

Environmental Quality Commission



SPECIAL MEETING MINUTES

Date: 2/25/2021

Time: 5:00 p.m.

Special Meeting Location: Zoom.us/join – ID# 915 4675 0502

A. Call to Order

Chair Price called the meeting to order at 5:06 p.m.

B. Roll Call

Present: Elkins, Gaillard, Kabat, London (Vice Chair) (left at 7:33), Martin, Price (Chair) (arrived at 5:12), Payne

Absent: None

Staff: Rebecca Lucky- Sustainability Manager

C. Public Comment

None.

D. Regular Business

D1. Approve October 21 2020, November 18 2020, December 16 2020 and January 20 2021 minutes ([Attachment](#))

Vice Chair London introduced item.

ACTION: Motion and second (Gaillard/Payne) to approve October 21 2020, November 18 2020, and December 16 2020, and include January 20 2021 in the next agenda, passed 6-0-1 (Price absent).

D2. Provide a recommendation to the City Council for the implementation of Climate Action Plan strategy No.3 (expand access to electric vehicle charging infrastructure)

Chair introduces item. Sustainability contractor, Candise Almendral provided a presentation ([Attachment](#)).

ACTION: Motion and second (Price/Gaillard), to request that the City Council leverage their relationships with existing multifamily property owners, and have at least 10 formal conversations with multifamily property owners in hopes to have at least one EV charger installed at two multifamily properties by August 31, 2021, passed unanimously.

E. Reports and Announcements

E1. Reports and Announcements from staff and commissioners

F. Adjournment

Chair Price adjourned the meeting at 7:25 p.m.

Minutes prepared by Rebecca Lucky, Sustainability Manager

These minutes were approved on March 17, 2021 by the Commission.



CAP STRATEGY #3 (EXPAND ACCESS TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE)

Candise Almendral, MuniPC Sustainability





EXPANDING ACCESS TO ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

- Gap analysis completed, major finding: less than 2.5% of multifamily properties have access to charging within ≤ 0.25 miles of their home.
- Access to at-home charging
 - **Major factor in EV adoption** (CAP strategy 2)
 - Meaningfully increases equity
 - Decreases charge and/or drive time (CAP strategy 4)



Source: Transportation Research Board and National Research Council. 2015. Overcoming Barriers to Deployment of Plug-in Electric Vehicles



ENVIRONMENTAL QUALITY COMMISSION RECOMMENDATIONS

- Focus on the expansion of on-site charging for existing multifamily properties
 - Achieve carbon neutral by 2030
 - Address long term equity issues related to charging preference, access, and cost

- Using combination of requirements, education, and incentives

- Primary emphasis on access to Level 1 charging (standard household outlet)
 - Level 2 where feasible



CITY COUNCIL DIRECTION JANUARY 2021

- Staff recommended developing various policy requirements (reach codes, time of sale, etc.) that could expedite and leverage available incentives for Level 1 charging at existing multifamily properties in order to achieve carbon neutrality in transportation by 2030.
 - This would also coincide with existing efforts around building electrification (CAP No.1)
- City Council did not approve \$155,000 mid-year budget request to complete the policy analysis for fund year 2020-21 and directed staff to return with a recommendation on how to implement this CAP strategy using an incentive based/marketing approach.



RECENTLY ADOPTED STATE POLICY

- Executive Order N-79-2020 includes the following goals:
 - 2/2021: Governor’s Office of Business and Economic Development released California Zero-Emission Vehicle (ZEV) Market Development Strategy

 - 7/2021: California State Transportation Agency, Department of Transportation, and California Transportation Commission shall identify near term actions, and investment strategies

 - **2035: 100 percent new in-state light-duty car sales will be ZEV**

 - 2045: 100 percent of medium- and heavy-duty vehicles for all operations where feasible

FUNDING AND INCENTIVES PENINSULA CLEAN ENERGY (STATE AND PCE FUNDS)



- Represents two distinct funding pools:
 - CALeVIP (state): \$20M is currently oversubscribed and all available funds have been provisionally reserved
 - PCE: \$4M created to service critical market segments not included in the CALeVIP program (i.e., multifamily properties with assigned parking, etc.)



- Level 1: up to \$2000 per connector
- Level 2: up to \$5500 per connector or 75% of the project costs
- Up to \$4000 in electric panel upgrade
- Free technical assistance to maximize incentive
- Level 1 incentive is anticipated to cover most (if not all) project costs
- Level 2 incentive is anticipated to cover at least 75% of project costs

FUNDING AND INCENTIVES BAY AREA AIR QUALITY MANAGEMENT DISTRICT



- Charge! Provides \$6M in funds:
 - Level 1: up to \$1500 per connector
 - Level 2: up to \$7000 per connector or 75% of the project costs
 - All project applications will be scored and ranked; projects at multifamily properties among those that receive higher priority

- Application for this program is still **open**
 - All program applicants **must** attend a pre-application workshop
 - Remaining workshop scheduled March 2, 2021
 - All applications must be submitted on or before March 18, 2021



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT



INCENTIVE CONSIDERATIONS

- All current incentives are regional
 - CALeVIP incentives are available to all the customers of five local utilities (including PCE)
 - PCE incentives are available to all its customers
 - BAAQMD incentives are available to the nine counties surrounding the San Francisco Bay; Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma

- Incentives are slowly transitioning to service multifamily properties
 - Although identified as a critical market segment, agencies continue to struggle to increase property owner participation



SUMMARY OF EV CHARGING INFRASTRUCTURE FOR MULTIFAMILY PROPERTIES BY TYPE (>4 UNITS)

Multifamily property type	Total units	Public EV charging on-site	% living units with EV charging on-site	Public EV charging ≤0.25 miles	% living units with public EV charging ≤0.25 miles
Total	4,368	58	1.33%	87	1.99%
Fourplex	920	0	0.00%	12	1.30%
5-9 units	973	0	0.00%	12	1.23%
10-19 units	644	0	0.00%	12	1.86%
20-49 units	409	2	0.49%	39	9.54%
50+ units	1,422	56	3.94%	12	0.84%



KEY CONSIDERATIONS FOR EV CHARGING INFRASTRUCTURE AT EXISTING MULTIFAMILY PROPERTIES

- Capital needed to install Level 1 charging at existing multifamily properties in Menlo Park (>4 units): **\$8.7M**
 - Not including panel or transformer upgrade
 - Estimated cost far exceed available incentives

- Incentives alone will not cover the full cost to transition all of Menlo Park’s existing multifamily properties with Level 1 charging, which will be necessary for community members to make the transition to electric vehicles.

- Incentives can be monitored to help inform a policy development in the future.



STAFF RECOMMENDATION

- Monitor state ZEV market development and investment strategy development and implementation
 - Provide local outreach for statewide efforts and programs to the extent possible within current staff capacity and communication mediums.

- Monitor PCE and BAAQMD incentive program implementation
 - Amplify PCE and BAAQMD incentive program marketing efforts to the maximum extent possible using existing communication mediums.

- Report efficacy and progress of these efforts in early 2022 to inform next steps

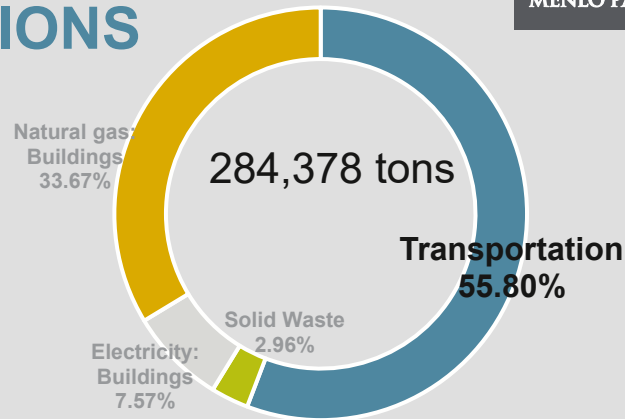


THANK YOU

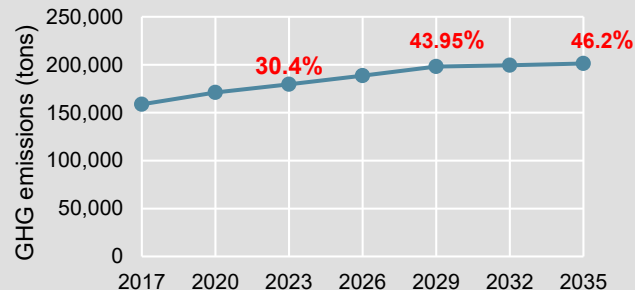


CLIMATE ACTION GOAL AND COMMUNITY GREENHOUSE GAS EMISSIONS

- July 2020: City Council adopted the goal to become carbon neutral by 2030
- Most recent 2017 data shows communitywide emissions have decreased to 284,378 tons (18.6%)
- However, gasoline vehicle emissions are predicted to **increase** to 198,525 tons by 2030



Estimated gas vehicle emissions
% change relative to 2005 inventory



CHARGING TYPES

AC Level One



Voltage

120v 1-Phase AC

Amps

12-16 Amps

Charging loads

1.4 to 1.9 kW

Charge time

3-5 Miles of range per hour

AC Level Two



Voltage

208V or 240V 1-Phase AC

Amps

12-80 Amps (typ. 32 Amps)

Charging loads

2.5 to 19.2 kW (typ. 7 kW)

Charge time

10-20 miles of range per hour

DC Fast Charge



Voltage

208 or 480V 3-phase AC

Amps

<125 amps (typ. 60 amps)

Charging loads

<90 kW (typ. 50 kW)

Charge time

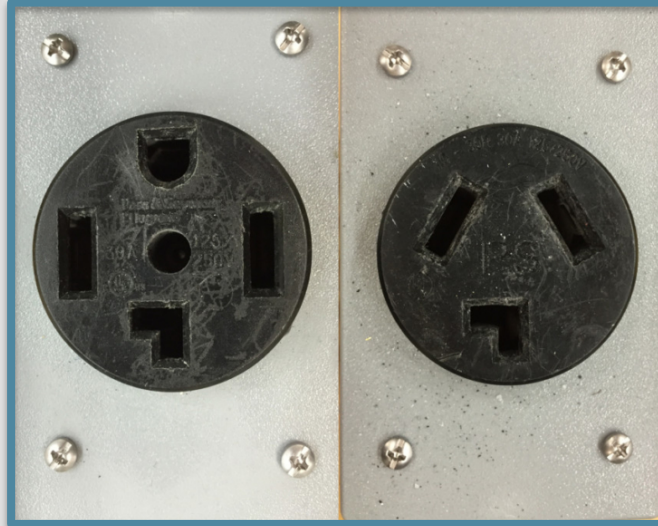
80% Charge in 20-30 minutes



CHARGING TYPES



Level 1



Level 2





CHARGING TIME AND COST

- In most cases, public charging can more than double the price of at-home charging
 - Multifamily residents cannot take advantage of time of use or specialized electricity rates; cost of ownership is often higher
- Even the fastest charging (DCFC) is still a significant time investment

EV charging type	Estimated range added per hour	Average cost	Total charge time
Level 1 (at home)	5 miles/hour	\$5.00	20 hours
Level 2 (public)	13-25 miles/hours	\$12.00	8 hours
Direct current fast charging (DCFC)	100+ miles/hour	\$13.50	45 minutes



SUMMARY OF EV CHARGING INFRASTRUCTURE FOR MULTIFAMILY PROPERTIES BY LOCATION (>4 UNITS)

Map area	Total units	Public EV charging on-site	% living units with EV charging on-site	Public EV charging ≤0.25 miles	% living units with public EV charging ≤0.25 miles
Citywide	4,368	58	1.33%	87	1.99%
Belle Haven	1,062	24	2.26%	33	3.11%
The Willows & District 2	628	0	0.00%	6	0.96%
District 3 west of Linfield Oaks	710	0	0.00%	36	5.07%
Linfield Oaks	343	0	0.00%	0	0.00%
Downtown	1,081	0	0.00%	12	1.11%
Allied Arts	37	0	0.00%	0	0.00%
Sharon Heights	507	34	6.71%	0	0.00%

REQUIRING A PERCENTAGE OF EV CHARGING SPACES AT EXISTING MULTIFAMILY PROPERTIES



- Require a certain percentage of EV charging at existing multifamily properties by a certain date
- Time of sale requirement
- Altering the city's existing thresholds for requiring EV charging for additions/alterations to apply to multifamily and explore lower square footage thresholds.
- Developing a policy that exceeds the state's requirements regarding tenants' rights to install EV charging



MULTI FAMILY SURVEY

- Here are some survey results on EV charging in multifamily: <https://cleantechnica.com/2021/02/18/your-survey-responses-on-ev-charging-at-apartment-complexes/>