



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 3

Update on Electric Vehicle (EV) Incentive Programs

Technology Implementation Office
Steering Committee
May 15, 2020

Anthony Fournier
Technology Implementation Officer

Light-Duty EV Programs



Clean Cars for All



High Mileage
Fleets



Charge!



Bay Area EV
Acceleration Plan

Clean Cars for All (CCFA) Program



Current Options

Electric Vehicles



Home Charger



Portable Charging



Future Options

Public Transit



Bike & Car Share



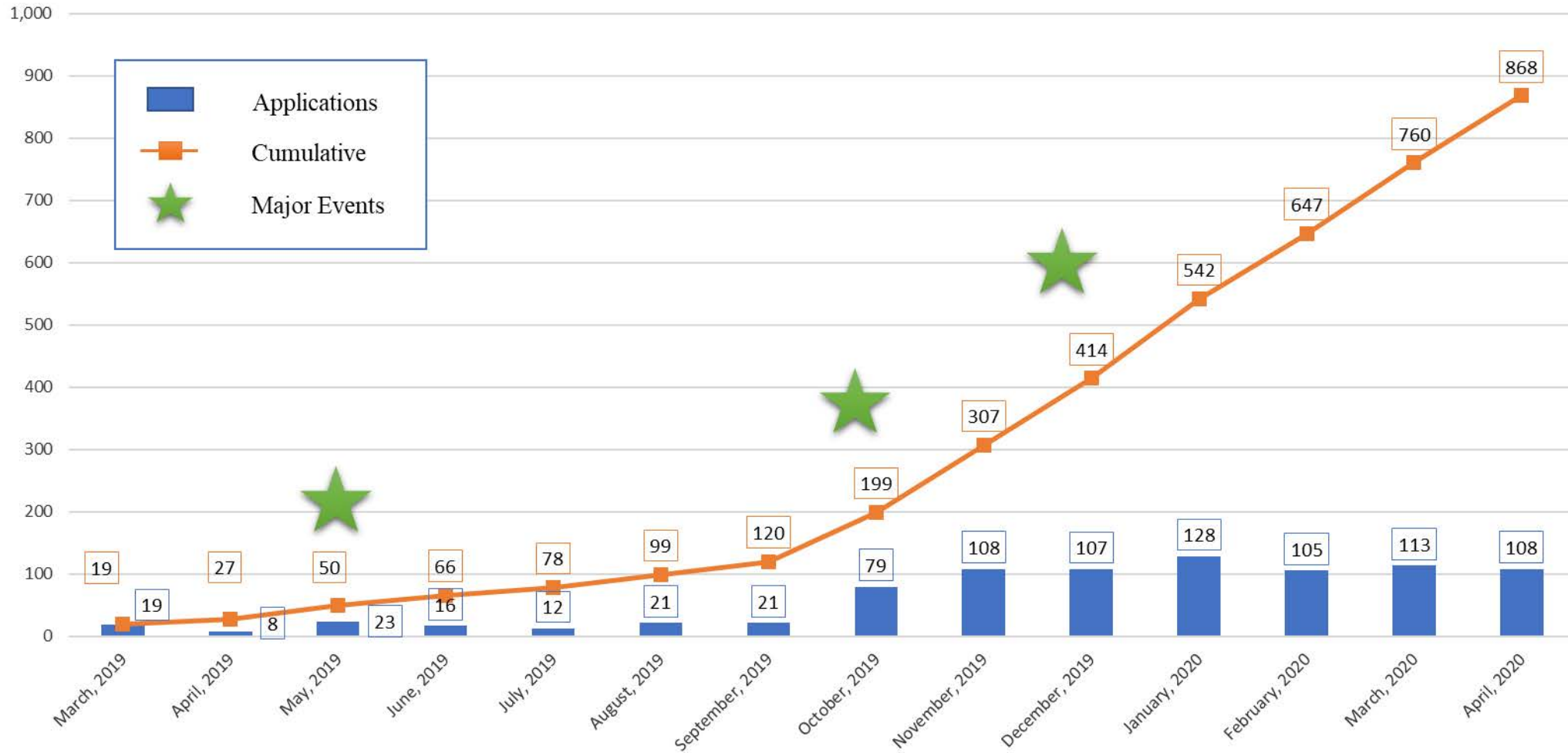
Public EV Charging



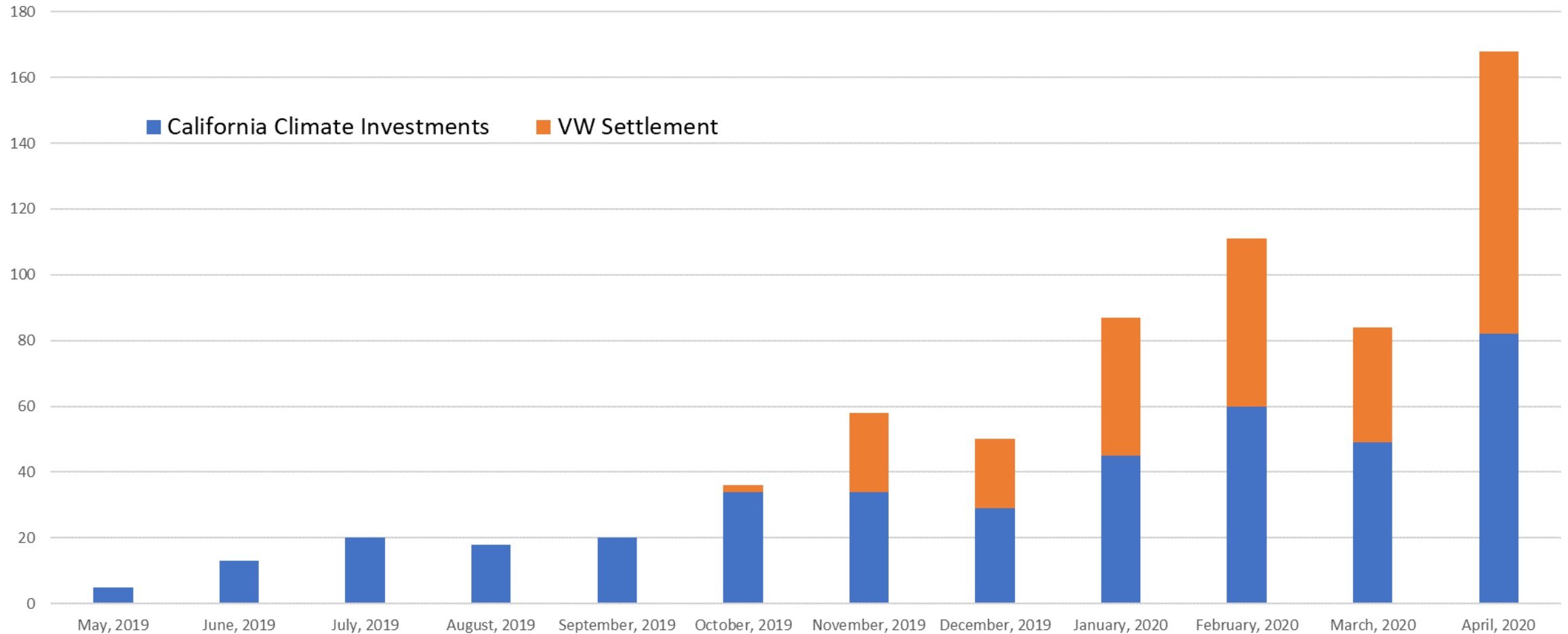
E-Bikes



Application Trends



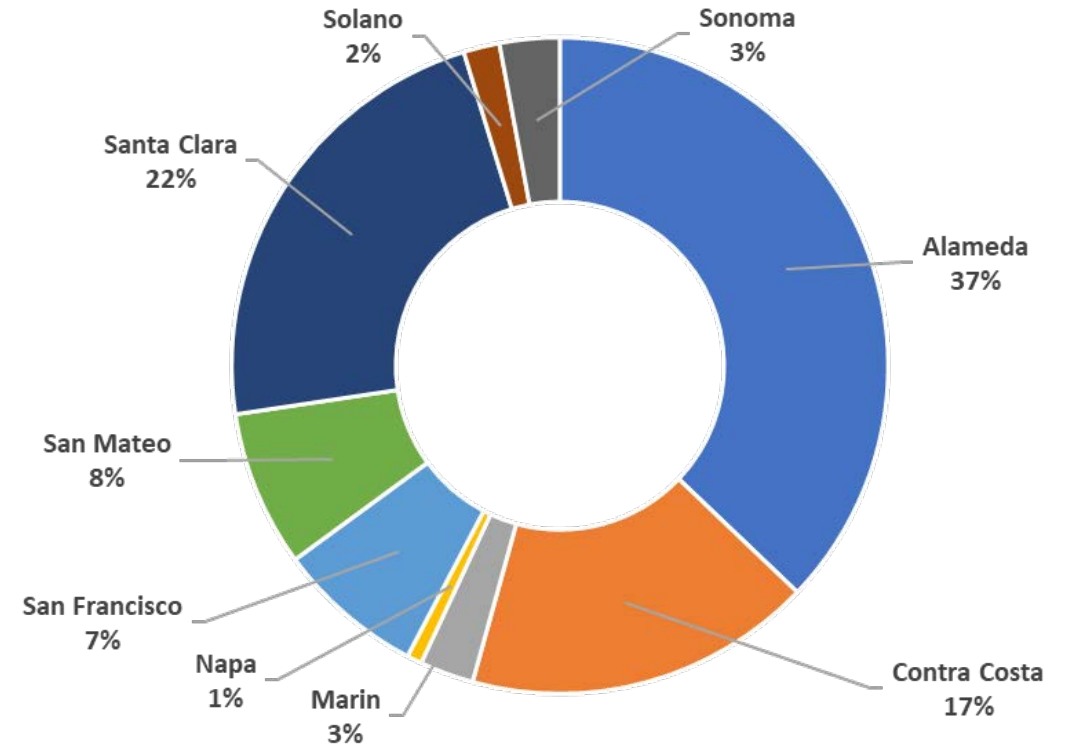
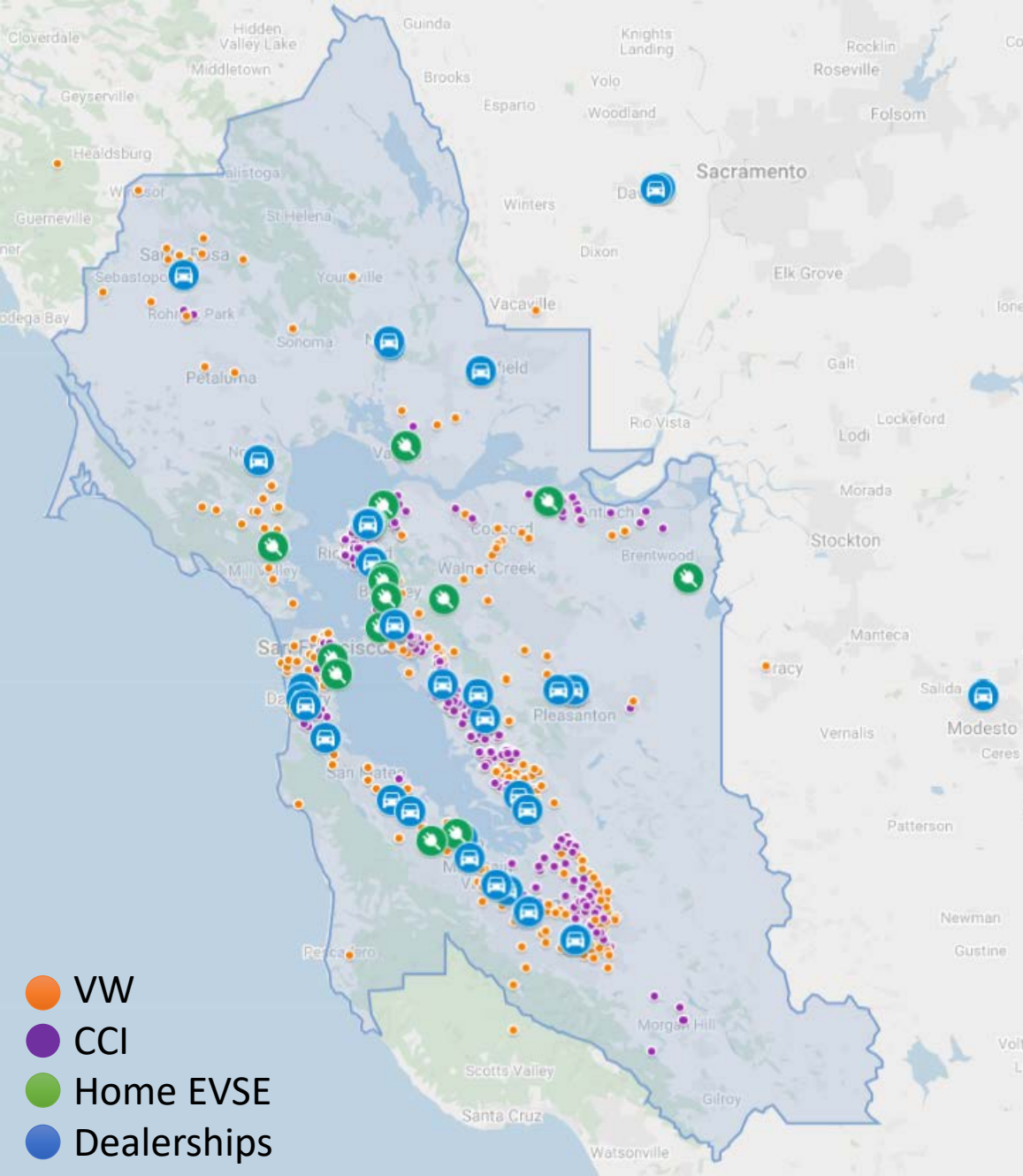
Grants Awarded by Month



Geographic Distribution



- 676 Total Awards (\$5.74 million)
- 16 home charging stations
- 47 participating dealerships





High Mileage Fleets



Incentive funding to offset the purchase or lease of Zero Emission Vehicles (ZEVs) for very high mileage fleets

\$5,000



41,000 miles/year

Solicitation: Summer, 2020

Fiscal Year Ending (FYE) 2019 Charge!



Solicitation Period: October 25, 2018 – June 30, 2019

76
applications
received

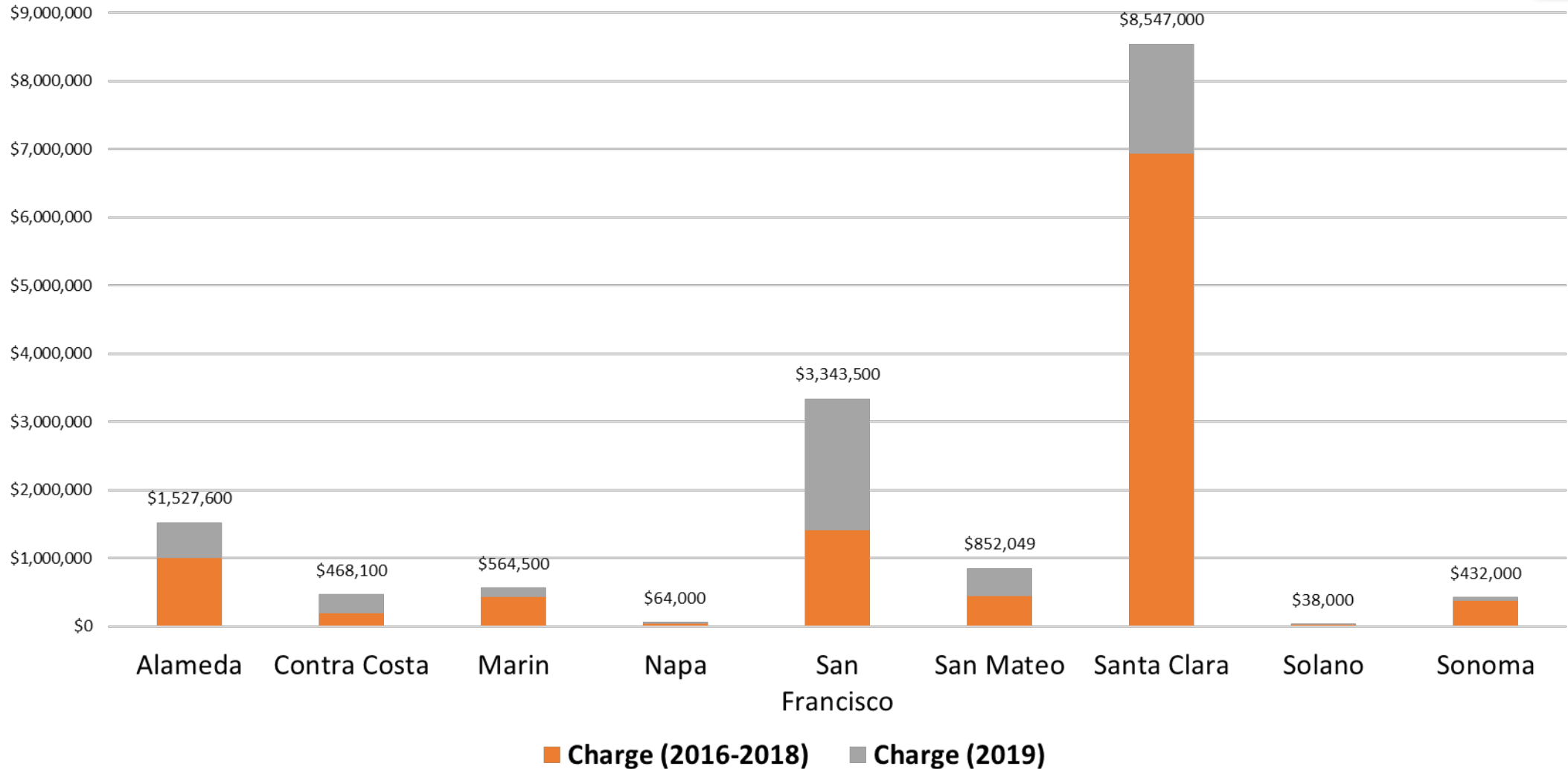
\$6.6 million
requested

52%
Community Air Risk
Evaluation (CARE)
locations

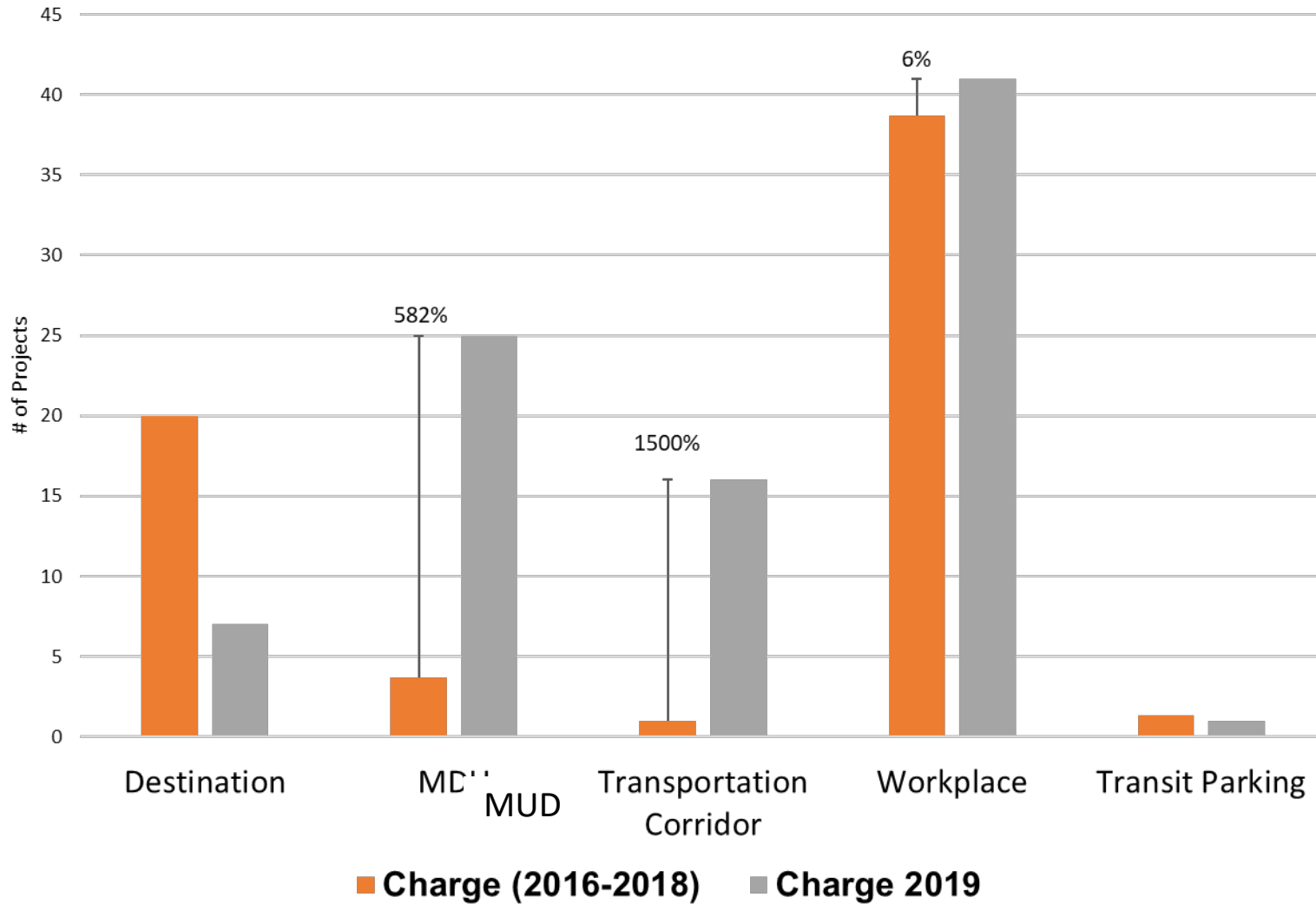
Supporting 847 Level 2, 70 DC Fast charging stations



Charge! Geographic Distribution



Charge! Facility Types



Highlights

Multi-unit Dwelling (MUD)

582%



Transportation Corridors

1,500%

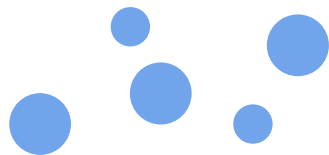


EV Market Research and Surveys



- Understand majority adopters to move market beyond early adopters: apartment residents, low-income households, fleet managers, ride hailing drivers, property owners, and dealership sales personnel
- Understand priorities and barriers of key market actors that affect EV market and infrastructure

Anecdotes



Data



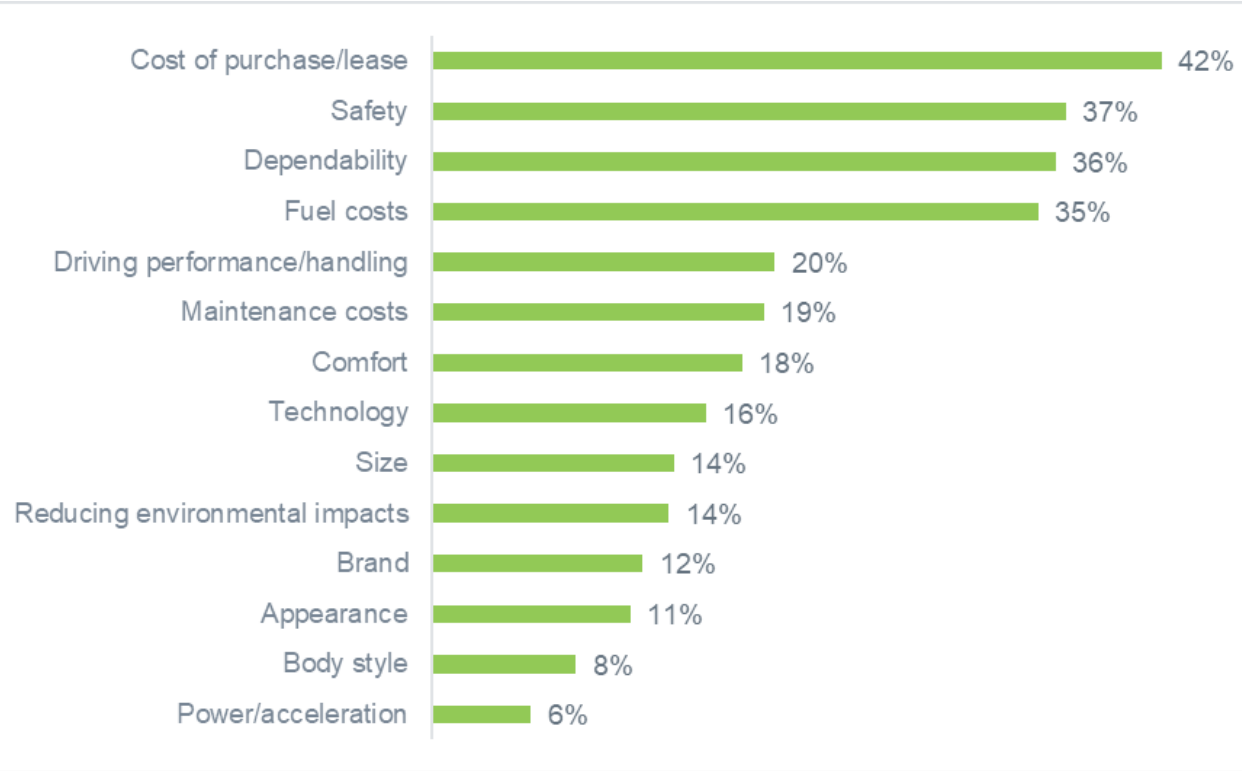
Outreach
Messages



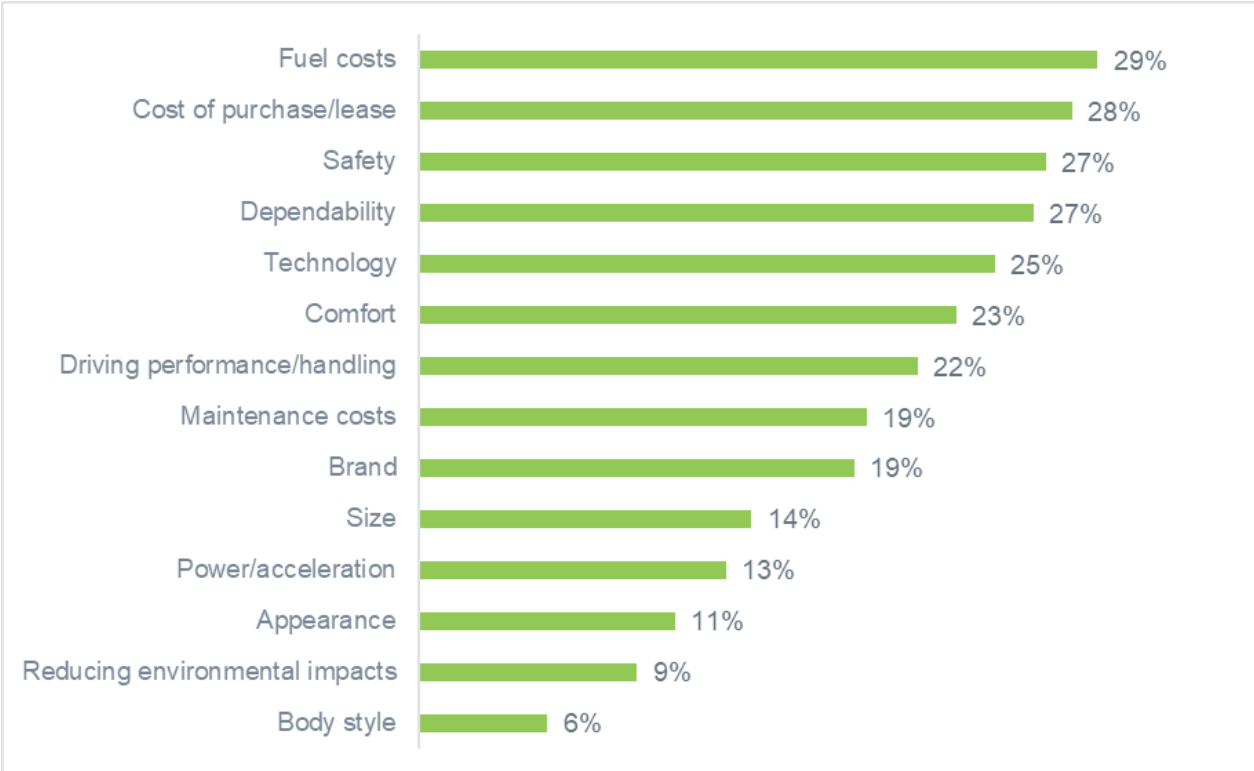


Most Important Factors in Car Buying?

Bay Area Residents



Bay Area Ride-Hail Drivers



What are Your Biggest Concerns Related to Driving an EV?



Bay Area Residents

- Major concerns: EV battery range, home and public EV charging, and EV repair costs
- Minor concerns: availability of EV models or body styles, EV safety record

Bay Area Ride-Hail Drivers

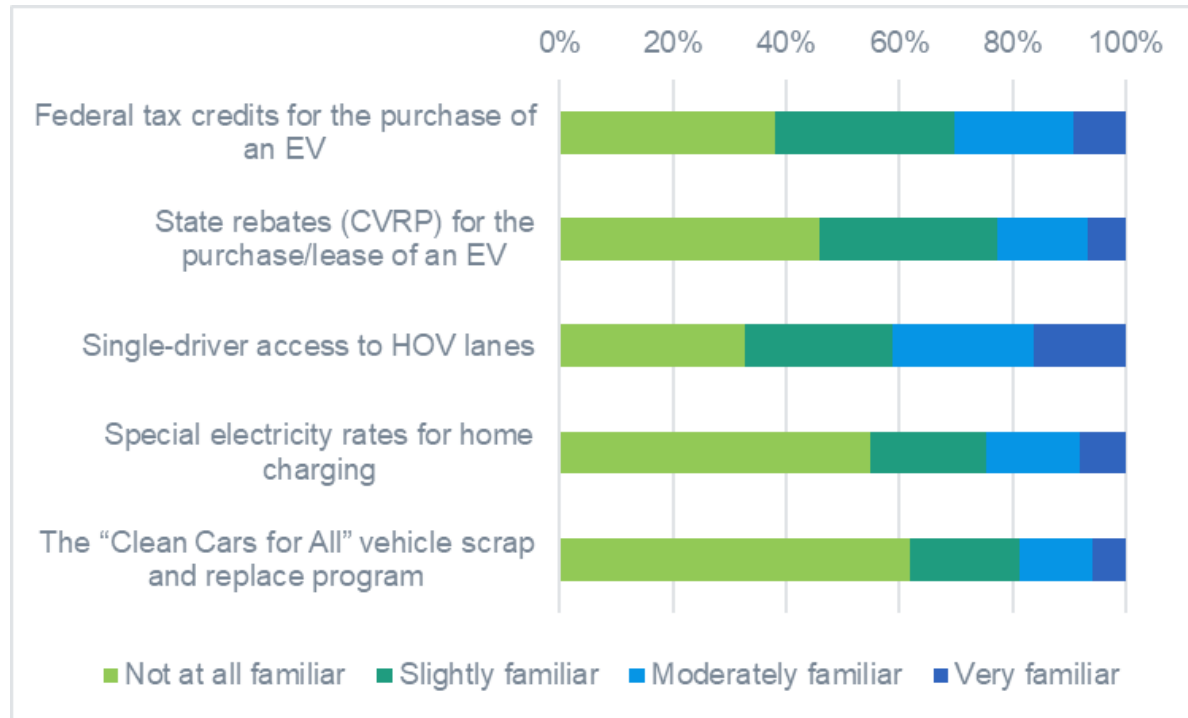
- Major concern: EV battery range, home and public EV charging, and EV repair costs
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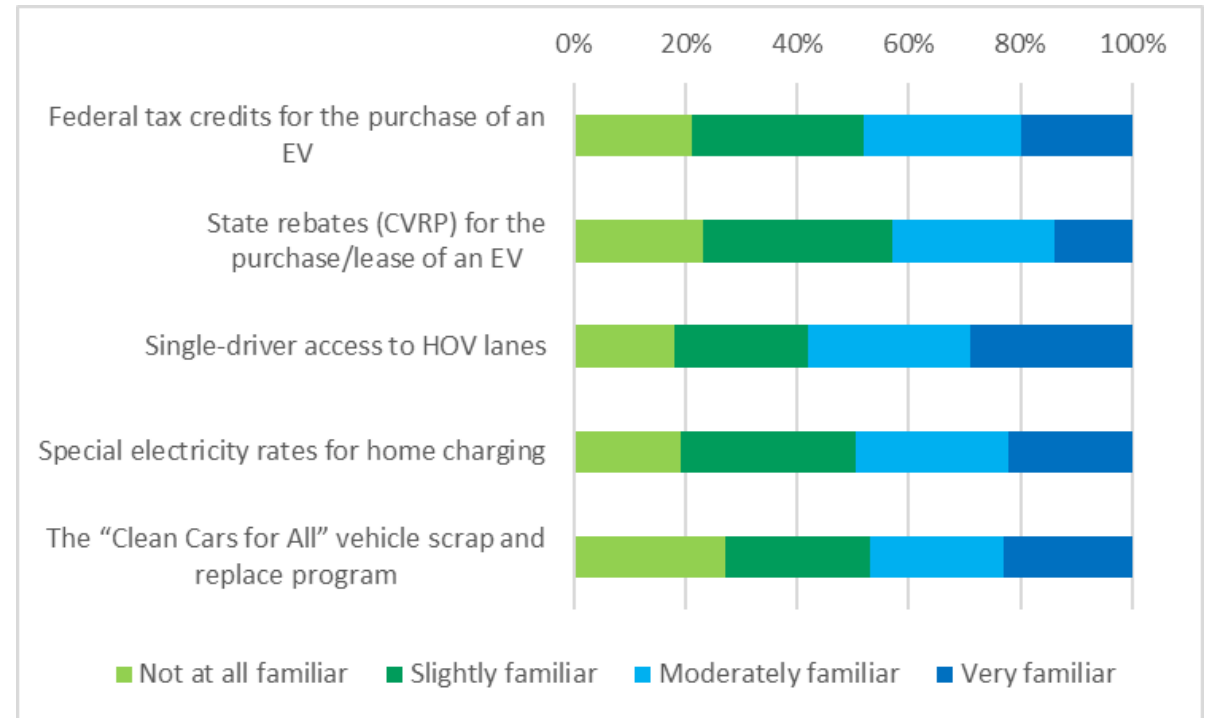
Familiarity with EV Incentives



Bay Area Residents



Bay Area Ride-Hail Drivers



How Incentives Influence Decision Making



Bay Area Residents

- Discounts off the price of a new EV
- Tax credit received when taxes are submitted
- Attractive financing for the purchase of an EV
- Discounts off the price of a used EV

Bay Area Ride-Hail Drivers

- Discounts off the price of a used EV
- Discounts on home charging
- Free or reduced charging vouchers
- Discounts off the price of a new EV

Questions for the Steering Committee



- Are there additional outreach channels we should pursue to raise awareness of the CCFA program?
- Are you aware of any new/innovative EV charging technologies that could be integrated into Charge!?
- Is there research that shows how EV chargers support mode-shift behavior and encourage EV adoption?
- Are there best practices or keys to success to ensure that the EV Acceleration Plan and market research is shared and used broadly?



Thank you





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AGENDA: 4

Climate Tech Finance Program Update

Technology Implementation Office
Steering Committee
May 15, 2020

Derrick Tang
Manager

Program Overview



Working Capital for Business Growth

*Loan guarantees of
up to \$2.5M or 90%*

Loans for Buying Climate Tech

*Low-interest loans of up
to \$30M over 30 years*

Program Status



Relevant climate projects identified
From targeted outreach to 450 Bay Area organizations



Loan guarantees approved by the Air District
Currently under review by banks



Executed loans or loan guarantees

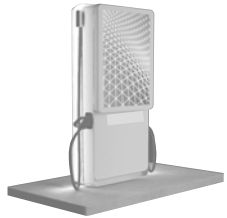
Pre-Funded Projects



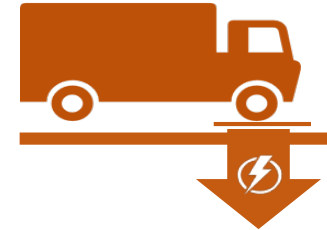
Residential Battery Systems
with Integrated Demand-
Response



Solar Microgrids



Battery-Boosted
Electric Vehicle (EV) Fast
Charger



In-Road Energy
Recovery at Toll Gates



Hydrogen Fuel Cell Ferry
(Oakland \leftrightarrow San Francisco)



Low-Carbon Aggregate
for Concrete

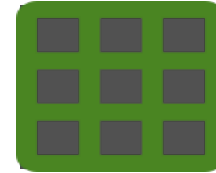
Total Air District Commitment	\$1 million
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Total Loan Amount Supported	\$15 million
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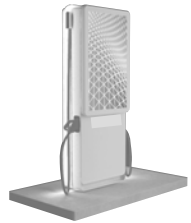
Pre-Funded Projects: First-Year Impact



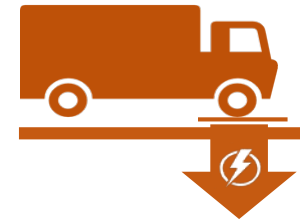
1,000 residential battery systems



10 renewable microgrids on municipal buildings



10 battery-boosted EV fast chargers



20 road plates generating electricity at Port of Oakland



First-of-its-kind all-hydrogen fuel cell ferry



400,000 tons of aggregate in concrete

Total Greenhouse Gas Reductions

24,000 MTCO₂

Pre-Funded Projects: Five-Year Impact



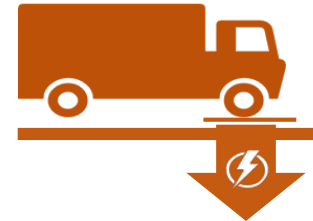
4,000 residential battery systems



150 renewable microgrids on municipal buildings



100 battery-boosted EV fast chargers



60 road plates generating electricity



10 all-hydrogen fuel cell ferries



2,600,000 tons of aggregate in concrete

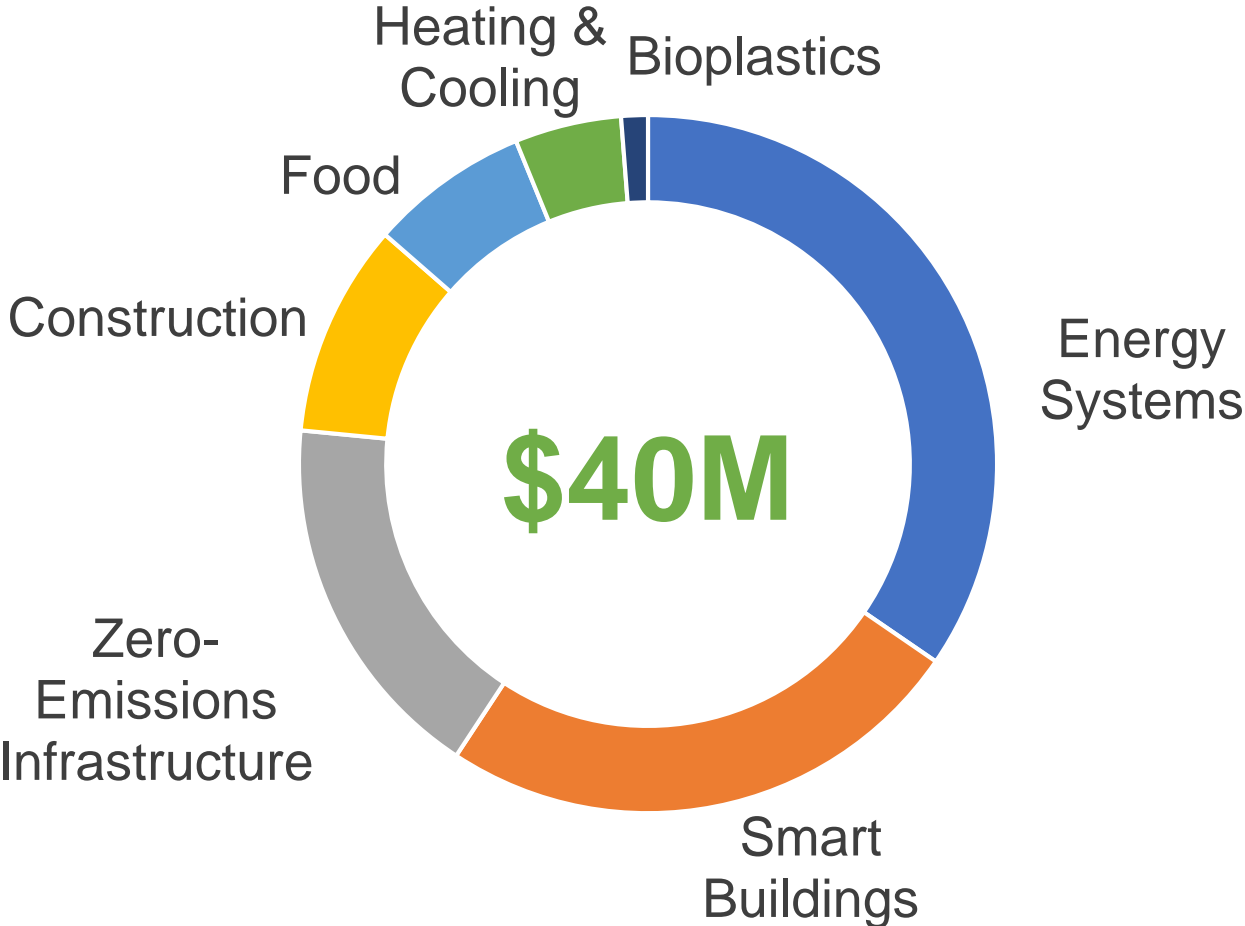
Total Greenhouse Gas Reductions

500,000 MTCO₂

Climate Project Pipeline



Projects Currently Under Review



Total Demand for Climate Loans Identified This Year

>\$400M



Expanding the Climate Project Pipeline

- Continuing to build out customer relationship database
- Working with contractor for marketing and product development services
- Hosting virtual Climate Tech Marketplace this summer

CLIMATE
TECH
FINANCE

Technology Technology Industry Organization

Customer Relationship

Engagement

Organization	Date	Engagement Summary	Date for Next Outreach	Notes for Next Outreach
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Climate Catalyst Revolving Loan Fund



- Governor proposed \$1 billion green loan fund for climate projects
- To be administered by IBank with direction from Strategic Growth Council
- Air District and IBank are collaborating on potential design of fund
 - Lower interest rates
 - Emerging technologies
 - Develop lending guidelines to unlock private capital and expand borrowing for small businesses



Partnership & Growth Opportunities



- Expand Air District's role as brokerage for climate projects
 - Outreach to potential borrowers
 - Technical evaluation/certification of projects
- Secure funding to further reduce interest rates, increase access to working capital, and offer additional funding mechanisms

Questions & Feedback



Thank You