

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Projects and Contracts with Proposed Awards over \$100,000

Mobile Source and Climate Impacts Committee Meeting June 24, 2021

> **Alona Davis Air Quality Program Manager** adavis@baaqmd.gov

Outcome



- Provide status update of grant funds awarded since July 1, 2020, and information about new recommended awards greater than \$100,000; and
- Obtain the Committee's support and approval to forward the recommended projects to the full Board of Directors for approval





- Background
- Proposed projects with awards over \$100,000
- Status of incentive funding
 - Revenue sources
 - Community benefits & project locations
- Recommendations

Requested Action



Recommend the Board of Directors:

- 1. Approve recommended projects with proposed grant awards over \$100,000 as shown in Attachment 1; including a policy waiver to allow the Transportation Fund for Clean Air Regional Fund to be used as match for two recommended school bus projects;
- 2. Waive Policy #2, regarding Cost-Effectiveness, of the Transportation Fund for Clean Air Regional Fund to allow the replacement of diesel buses with electric zero-emission buses to be fully reimbursable with Air District grant funding; and
- 3. Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.

CMP/MSIF, CAPP, and FARMER













Carl Moyer
Program
(CMP)

Funding Agricultural
Replacement Measures
for Emission
Reductions (FARMER)

Community Air
Protection Program
(CAPP)

Mobile Source Incentive Fund (MSIF)

California Air Resources Board (CARB)

\$30 million

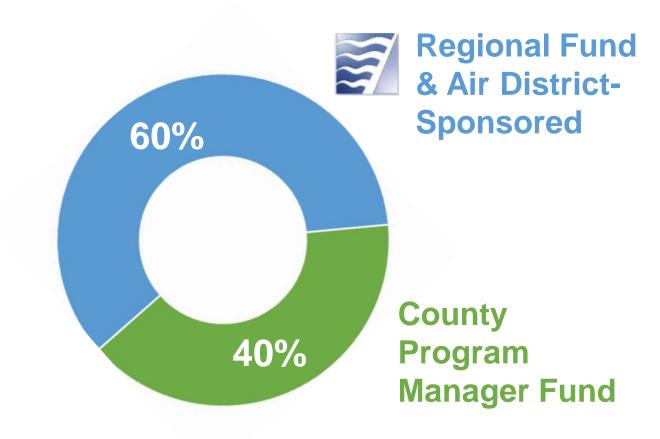
DMV Fees **\$12 million**

Transportation Fund for Clean Air (TFCA)



 Statutory authority set forth in California Health and Safety Code Sections 44241 and 44242

Funding provided by a \$4 surcharge on motor vehicles



CMP/MSIF, CAPP, and FARMER



- Recommend \$7,873,263 in awards
 for seven projects to replace 25 pieces of
 equipment:
 - ✓ Agricultural equipment
 - ✓ Engine for commercial fishing vessel
 - ✓ School buses with charging infrastructure
 - ✓ Includes \$2,045,391 in TFCA match
- Emissions Reductions
 - ✓ Over 6.5 tons per year of criteria pollutants







Recommend TFCA funds as match for CMP projects

Project #	22SBP71	22SBP84
Total Project Cost	\$4,928,532	\$1,698,222
Proposed CMP/CHP/MSIF Award	\$3,775,186	\$803,786
Proposed TFCA Award (buses only)	\$1,153,346	\$892,045
Total Proposed Award (TFCA and CMP)	\$4,928,532	\$1,695,831

- Requires waiver to allow TFCA Regional Fund to be used as match and waiver of TFCA Regional Fund Policy #2, Cost-Effectiveness
- Emissions Reductions will be attributed to CMP

Incentive Funding Awarded & Recommended Since July 2020 by Revenue Source* (in Millions)





^{*}Agenda item #4 includes a recommendation for award of \$6 million

Funds Awarded & Recommended Since July 2020 by Project Category (in Millions)



Total = \sim \$54.7 M*

List of projects is shown in Attachments 2 & 3



^{*}Agenda item #4 includes a recommendation for award of \$6 million

Funds Awarded & Recommended Since July 2020 (in Millions)



Sonoma

\$11.3,

20.8%

Marin

\$1.2, 2.2%

San Francisco

\$1.4, 2.6%

San Mateo

\$4.4, 8.0%

Napa

\$3.6, 6.7%

Solano

\$2.9, 5.4%

Contra Costa

\$4.8, 8.8%

Alameda

\$15.9, 29.3%

Santa Clara

\$8.7, 16.0%

~\$54.7 Million Awarded*



~79% to CARE areas, disadvantaged and low-income communities, and low-income residents

^{*}Agenda item #4 includes a recommendation for award of \$6 million

Feedback Requested/Prompt



Recommend the Board of Directors:

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- 2. Waive Policy #2, regarding Cost-Effectiveness, of the Transportation Fund for Clean Air Regional Fund to allow the replacement of diesel buses with electric zero-emission buses to be fully reimbursable with Air District grant funding; and
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AGENDA: 4

Charge! Program

Mobile Source and Climate Impacts
Committee Meeting
June 24, 2021

Deanna Yee Acting Supervising Staff Specialist dyee@baaqmd.gov

Outcome



- Provide an update on the 2021 Charge! Program and new recommended projects
- Provide an informational update on other incentive programs supporting electric vehicle (EV) charging in the region
- Obtain the Committee's support and approval to forward the recommended projects to the full Board of Directors for approval

Requested Action



Recommend the Board of Directors:

- 1. Approve the Charge! Program rank list and recommended projects with proposed grant awards as shown in Attachment 1; and
- 2. Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.



- Charge! Program Overview
 - Fiscal Year Ending (FYE) 2021 solicitation
 - Scoring process
 - Project recommendations
- Overview of other light-duty EV infrastructure programs in the region
- Recommendations

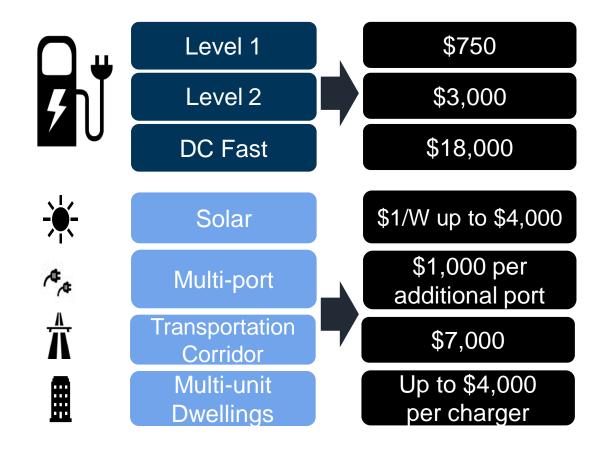


Charge! Program Overview



- Publicly accessible EV charging in the Bay Area since 2016
- Open to public agencies and private businesses
- Charging location types:
 - Workplace
 - Destination
 - Transportation corridors
 - Transit parking
 - Multi-unit dwellings

Charge! 2021 funding levels





Charge! FYE 2021 Solicitation



- \$6 Million (M) available from Transportation Fund for Clean Air and Mobile Source Incentive Fund
- Solicitation period: December 28, 2020 March 18, 2021
- Prioritize:
 - Multi-unit dwellings
 - Assembly Bill (AB) 617 communities
 - Areas where there are gaps in available funding



Charge! FYE 2021 Solicitation Cont'd



- Competitive/ranked solicitation
- New online application system
- 25 applications requesting nearly \$13M
- May be able to fund additional projects with Carl Moyer Program



Charge! Scoring



 Scoring panel consisted of three staff members from Technology Implementation Office, Strategic Incentives Division, and Rules and Strategic Policy Division

Evaluation criteria	Possible points	
Project details & implementation		
plan		25
Project benefits		30
Readiness		15
Qualifications		10
Budget		10
Application completeness		10
Total Points Possible		100



Charge! Ranking List



Rank	Applicant	Score	Proposed Grant Award
1	County of Solano	92.51	\$406,000
2	Bollinger Crest Apartment Investors, LP	92.34	\$32,000
3	City of San Ramon	91.9	\$44,000
4	East Bay Community Energy Authority	91.34	\$425,000
5	West County Wastewater District	90.56	\$12,000
6	Silvergate Brentwood, LLC	90.28	\$44,000
7	EV Charging Solutions, Inc.	90.17	\$3,000,000
8	REEF Energy CA Operations LLC	89.9	\$64,000
9	City of Dublin	89.34	\$26,000
10	Napa Valley Transportation Authority	88.56	\$20,000



Charge! Ranking List, Cont'd



Rank	Applicant	Score	Proposed Grant Award
11	Alameda Multifamily Owner LLC	86.12	\$64,000
12	EVgo Services LLC	86.01	\$2,400,000
13	PowerFlex Systems, Inc.	85.84	\$3,000,000
14	The Shores at Marina Bay Community Association	84.45	\$48,000
15	City of Milpitas	83.51	\$16,000
16	University Terrace Berkeley Homeowners Association	81.51	\$53,086
17	Mountain View Whisman School District	81.12	\$76,000
18	The Millennium Tower Association	76.28	\$21,000
19	Intertie, Incorporated	73.78	\$256,000
20	EVmatch, Inc.	73.51	\$217,000



Charge! Ranking List



- 20 eligible projects requesting \$10,224,086 to install 1,588 charging ports at 136 facilities
- Fund projects in the rank list in order based on funding eligibility and availability

Charging Port Types:

• Level 2: 1,327

DC Fast: 261

Facility Types:

Destination: 33

• MUD: 44

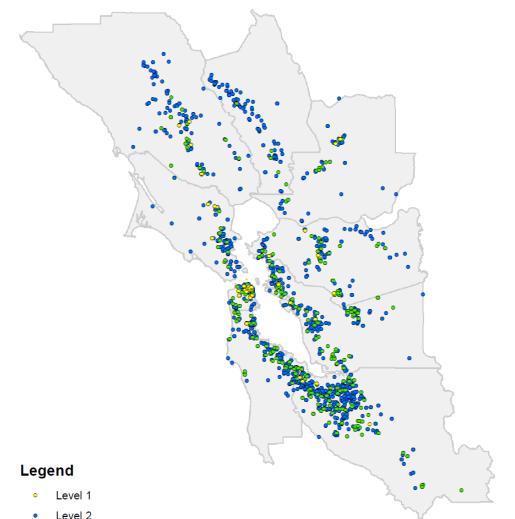
Transit Parking: 2

Transportation Corridor: 27

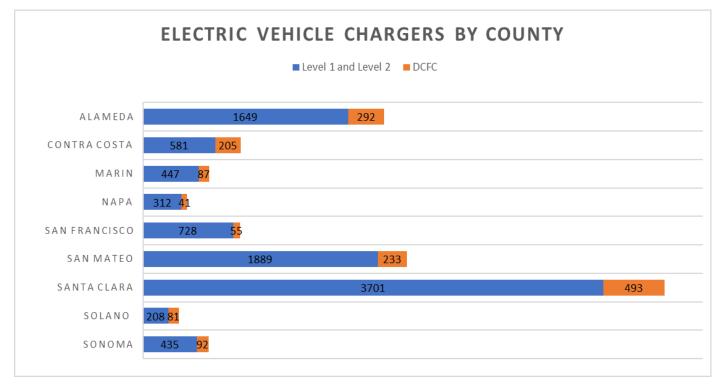
Workplace: 30

Bay Area EV Charging Stations





11,530 publicly available charging ports across the Bay Area

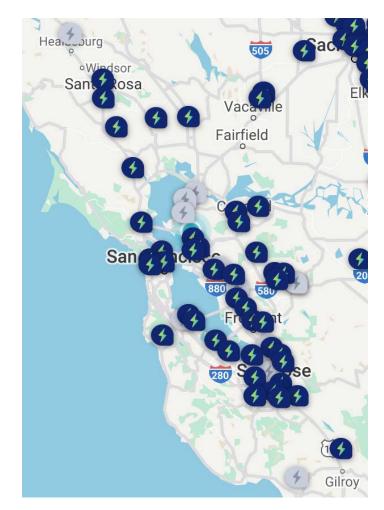




Electrify America



- Funding for zero-emission vehicle fueling infrastructure, consumer awareness campaigns, education, and access
- DC Fast charging network
- Program funding amount: \$2 billion over 10 years
 - California: \$800M over 4 cycles
 - Cycle 1: Q1 2017- Q2 2019 (\$200 M)
 - Cycle 2: Q3 2019 Q4 2021 (\$200 M)
 - Cycle 3: Q1 2022 Q2 2024 (\$200 M)
 - Cycle 4: Q3 2024 Q4 2026 (\$200 M)
 - 35% investments must benefit disadvantaged communities





Light-duty EV Infrastructure Program



- Administered by Bay Area Air Quality Management District
- Statewide program funding the purchase and installation of new Level 2 and DC Fast EV charging stations
 - Minimum of 50% of funds reserved for disadvantaged and low-income communities
 - Focus on closing geographic gaps in charging access
- \$5M in Volkswagen Environmental Mitigation Trust funding
- Solicitation period: May 11, 2021 July 15, 2021



California Electric Vehicle Infrastructure Project



- Funded by the California Energy Commission (CEC) and implemented by the Center for Sustainable Energy (CSE)
- Statewide program provides incentives for publicly accessible Level 2 and DC Fast EV charger installations
- Program total funding amount: \$124.9M available
 - Bay area results
 - Peninsula-Silicon Valley \$55.23M
 - Sonoma Coast/ Mendocino \$6.75M
 - Inland Counties (includes Napa, Solano) \$17.5M
 - Alameda County (Coming Q4 2021) \$14M





EV Fast Charge Program



PG&E

- \$22.4M in funding to install publicly accessible DC Fast EV charging infrastructure
- Additional \$25,000 available per charger for disadvantaged community sites
- Open to charging equipment vendors who apply of behalf of site hosts
- Program duration: 2020-2025

Community Choice Aggregators





Residential EV Charging Station Rebates

• \$1,000-\$5,000 towards purchase and installation of Level 2 EV charger



Free residential Level 2 home smart charger



Workplace and Multi-Unit Dwelling Rebates

• \$3,000 towards each Level 2 EV charger port for installation and hardware



Light-Duty EV Charger Incentive Block Grant



California Energy Commission

- \$500M awarded to two block grant implementers to design and implement light-duty EV charger incentive projects throughout CA
- Projects can fund Level 1, Level 2, and DC Fast chargers
- Solicitation period: April 12, 2021 June 11, 2021

Requested Action



Recommend the Board of Directors:

- Approve the Charge! Program rank list and recommended projects with proposed grant awards as shown in Attachment 1; and
- 2. Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.





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Bay Area Electric Vehicle (EV) Acceleration Plan

Mobile Source and Climate Impacts
Committee Meeting
June 24, 2021

Karissa White Staff Specialist kwhite@baaqmd.gov

Presentation Outcome



- Provide an update on the draft of the Air District's Bay Area Electric Vehicle (EV) Acceleration Plan
- Obtain Committee's feedback and comments on the plan



Presentation Outline



- Overview of the Acceleration Plan
- Plan Development and Release Timeline
- Bay Area EV Trends
- Market Research Data Collection Process
- Air District Goals
- Barriers and Recommendations

Presentation Requested Action



Informational item

 Seeking feedback and comments from Mobile Source and Climate Impacts Committee

Components of the Plan



- Executive Summary
- Background
- Current Bay Area EV Ecosystem
 - EV Adoption and Sales
 - Charging Infrastructure
 - CALGreen Codes
 - Local Reach Codes
 - Permit Streamlining
- Insights from Market Research and Surveys
 - Bay Area Residents
 - o Ride-Hail Drivers
 - Multi-Unit Dwelling Property Managers
 - Public Fleet Managers
 - Car Dealerships
- Accelerating EV Adoption
 - Barriers to EV Adoption
 - Recommendations
 - Advancing Equity in the EV Market
 - Air District Investments in Advancing Equity in the EV Market
- Conclusion
- Acknowledgements

Timeline







Review of 2013 Air District EV Plan (October 2018)



Assessment of Existing EV Data

(October – January 2018)



Stakeholder Consultation

(August – September 2019)



EV Market Research Study

(August 2019-May 2020)



Acceleration Plan Development

(June 2020-March 2021)





Acceleration Plan Draft Release (March 2021)



Webinar Presentation (April 2021)



Public Comment Period

(April 2021)



Board Review (May-June 2021)



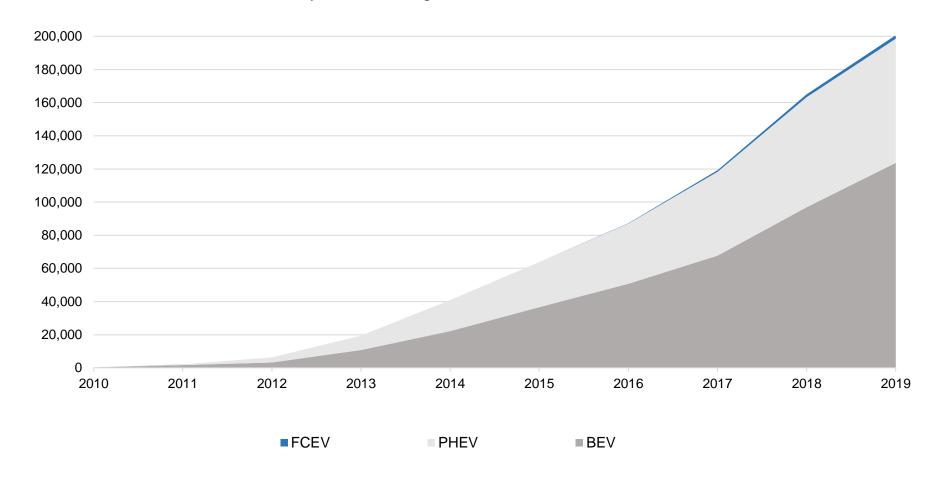
Final Acceleration Plan Release

(Underway)

Bay Area EV Registrations

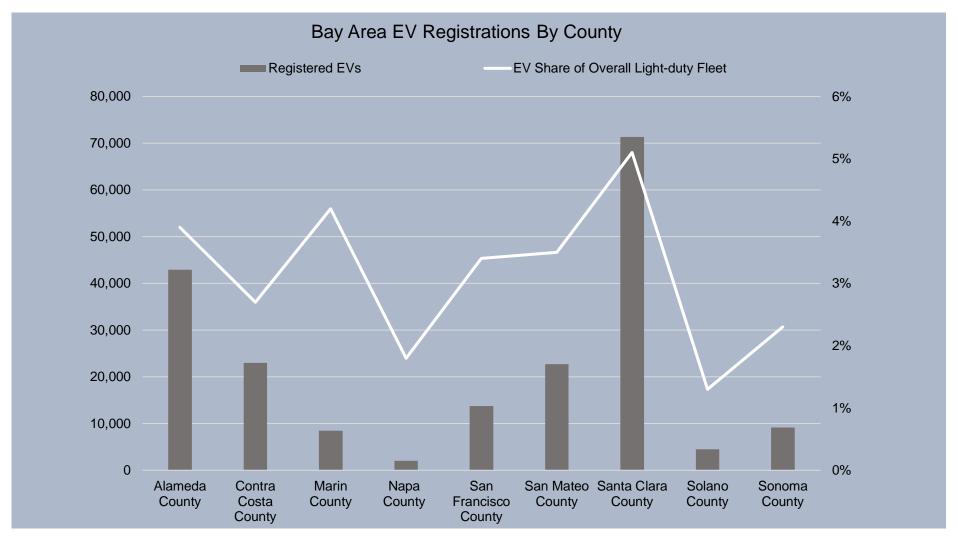


Bay Area EV Registrations Over Time



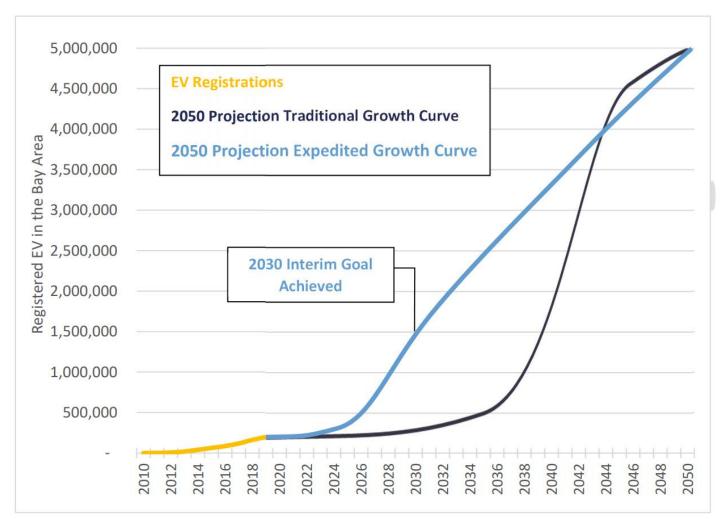
Bay Area EV Registrations, Cont'd





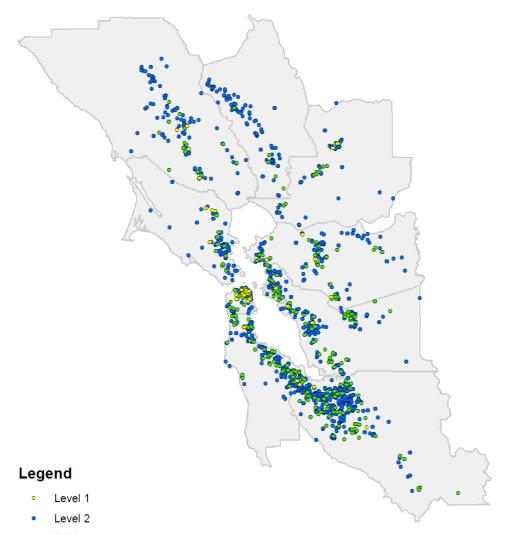
Bay Area EVs and Projected Increase to Meet 2050 Goal





Bay Area EV Charging Stations





11,530 publicly available charging ports (as of June 1st, 2021)

National Renewable Energy Laboratory projects 20,000 publicly available charging ports are needed in the Bay Area to support current EV drivers

DC Fast

Stakeholder Outreach



Participants

- Automotive manufactures
- Community choice aggregators
- Elected officials
- Electric vehicle service equipment (EVSE) technology
- Government organizations
- Ride-hailing companies
- School districts
- Software companies
- Universities

North Bay	San Francisco	East Bay	South Bay	Webinar
August 13 th , 2019	September 4 ^{th,} 2019	August 21st, 2019	September 10 th , 2019	September 12 th , 2019
10am-1pm	1pm-3pm	10am-12pm	10am-1pm	10am-12pm
Sonoma Clean	Lyft	Contra Costa County	Prospect SV	Zoom Video
Power	185 Berry St #5000,	50 Douglas Drive,	1608 Las Plumas Ave,	Conferencing
50 Santa Rosa Ave	San Francisco, CA	Second Floor	San Jose, CA 95133	Registration URL:
5th Floor, Santa	94107	Conference Room,		https://zoom.us/mee
Rosa, CA 95404	(Danama Danam)	Martinez, CA 94553		ting/register/3c7d1e
	(Banana Room)			7e0b3383f48c34be5
				<u>db4a05ad8</u>
*10 Attendees	*40 Attendees	*15 Attendees	*6 Attendees	*37 Attendees

Market Research and Surveys



Data Collection Process



Air District Goals



- Establish an interim goal of 1.5 million ZEVs in the Bay Area by 2030
- 100% of Bay Area Cities and Counties enact EV Charging Station Permitting Streamlining procedures and policies by 2022
- Increase Air District support for low-income and frontline communities
- Seek more ambitious CALGreen EV ready parking space standards in the 2022 Title 24 Code Update (for both existing and new buildings)
- 100% of Bay Area Cities and Counties enact EV ready reach codes by 2030

Barriers to EV Adoption



Vehicle Technology

- Range
- Battery degradation
- Diversity of models

Charging

- Public charging
- Existing building upgrades
- Permitting
- Grid capacity

Economics

- Purchase price (internal combustion engine vs EV)
- Complicated grants
- Funding for grant programs
- Cost of public charging
- Savings realized over time

Perceptions and Behavior

- Misinformation about technology
- EVs are for the wealthy
- Lack of dealership EV knowledge
- Inconsistent data collection
- Limited smart charging

Recommendations



Policy & Legislation:

Financial Incentives & Rebates:

Outreach & Education:

Charging:

- Seek more ambitious CALGreen EV ready parking spaces standards in the 2022 Title 24 Code Update (for both existing and new buildings)
- Invest in workforce training to retrain auto body workers

- Link EV and EVSE incentive programs for multifamily residents to ensure charging access
- Provide training for incentive program staff on how to bring a racial equity lens into their work
- Use community specific cultural media channels to share information
- Provide support to stack rebates
- Coordinate with other grant programs on applicant demographic data to identify underserved groups

- Develop a more accurate count of public EVSE in CA
- Increase EVSE signage along major highways
- Develop an estimate of home chargers in California to assess the share of EV drivers that charge at home versus on the go or at work.

Air District Recommendations



- 1. Work closely with frontline communities.
- 2. Empower influential members of frontline communities.
- 3. In outreach, use messages tested through surveys/focus groups.
- 4. Prioritizing EV charging installations at or near multi-family buildings.
- 5. Identify additional funding sources for the Bay Area.

Feedback Requested/Questions



