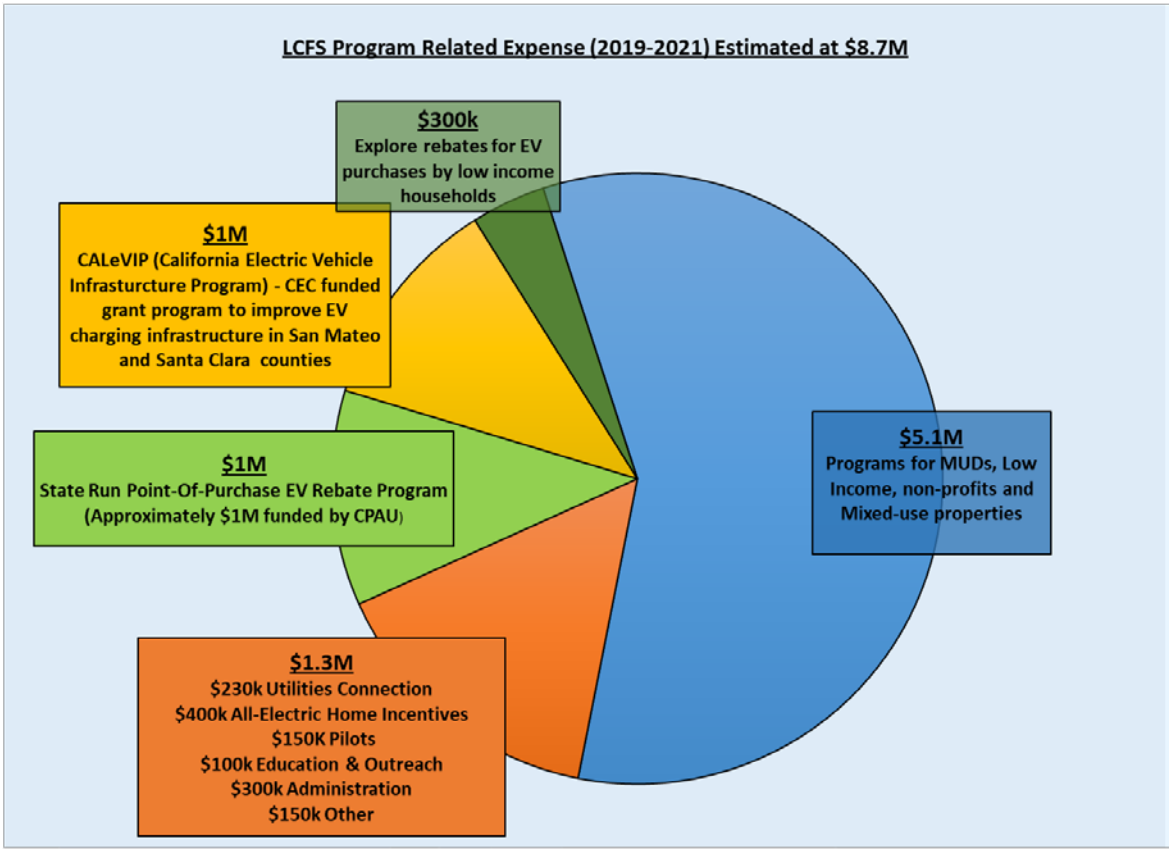
[8] Multi-family or multi-unit-dwellings (MUDs) are building structures that are designed to house several different families in separate housing units such as apartments and condominiums. Palo Alto is estimated to have 10,000 such units, along with 15,000 single family residential units.

C. Estimated Low Carbon Fuel Standard Fund Expenditures: 2019-2021

Attachment C provides a detailed estimate of program expenditures over the next three years. These expenditures are summarized in Figure 2 below. The major categories of anticipated expenditures are:

- $5.1 million for providing technical assistance[9] and rebates to install EV chargers and multi-unit dwellings (MUD), low income, non-profits and mixed-use properties.
- $1 million for providing matching funds towards the CALeVIP[10] grant to install level 2 and level 3 chargers in the City – locations to be determined.
- $1 million contribution to the state mandated program (Clean Fuel Rewards (CFR) program) to provide point-of-purchase rebates for EV buyers.
- $1.3 million for suite of rebates and expenditure related to: a) single family home utility connection fee rebate, b) rebates for all electric homes, and c) education outreach and administration expenses.
- $0.3 million to explore and provide EV rebates for low income households, in coordination with regional programs.

Figure 2: Summary of 2019-2021 EV Program Expenditures – Estimated at $8.7



[9] Council approved a contract (Staff Report#10287, 05/06/2019) with consultants who could provide a range of technical assistance for customers to design and construct EV chargers on their premises and assist apply for rebates with CPAU.

[10] California Energy Commission (CEC)'s CALeVIP (California Electric Vehicle Infrastructure Project) offers incentives for the purchase and installation of electric vehicle charging infrastructure at publicly accessible sites throughout California. Staff will be recommending to Council to utilize $1M of the LCFS funds as matching funds to receive an equivalent level of funding from the $33 million CALeVIP program that has been announced by CEC for implementation in San Mateo and Santa Clara counties. See Attachment E for related press release.

Attachment D provides a draft outline of the LCFS program, along with proposed rebate levels and participation eligibility rules. These documents will be refined and developed further as implementation approaches for individual program components.

D. Program Success Measures

Staff propose the following measures to evaluate the progress and success of the program by 2022[11]:

- Provide rebates to facilitate installation of 250 charging ports to serve Multi-family, low income, non-profits, and mixed-use properties
- Increase EVs registered at Multi-Unit Dwellings by 1,000 vehicles
- Lower City's transportation related emissions by 1,000 MT/year (0.3% reduction) by dispensing electricity from these charging stations.

These measures focus primarily on the Multi-Unit Dwelling programs, which is currently the most developed. Additional measures may be adopted for other programs as they become established.

E. Funding Sources

Palo Alto has been successful in securing grants and state funding for EV programs from the following three sources:

- LCFS – CARB's Low Carbon Fuels Standards Program provides LCFS credits for dispensing electricity to EVs in Palo Alto. This source is anticipated to provide $1.5M+ per year in the coming years.
- CALeVIP - California Energy Commission (CEC)'s CALeVIP (California Electric Vehicle Infrastructure Project) matching grant program, is expected to provide rebate funding to expand charging infrastructure. Staff plans to recommend to Council using $1 million of LCFS funds over the next 2-years to receive matching funds from the CALeVIP grant program[12].
- BAAQMD – Bay Area Air Quality Management District grants being used to partially fund network of City's public chargers. These grants have totaled $150,000 over the past five years[13].

Due to the availability of these external funding sources, minimal CPAU rate payer funds have been used to cover expenses related to EV programs. The City's General Funds are used to purchase fleet EVs as part of the City's regular vehicle replacement program.

Resource Impact

Considerable staff effort will be expended to launch and implement these programs. A full-time staff from Resource Management will be assigned to manage these programs with assistance from consultants. In

[11] Over three years staff anticipates providing rebate for 180 to 360 charging ports at 60 to 90 locations. Assuming each charger is able to meet the electricity needs of 2 EVs on average and each EV would displace ~2 metric tons of CO_2 per year, 250 charging ports could help lower emissions by 1,000 MT. It is also estimated that such chargers could increase EVs at MUDs by 1,000 vehicles, and substantially meet the charging needs of 500 EVs. Vehicle registration data from DMV and usage data from the chargers will be utilized to develop these program measures.

[12] Though the program plans are not final, the $1M in CALeVIP funds are expected to be utilized primarily towards high power level 3 charger installations. City's matching funds of $1M is expected to be used for medium power level 2 chargers.

[13] In addition to the City receiving BAAQMD grants, a number of Palo Alto business have also received BAAQMD grants. CPAU will continue to publicize grant opportunities and vehicle rebates available for residents and businesses.

addition, installation of EV chargers will increase workload at the Development Center due to increases in permitting requests. Planning will also be affected with an increase in customers needing parking requirement reviews as it pertains to EV charger installations. Utilities Engineering and Operations are also likely to see an uptick in request to upgrade utility connections to accommodate EV charger installations. Utilities Customer Service may also see an increase in call volumes from customers seeking program information. These aspects will be considered, along with the level of demand these programs will generate in the coming months, when deciding on overall staffing needs.

As the funding for these customer programs is expected to be substantially covered by LCFS and grant funds, the EV programs will have minimal retail rate-payer impact. Wide adoption of EVs and the resulting increased electricity sales may generate additional electric utility revenue, potentially defraying the need for retail rate increases.

Policy Implications

Proposed customer programs meet Council policy on greenhouse reductions as embodied in the Sustainability and Climate Action Plan. The use of LCFS and grant funding to implement these programs minimizes the impact to customer retail rates.

The program meets Utilities Strategic Plan Priority #3 to utilize technology to improve customer experience and Priority #4 to use resources efficiently to meet customer service priorities. Under Priority#4, Strategy 4 and Action 2 states: Establish and implement a Distributed Energy Resources plan to ensure local generation (e.g. solar), storage, electric vehicles (EVs), and controllable loads (like heat pump water heaters) are integrated into the distribution system in a way that benefits both the customer and the broader community. Efforts will be made to integrate smart EV chargers to respond to utility signals to meet the greater community and needs of the electrical grid.

Attachments

Attachment A: EV Sustainability Implementation Plan Key Actions 2018-2020
Attachment B: Customer Programs: Existing, Planned and Potential EV Programs by Sector
Attachment C: Draft Allocation of Funds and Estimated Program Expenditures
Attachment D: Draft Outline of CPAU's Proposed LCFS Program & Participation Eligibility Rules
Attachment E: CALeVIP Grant Press Release 08-14-2019.

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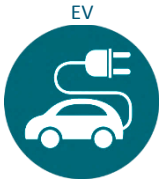
DEAN BATCHELOR
Director of Utilities

ELECTRIC VEHICLES

Powering transportation through Zero Emission Vehicles (ZEV) as opposed to fossil fuel powered Internal Combustion Engine (ICE) vehicles can significantly reduce GHGs and reduce climate pollution. The electric vehicle landscape is evolving rapidly as less expensive and longer ranged vehicles come on line. Because the largest portion of Palo Alto's GHG emissions are from road transportation, Palo Alto is actively encouraging its residents and non-resident commuters to adopt ZEVs to help reduce its carbon footprint—through policies, incentives and provision of EV charging infrastructure. (Lead departments: Sustainability, Utilities, Public Works)



GOALS

- Accelerate EV penetration for both PA-based & inbound vehicles
- Make "Going EV" more convenient and economical than using fossil fueled vehicles

STRATEGIC MOVES

- Build out public and private infrastructure to support rising EV penetration, including anticipated local ownership of 4-6,000 EVs by 2020 (UTL, PW, DS, S)
- Evaluate incentives, outreach, policies, and financing options to stimulate charging infrastructure and EV ownership/use (UTL, DS)

KEY ACTIONS

EV1 - Publicize streamlined permitting and CPAU-funded transformer upgrades (DS, UTL)
EV2 - Consider requiring EV Readiness and charger installation in existing buildings (DS)
EV3 - Evaluate programs to expand EV charger deployment on private property, including rebates and financing options (e.g. on-bill financing, etc.) (UTL, S)
EV4 - Develop a plan for expanding EV charging infrastructure in the public right-of-way and on publicly-owned property. (PW, DS, UTL, S)
EV5 - Expand EV deployment in City fleet (PW, S)
EV6 - Support regional EV group-buy programs (UTL)
EV7 - Build public awareness of EV options through communications, RideAndDrive events, etc. (UTL, DS)

KPIs: GHG emissions. EV penetration.

Palo Alto has one of the highest EV ownership rates in the country - estimated by staff at 3-4% of registered vehicles. In 2016 Palo Alto surpassed Saratoga, Los Altos, and Los Gatos to become the #1 city in California by percentage of new vehicles that are electric. Following a 5% decline in sales from 2014 to 2015, U.S. EV sales jumped by 37% in 2016[4] and "range anxiety" is softening as 200-300 mile range EVs hit the market.

[4] Rapier, Robert. "U.S. Electric Vehicle Sales Soared In 2016". Forbes, 5 February 2017.

Attachment B: Portfolio of Customer Programs & Definition of Terms

CUSTOMER		CURRENT PROGRAMS	POTENTIAL PROGRAMS TO LAUNCH IN 2020	POTENTIAL PROGRAMS UNDER EVALUATION
ALL EV DRIVERS	Residents, Commuters, Visitors	• Workshops and Ride and Drives • EV calculator and online resources • EV readiness mandates for all new construction	• LCFS funding support to Public Works for new public EV Charger installations • Fund DC Fast Chargers (DCFC) at neighborhood commercial centers with the California Energy Commission's (CEC) California Electric Vehicle Infrastructure Project (CALeVIP)	• Curbside EV charging infrastructure
ALL RESIDENTIAL			• Point of Purchase (POP) EV rebate	• Light Electric Vehicle (LEV) rebates • Discount on utility bill for EV owners
Residential Sub-Groups	Low-Income	• Electrification education through the Home Efficiency Genie • Rebate for Utility connection fees	• EV Solutions and Technical Assistance Program for building EV infrastructure (for low-income Multifamily properties)	• All-electric home incentive • Panel upgrade incentive • All-electric home calculator • Used EV incentives
	Multifamily	• EV Charger Rebate Program • EV charging infrastructure	• EV Solutions and Technical Assistance Program for building EV infrastructure	
	Single Family	• Electrification education through the Home Efficiency Genie • Rebate for Utility connection fees		• All-electric home incentive • Panel upgrade incentive • All-electric home calculator
ALL NON-RESIDENTIAL			• Incentive for Utility transformer upgrade	
Non- Residential Sub-Groups	Large Commercial & Industrial (C&I)		• Rebates for workplace chargers under grant-funded regional program (CALeVIP)	• Co-sponsor, All-Electric Commuter Buses • Education and Outreach for Commuters
	Small & Medium Commercial		• EV Solutions and Technical Assistance Program for building EV infrastructure (for small to medium sized businesses)	• DC Fast Chargers at commercial centers
	Non-Profit	• EV Charger Rebate Program	• EV Solutions and Technical Assistance Program for building EV infrastructure (for schools and other non-profits)	• School Bus electrification
	TNC (Transportation Network Company) Drivers	• Access to public EV chargers	• Access to private EV chargers at non-profit properties	• Access to neighborhood DC Fast Charging

Definition of EV Terms

ACRONYM	FULL NAME	DEFINITION
CALeVIP	**California Electric Vehicle Infrastructure Project**	A program that offers incentives for the purchase and installation of electric vehicle charging infrastructure at publicly accessible sites throughout California. CALeVIP works to address regional needs for electric vehicle (EV) charging infrastructure throughout California, while supporting the state's goal to improve air quality, fight climate change and reduce petroleum use. Funded by the California Energy Commission and implemented by the Center for Sustainable Energy, CALeVIP works with local partners to develop and implement EV charger incentive projects that meet regional needs for Level 2 and DC fast chargers. The statewide project aims to provide a streamlined process for getting chargers installed to fill the significant gaps in charging availability.
CEC	California Energy Commission	California's primary energy policy and planning agency. Holds responsibility for forecasting future energy needs, promoting energy efficiency through appliance and building standards, and supporting renewable energy technologies.
DCFC	DC Fast Charger	Also known as level 3 chargers are the fastest way to charge an EV. At a DCFC, EVs can get about 120miles of charge in 30 minutes, however, not all EVs on the market today have the capability to fast charge.
EV	Electric Vehicle	Alternative fuel automobile that uses electric motors and motor controllers for propulsion as a substitute to common propulsion methods such as the internal combustion engine.
EVSE	Electric Vehicle Supply Equipment	EVSE is the technical name for a charging station or charging dock that connects an electric vehicle (EV) to a source of electricity to recharge electric cars.
GHG	Green House Gas	Gaseous compound (such as carbon dioxide or methane) that absorb infrared radiation, trap heat in the atmosphere, and contribute to the greenhouse effect.
J1772	EVSE Connector Standard	North American standard for electrical connectors for EVs maintained by SAE International (Society of Automotive Engineers). J1772 is the common electric vehicle conductive charging system architecture including operational requirements and the functional and dimensional requirements for the vehicle inlet and mating connector. Tesla uses a different standard, but all Tesla's come with a J1772 adapter.
LCFS	Low Carbon Fuel Standard	Designed by CARB (California Air Resources Board) to encourage production and use of cleaner low-carbon fuels in California to reduce greenhouse gas emissions. Fuels in the California transportation fuel pool that have a Carbon Intensity (CI) lower than the State targets, generate LCFS credits. Fuels in the transportation fuel pool with CIs higher than the State targets, generate deficits. A fuel producer with deficits must have enough credits through generation and acquisition to be in annual compliance with the standard.
LEV	Light Electric Vehicle	EVs with two to four wheels powered by a battery, fuel cell, or hybrid-powered, and generally weighing less than 100 kilograms.
MF/MUD	Multifamily/Multi-Unit Dwelling	A building or structure that is designed to house several different families in separate housing units such as apartment buildings.
POS Rebate	Point of Sale Rebate	A discount incorporated at the point where a customer executes the payment for goods.
TNC	Transportation Network Company	Transportation Network Companies provide prearranged transportation services for compensation using an online-enable application or platform to connect drivers using their personal vehicles with passengers. Ex: Lyft, Uber

Attachment C: Proposed EV Programs and Draft Funding Allocations Estimates

The Utilities Department is preliminarily proposing to devote Low-Carbon Fuel Standard Funds to the following programs for CY 2019 through CY 2021. These are estimates, actual expenditure could change considerably based on the customer demand for individual programs. The total expenditure of all programs would be within budgetary limits approved by Council annually.

1. Point of Purchase EV Rebates: In accordance with Section 95483(c) of CARB's Low Carbon Fuel Standard regulations, 20% of funds will be provided to the State to provide point of purchase rebates to EV buyers. Palo Alto share is estimated at $1M over 3 years.

2. Electric Vehicle Supply Equipment (EVSE) Rebates: Up to $3.7 million will be devoted to providing rebates for multi-unit dwellings (MUDs), non-profits, and schools, with rebate levels as described below, and up to $600,000 for new technical assistance program to be launched in fall 2019[1] to these customers.

3. Transformer Upgrades:
   - MUDs, non-profits, and schools - Up to $800,000 may be used to provide rebates when the installation of EV chargers necessitates a new electrical service or transformer upgrade.
   - Single-family homes - Up to $230,000 may be used to reimburse customers for utility connection fees when the installation of EVSE results in the need for a utility transformer upgrade

4. CEC Grant for Workplace Charging: Up to $1 million may be used as matching funds for the California Energy Commission's CALeVIP (California Electric Vehicle Infrastructure Project) program to provide rebates for EV charging infrastructure (focus on publicly available Level 3 chargers at neighborhood centers and Level 2 workplace chargers, but multi-family buildings are also eligible).

5. Pilot Programs: Up to $150,000 may be used for EV-related pilot programs, to be approved by the Utilities Director or his designee.

6. Program Administration and Marketing: Up to $400,000 total over three years may be used for program administration, education, outreach, and marketing.

7. Other Programs to be Determined: Explore use of remaining funds ($680,000) for other EV-related purposes, subject to additional Council and/or City Manager approval, including but not limited to:
   a. All-Electric Home Rebates: Explore using up to $400,000 to provide rebates for equipment in all-electric homes related to EV charger installation.
   b. Program for Low-Income Residents: Explore using up to $300,000 to provide incentives to low-income customers for purchase of a used EV.
   c. LEV (Light Electric Vehicle) rebate program: Explore using up to $30,000 to provide rebates for e-bikes, e-scooters, e-skateboards and other LEVs.

[1] EV Solutions and Technical Assistance Program Staff Report

CY2019-2021 Draft Allocation of Projected $8+ Million in Anticipated Low-Carbon Fuel Standard Funding

Sector	Program	CY 2019 – 2021 Funding	Goal
All Palo Alto residents	Funding for State-mandated, State-run Point of Purchase rebate program currently in development	$1,000,000*	TBD, will provide additional incentives for EV buyers
Multi-family, Non-profits, and Schools	Charger rebates	$3,700,000	Install 200-400 EV charging ports at 60-90 locations supporting 1800-2400 vehicles, 10-20% of population
	Consultant for Technical Assistance	$600,000	
	Transformer Upgrades	$800,000	
Non-residential (multi-family and City also eligible)	Matching funds for CEC's CALeVIP grant program providing rebates for private charging infrastructure. Expected to receive $1M from CEC.	$1,000,000**	Install Level 3 chargers at neighborhood commercial centers, fund 200-400 additional workplace chargers
Single-family	All-Electric Home Incentives	$400,000**	Reduce costs of single-family EV adoption and building electrification
	Reimburse utility connection upgrade fees	$230,000	
Low-Income	Low-income EV purchase incentives	$300,000**	TBD, additional incentives for low-income EV buyers in PA
All	Administration	$300,000	Promote EV adoption, other goals TBD as new pilots and programs are developed
	Education, Marketing and Outreach	$100,000	
	Pilot programs	$150,000	
	Other programs to be determined	$150,000	
	LCFS FUNDING TOTAL	**$8,730,000**	

**State run point of purchase EV rebate program – Palo Alto required to provide 20% of LCFS credits sales proceeds*

*** These three programs will be explored and require additional Council and City Manager approvals*

Attachment D: Draft Outline of CPAU's Proposed LCFS Program & Participation Eligibility Rules

DRAFT ELIGIBILITY REQUIREMENTS

2019 City of Palo Alto Utilities Electric Vehicle (EV) Charger Rebate Program
MULTIFAMILY and MIXED USE PROPERTIES

1. REBATES

1.1 Rebate amounts are up to $8,000 per Electric Vehicle Supply Equipment (EVSE) or EV charging port installed, and up to a maximum of ten (10) ports per multifamily or mixed use residential building within City of Palo Alto Utilities (CPAU) service territory.**

1.2 Rebates are limited to a maximum of 75% of the total EVSE project installation cost.

1.3 Funds are limited to $80,000 per service address for the life of the program.

1.4 In the event a multifamily or mixed-use property owner finds that a new electrical service is needed to install EVSEs, and CPAU at its sole discretion determines that this is feasible, the program will credit the utility costs for providing this service by up to $100,000 per service address.

a. To qualify for this incentive, the location shall install 10 ports or install 10 fully wired EVSE-ready outlets.
b. In the event fewer than 10 ports are installed, a prorated reduction in rebate will be made available. For example, up to $50,000 reimbursement for 5 ports.

2. ELIGIBILITY REQUIREMENTS

2.1 EVSE must be installed in a shared parking location not assigned or dedicated to particular tenants or owners. EVSE will remain available to all tenants, owners, employees or guests.

2.2 Rebates are not provided for EVSE's that are required by the City of Palo Alto's Building Code. ***

2.3 Multifamily buildings must have a minimum of four (4) units.

2.4 EVSE installation projects will comply with all City of Palo Alto building codes and permitting requirements and any American Disability Act (ADA) requirements if applicable.

2.5 Rebates are limited to Level 2 EVSE's or higher with a minimum of 30A circuits. EVSE must be installed with a J1772 plug.

2.6 All applicants receiving a rebate shall post information about their EVSE on the US Department of Energy Alternative Fuel Data Center website: https://afdc.energy.gov/fuels/electricity_locations.html#/station/new

3. EXCEPTIONS

3.1 Two Level 1 chargers may be substituted for one Level 2 charger, with prior written approval from CPAU.

4. RECOMMENDATIONS

4.1 Add physical signage for easy identification of EVSE location.

* Rebate is provided for each charging port.
** Palo Alto Municipal Code Section 16.14.420 and 16.14.430 Ordinance 5324.

DRAFT ELIGIBILITY REQUIREMENTS

2019 City of Palo Alto Utilities Electric Vehicle (EV) Charger Rebate Program
SCHOOLS and NON-PROFITS

1. **REBATES**
   - **1.1** Rebate amounts are up to $8,000 per Electric Vehicle Supply Equipment (EVSE) or EV charging port installed with a maximum of ten (10) ports 10 per service address.*
   - **1.2** Rebates may cover up to 100% of the EVSE project installation cost.
   - **1.3** Funds are limited to $80,000 per service address for the life of the program.
   - **1.4** In the event a school or non-profit finds that a new electrical service is needed to install EVSEs, and CPAU at its sole discretion determines that this is feasible, the program will credit the utility costs for providing this service by up to $100,000 per service address.
     a. To qualify for this incentive, the location shall install 10 ports or install 10 fully wired EVSE-ready outlets.
     b. In the event fewer than 10 ports are installed, a prorated reduction in rebate will be made available. For example, up to $50,000 reimbursement for 5 ports.

2. ELIGIBILITY REQUIREMENTS

- **2.1** EVSE must be installed in a shared parking location not assigned or dedicated to a particular individual. EVSE will remain available to members of the public or to all employees and guests.
- **2.2** Rebates are not provided for EVSE's required by the City of Palo Alto's Building Code. **
- **2.3** EVSE installation projects shall comply with all City of Palo Alto building codes and permitting requirements and any American Disability Act (ADA) requirements if applicable.
- **2.4** Rebates are limited to Level 2 EVSE's or higher with a minimum of 30A circuits. EVSE must be installed with a J1772 plug.
- **2.5** All applicants receiving a rebate shall post information about their EVSE on the US Department of Energy Alternative Fuel Data Center website: https://afdc.energy.gov/fuels/electricity_locations.html#/station/new
- **2.6** If networked EVSEs are installed, CPAU shall be provided access to the EVSE charging information.

3. EXCEPTIONS

- **3.1** Schools are exempt from publicly posting EVSE locations for security reasons.
- **3.2** Two Level 1 chargers may be substituted for one Level 2 charger, with prior written approval from CPAU.

4. RECOMMENDATIONS

- **4.1** Add physical signage for easy identification of EVSE location, unless safety concerns preclude them.

* Rebate is provided for each charging port.
**Palo Alto Municipal Code Section 16.14.420 and 16.14.430 Ordinance 5324

For Immediate Release
August 14, 2019

State Proposes $33M in New Funding for Electric Vehicle Charging in Santa Clara and San Mateo Counties

California Energy Commission to help the Peninsula and South Bay keep pace with rapid adoption of electric vehicles

Santa Clara and San Mateo Counties, Calif. - The California Energy Commission is partnering with five local energy agencies to launch an incentive project for the installation of public electric vehicle (EV) charging stations throughout Santa Clara and San Mateo counties. As more Californians choose to drive EVs and the state transitions to an electric transportation system, there is a continued need for available charging stations. This is especially the case in Silicon Valley, which has the highest rate of EV sales in the state.

The project, expected to launch in spring of 2020, is an initiative of the Energy Commission's California Electric Vehicle Infrastructure Project (CALeVIP), which works with local community partners to develop and implement regional incentive projects for charging infrastructure that supports the adoption of EVs statewide. Funding will span two to four years.

The Energy Commission is proposing to provide $21 million in incentives to Santa Clara County and $12 million in incentives to San Mateo County. City of Palo Alto Utilities, Peninsula Clean Energy, San José Clean Energy, Silicon Valley Clean Energy and Silicon Valley Power are pledging to contribute millions in matching funds to this effort, pending approval by their respective governing boards or city councils. By leveraging local investment, CALeVIP funds will further expand EV charging accessibility in the region.

"This project will help provide the necessary infrastructure for the shift to a clean, electric transportation system statewide," says California Senator Bob Wieckowski. "Adding charging options in convenient locations will make electric vehicles accessible for those unable to charge at home. This in turn will support a continued increase in EV adoption, allowing our communities to meet our climate goals, and helping everyone benefit from better local air quality."

"The lack of charging stations is one of the main reasons consumers are reluctant to make the switch to electric vehicles. We can't move the needle on EV adoption unless we aggressively expand our charging infrastructure. This state and local funding partnership would not only support the current demand in the South Bay and Peninsula, but also help meet the needs of future EV drivers," said Assemblymember Phil Ting (D-San Francisco), whose district includes northern San Mateo County.

"The Energy Commission is excited to work with all our partners on this project to increase access to convenient charging for electric vehicles in Santa Clara and San Mateo counties,"

said Commissioner Patty Monahan of the Energy Commission. "By expanding the state's charging network, CALeVIP projects like this one help the state transition to zero-emission transportation, provide cleaner air and reduce greenhouse gas emissions."

CALeVIP works to address regional needs for EV charging infrastructure throughout California, while supporting the state's goals to improve air quality, fight climate change and reduce petroleum use.

The incentive project will help increase the number of fast chargers and Level 2 chargers in public, workplace and multi-family housing locations, as well as along highway corridors.

Fast chargers provide at least 100 miles of range per hour of charging, and some can charge a battery up to 80 percent in 30 minutes. Level 2 chargers provide 15-35 miles of range per hour of charging, which is enough for most day-to-day driving.

California's goal is to get 5 million EVs on its roads by 2030 to reduce carbon emissions and to support those vehicles by installing 250,000 chargers statewide, including 10,000 direct current fast chargers, by 2025.

Santa Clara and San Mateo counties receive clean electricity from local energy providers that is at a minimum 80 percent greenhouse-gas free. Powering cars with electricity rather than fossil fuels dramatically reduces tailpipe emissions that contribute to climate change and air pollution. CALeVIP funding and the matching funds from local agencies will help Santa Clara and San Mateo counties accelerate this transition, reducing greenhouse gas emissions from the transportation sector, the leading source of emissions in Silicon Valley.

CALeVIP has several regional projects throughout the state, including projects in Fresno, Sacramento and Southern California. CALeVIP and its regional projects are implemented by the Center for Sustainable Energy and funded primarily by the Energy Commission's Clean Transportation Program (also known as the Alternative and Renewable Fuel and Vehicle Technology Program).

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About the California Energy Commission

The California Energy Commission is leading the state to a 100 percent clean energy future. It has seven core responsibilities: developing renewable energy, transforming transportation, increasing energy efficiency, investing in energy innovation, advancing state energy policy, certifying thermal power plants, and preparing for energy emergencies.

About the Center for Sustainable Energy

The Center for Sustainable Energy® (CSE) is a nonprofit offering clean energy program administration and technical advisory services. With the experience and streamlined efficiency of a for-profit operation, CSE leads with the passion and heart of a nonprofit. We work nationwide with energy policymakers, regulators, public agencies, businesses and others as an expert implementation partner and trusted resource. EnergyCenter.org

About City of Palo Alto Utilities (CPAU)

The City of Palo Alto is the only municipality in California operating a full suite of utility services, including electric and fiber optics, water, wastewater, natural gas, refuse and

storm drain services. Since 2013, the City's electric supply portfolio has been carbon neutral. For more about CPAU's EV programs, visit cityofpaloalto.org/EV

About Peninsula Clean Energy

Peninsula Clean Energy (PCE) is San Mateo County's official electricity provider. PCE (www.PeninsulaCleanEnergy.com) is a public local community choice energy program that provides electric customers in San Mateo County with cleaner electricity at lower rates than those charged by the local incumbent utility. PCE is projected to save customers more than $18 million a year. PCE, formed in March 2016, is a joint powers authority made up of the County of San Mateo and all 20 cities and towns in the County. PCE serves approximately 290,000 accounts. www.peninsulacleanenergy.com

About San José Clean Energy

San José Clean Energy is the new electricity generation service provider for residents and businesses in the City of San José, operated by the City's Community Energy Department. Governed by the City Council, it provides over 328,000 residential and commercial electricity customers with cleaner, lower carbon power options at competitive prices, from sources like solar, wind and hydropower. For more information, please visit www.SanJoseCleanEnergy.org.

Follow us on Facebook, Twitter and Instagram @SJCleanEnergy.

About Silicon Valley Clean Energy

Silicon Valley Clean Energy is a community-owned agency serving the majority of Santa Clara County communities, acquiring clean, carbon-free electricity on behalf of more than 270,000 residential and commercial customers. As a public agency, net revenues are returned to the community to keep rates competitive and promote clean energy programs. Member jurisdictions include Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and unincorporated Santa Clara County. SVCE is guided by a Board of Directors, which is comprised of a representative from the governing body of each member community. For more information, please visit SVCleanEnergy.org.

About Silicon Valley Power

Silicon Valley Power (SVP) is the trademark adopted for use by the not-for-profit electric municipal utility of Santa Clara, CA, serving residents and businesses for over 120 years. SVP provides power to nearly 55,000 customers, at rates 25 to 48 percent below neighboring communities. SVP is the only full service, vertically integrated publicly owned utility in Silicon Valley owning generation, transmission and distribution assets. See more at: http://www.siliconvalleypower.com/.

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