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
Grants Awarded by Month

- California Climate Investments
- VW Settlement

May 15, 2020
Geographic Distribution

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

Highlights

Multi-unit Dwelling (MUD)  582%
Transportation Corridors  1,500%

Technology Implementation Office Steering Committee
May 15, 2020
Bay Area Air Quality Management District
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
Most Important Factors in Car Buying?

**Bay Area Residents**

- Cost of purchase/lease: 42%
- Safety: 37%
- Dependability: 36%
- Fuel costs: 35%
- Driving performance/handling: 20%
- Maintenance costs: 19%
- Comfort: 18%
- Technology: 16%
- Size: 14%
- Reducing environmental impacts: 14%
- Brand: 12%
- Appearance: 11%
- Body style: 8%
- Power/acceleration: 6%

**Bay Area Ride-Hail Drivers**

- Fuel costs: 28%
- Cost of purchase/lease: 28%
- Safety: 27%
- Dependability: 27%
- Technology: 25%
- Comfort: 23%
- Driving performance/handling: 22%
- Maintenance costs: 19%
- Brand: 19%
- Size: 14%
- Power/acceleration: 13%
- Appearance: 11%
- Reducing environmental impacts: 8%
- Body style: 6%
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
- Minor concerns: availability of EV models or body styles, EV safety record, EV charging costs
Familiarity with EV Incentives

Bay Area Residents

- Federal tax credits for the purchase of an EV
- State rebates (CVRP) for the purchase/lease of an EV
- Single-driver access to HOV lanes
- Special electricity rates for home charging
- The “Clean Cars for All” vehicle scrap and replace program

Bay Area Ride-Hail Drivers

- Federal tax credits for the purchase of an EV
- State rebates (CVRP) for the purchase/lease of an EV
- Single-driver access to HOV lanes
- Special electricity rates for home charging
- The “Clean Cars for All” vehicle scrap and replace program
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
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

26 Technical Discovery

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

6 Pre-Funded

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

0 Funded

Executed loans or loan guarantees
Pre-Funded Projects

- Residential Battery Systems with Integrated Demand-Response
- Battery-Boosted Electric Vehicle (EV) Fast Charger
- Hydrogen Fuel Cell Ferry (Oakland ↔ San Francisco)
- Solar Microgrids
- In-Road Energy Recovery at Toll Gates
- Low-Carbon Aggregate for Concrete

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

- 1,000 residential battery systems
- 10 battery-boosted EV fast chargers
- First-of-its-kind all-hydrogen fuel cell ferry
- 10 renewable microgrids on municipal buildings
- 20 road plates generating electricity at Port of Oakland
- 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
- 100 battery-boosted EV fast chargers
- 10 all-hydrogen fuel cell ferries
- 150 renewable microgrids on municipal buildings
- 60 road plates generating electricity
- 2,600,000 tons of aggregate in concrete

Total Greenhouse Gas Reductions: 500,000 MTCO₂
Climate Project Pipeline

Projects Currently Under Review

- Energy Systems
- Smart Buildings
- Zero-Emissions Infrastructure
- Construction
- Food
- Heating & Cooling
- Bioplastics

Total Demand for Climate Loans Identified This Year

>$400M

$40M

Projects Currently Under Review

Energy Systems

Bay Area Air Quality Management District

Technology Implementation Office Steering Committee
May 15, 2020
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 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