Light-Duty Electric Vehicle Update

Technology Implementation Office (TIO) Steering Committee Meeting
May 13, 2022

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Presentation Outcome

- Provide information on Electric Vehicle (EV) adoption in the Bay Area
- Provide an update on Bay Area Clean Cars for All (CCFA) Program
- Provide an overview of other EV incentive programs available to Bay Area residents
Presentation Outline

• Background: Bay Area Electric Vehicle (EV) Goals
• Status of EV adoption in the Bay Area
• CCFA Program update
• Next Steps and Challenges
Requested Action

None. Informational item only.
Background: Bay Area EV Goals

**Electric Vehicle Trends and Goals**

- **11,917 public charging ports currently**
- **30,000 public charging ports needed (NREL)**
- **In 2020 3.9% of the Bay Area fleet were EVs, with a goal of 90% by 2050**
- **In 2022 16.3% of new sales in CA were EVs**

**Public charging ports**
- 16% DC Fast
- 83% Level 2
- 1% Level 1

**Progress towards our EV Adoption Goals**
- 2015: 71,672
- 2022: 383,348
- 2030: 1.5 million
- 2050: ~5 million
Bay Area EVs and Projected Increase to Meet 2050 Goal

![Graph showing EV registrations over time with projected growth curves for 2050.]
EV Adoption in the Bay Area

Bay Area Total: 383,348

CA Total: 1,135,387

Total EVs in Bay Area

Total EVs in California
Program Overview

**Income-qualified residents* who retire an older vehicle**

**Advanced Technology**
- Purchase or lease, new or used
- Hybrid, plug-in hybrid, battery electric, and fuel cell electric vehicles
- Home charger installation or portable charger for plug-in hybrid and battery electric vehicles

**Mobility Options**
- PEX pre-paid debit card
  - Public transit (Clipper Card)
  - Electric bicycles
  - Carsharing (future option)

* ≤400% Federal Poverty Level
**Clean Transportation Options**

<table>
<thead>
<tr>
<th>Option</th>
<th>Incentive Amount Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hybrid</td>
<td>$5,000 - 7,500</td>
</tr>
<tr>
<td>Plug-In Hybrid</td>
<td>$5,500 - $9,500</td>
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<tr>
<td>Battery Electric</td>
<td>$5,500 - $9,500</td>
</tr>
<tr>
<td>Fuel Cell Electric Vehicle</td>
<td>$5,500 - $9,500</td>
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<tr>
<td>Mobility Option</td>
<td>$5,000 - $7,000</td>
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</tbody>
</table>

Additional Notes:
- Plug-In Hybrid: Plus $2,000 rebate for charger
- Battery Electric: Plus $2,000 rebate for charger

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**TIO Steering Committee Meeting**
May 13, 2022

*Bay Area Air Quality Management District*
3,698 applications submitted through April 11, 2022

Application Trends

CCFA Applications Submitted per Month

TIO Steering Committee Meeting
May 13, 2022

Bay Area Air Quality Management District
CCFA Program Stats

- Program launched March 2019
- Currently open to 76 disadvantaged zip codes
- Budget - $42M
  - CCI, VW, AQIP, TFCA
- Awarded
  - $23.6M
  - 2,819 grantees
    - 35 Mobility Option
    - 175 EVSE

Awarded Clean Transportation Options

- BEV 26%
- PHEV 50%
- FCEV 2%
- Hybrid 21%
- Mobility Option 1%
## Other Incentive Programs

<table>
<thead>
<tr>
<th>Other Programs</th>
<th>New EV</th>
<th>Used EV</th>
<th>EV Charging</th>
<th>Stackable with CCFA?</th>
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<tbody>
<tr>
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<tr>
<td>Clean Vehicle Rebate Project</td>
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<tr>
<td>Clean Vehicle Assistance Program</td>
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<td>Driving Clean Assistance Program</td>
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<tr>
<td>MCE My Community, My Choice</td>
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<tr>
<td>Peninsula Clean Energy</td>
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<td>Used EV Rebate Program</td>
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<tr>
<td>Federal Tax Credit</td>
<td>Up to $7,500</td>
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<td>X</td>
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</table>
Next Steps and Challenges

• Increased support for underserved communities and targeted outreach
• Statewide CCFA Program
• Expand authorized dealership network
• EV supply chain issues leading to vehicle shortages and high costs
• Phase out of conventional Hybrid
Feedback Requested

• Discussion of CCFA Program and its role in achieving Bay Area goals.
Electric Vehicle Infrastructure

Technology Implementation Office (TIO) Steering Committee Meeting
May 13, 2022

Danny Fung
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Presentation Outcome

• The Committee will receive an update on publicly available electric vehicle (EV) charging stations in the Bay Area
Presentation Requested Action

• None, informational item.
Presentation Outline

- Provide an update on publicly available EV charging stations in the Bay Area
- Discuss the Air District’s the Charge! Program
- Discuss StopWaste Technical Assistance and ongoing outreach efforts
- Questions
**BAY AREA**

**ELECTRIC VEHICLE TRENDS AND GOALS**

11,917 public charging ports currently

30,000 public charging ports needed (NREL)

In 2020 3.9% of the Bay Area fleet were EVs, with a goal of 90% by 2050

In 2022 16.3% of new sales in CA were EVs

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**Public charging ports**

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**Progress towards our EV Adoption Goals**

- 2015: 71,672
- 2022: 383,348
- 2030: 1.5 million
- 2050: ~5 million
• Total public EV charging ports as of April 2022: ~11,939
  • Source: U.S. Department of Energy's Alternative Fuels Data Center
Existing Bay Area EV Infrastructure Cont’d

Publicly Available Charging Stations in the Bay Area

Publicly Available Charging Stations in West Oakland (AB 617 Community)

Publicly Available Charging Stations in Vallejo (Future Community for AB 617 Consideration)

Publicly Available Charging Stations in Richmond/San Pablo (AB 617 Community)

Publicly Available Charging Stations in East Oakland (AB 617 Community)
• Since 2016, the Charge! Program has provided grant funding for publicly accessible EV charging in the Bay Area.
• Open to public agencies and private businesses.
• Charging location types:
  - Workplace
  - Destination
  - Transportation corridors
  - Transit parking
  - Multi-unit dwellings
$7M available from Transportation Fund for Clean Air and Mobile Source Incentive Fund

Solicitation period: December 7, 2021 – March 1, 2022

Funding priorities:
- AB 617 communities
- Affordable and below market-rate housing
- Disadvantaged & low-income communities
- Environmental justice communities
- Multi-unit dwellings (MUDs)
- Low charger density regions
• Competitive/ranked solicitation
• Currently evaluating and scoring projects
StopWaste Pilot Overview

• Air District’s Bay Area EV Acceleration plan performed market research to better understand barriers preventing property managers and landlords from installing EV charging at MUDs.

• Barriers to installing EV chargers at MUDs include:
  • A lack of time to research EV charging.
  • Uncertainty about cost and upgrade requirements.
  • Suggested that technical assistance, including site assessments, would help increase installations of EV charging at MUDs.
StopWaste Pilot Cont’d

• The Air District contracted with Alameda County Waste Management Authority (StopWaste) to perform outreach and technical assistance for MUDs in West Oakland and Richmond/San Pablo.

• Experience has shown that having existing relationships and employing contractors from these communities increases the ability to integrate local knowledge and meet community needs.

• StopWaste
  • Has connections with existing multi-family building owners.
  • Was the lead implementer for the BayREN multifamily programs, which includes a rebate and technical assistance program for energy efficiency projects.
  • ECO (sub-contractor) has experience working in West Oakland and Richmond AB 617 communities.
Additional Efforts

• The Air District has recently applied for grant funding to support EV charger installations at MUDs.
  o If awarded, the Air District will work with partner organizations and community groups to identify project sites to install EV chargers across the Bay Area, specifically in Oakland, Richmond/San Pablo, and Vallejo.
    - Reduce out-of-pocket expenses for MUD owners and residents.
  o Goal is to install EV chargers solely at MUDs with affordable housing units to serve disadvantaged and low-income communities.
  o Assist residents with applying for Clean Cars for All Program grant funding.
Feedback Requested/Questions

1. What EV charging needs do you see in areas that you frequently visit?
2. What are the priority areas in your communities?
3. Do you have recommendations for outreach and engagement?
4. Do you have thoughts about the future of EVs and EV charging infrastructure?
Climate Tech Finance
Statewide Expansion

Technology Implementation Office (TIO) Steering Committee Meeting
May 13, 2022

Tamara Kohne
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Presentation Outcome

- The Committee will receive an update on the possible statewide expansion of the Climate Tech Finance program
• None; informational item
Presentation Outline

- Program Overview
- Impact to Date
- Potential Statewide Expansion
- Program Marketing
Mission
Reduce greenhouse gases (GHGs) by increasing access to capital to accelerate climate technology commercialization

Tools

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 Impacts

Total Loan Amount ($M)

- Funded with Guarantee: $15
- Completed BAAQMD Impact Evaluation: $28
- Active Lender Discussions: $65
- Seeking Financing in 6-18 Months: $80
Program Impacts Cont’d

Technology Sectors

- Mobility 32%
- Energy 44%
- Circular Economy 21%
- Climate Advocacy 3%

Projected GHG Reductions (Metric Tons CO2e)

- 2021: -1,554
- 2022: -6,124
- 2023: -35,195
- 2024: -173,855
- 2025: -655,570
- 2026: -1,675,999
Potential Statewide Expansion

California Climate Tech Finance

- California programs slated to receive ~$900M from State Small Business Credit Initiative (SSBCI)
- Our banking partner (IBank) will need to facilitate large volume of loans
- Likely to enhance loan guarantee beyond current $2.5M max
- Climate Tech Finance is IBank’s primary climate program
- Discussions of fee sharing with IBank to support Climate Tech Finance statewide
Potential Statewide Expansion Cont’d

California Climate Tech Finance

• Robust pipeline of Bay Area and California entrepreneurs
  • Nearly half of pipeline has presence outside Bay Area

• Prominent lenders participating in the program

Pipeline Volume by Region ($M)

- Bay Area: $73.20
- California: $18.75
- Nationwide: $37.50
Program Marketing

• New Climate Tech Finance website: ctf.baaqmd.gov

• Salesforce CRM implementation

• Outreach Campaign to identified referral networks
Feedback Requested

• Discussion of statewide expansion opportunities for Climate Tech Finance