Expanding EV Market Access in Disadvantaged Communities

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Introduction
• 4 of 10 Californian’s are subject to increased health risks.
• Transportation is California’s largest source of Green House Gas (GHG) emissions
• Negative effects disproportionately concentrated in low-income, disadvantaged communities (DAC)
• Electric Vehicle (EV) mass adoption is the long term goal
• Need mechanisms, opportunities to encourage the 99% to adopt cleaner transportation options

Center for Sustainable Energy (CSE)

Building Performance
Clean Transportation
Distributed Generation
Energy Efficiency
Energy Storage
Renewable Energy

CSE Electric Vehicle Activities

Incentives Design & Administration
Consumer & Dealer Outreach
Stakeholder Engagement
Fleet Assistance & Clean Cities
PEV, Alt.-Fuel, & ZEV Planning & Implementation
2nd Life Battery Research & Vehicle-Grid Integration

Outline
1. Summary of Legislative Directives
2. The EV Market
3. Response: Equity Initiatives & Programs
4. Lessons learned

Legislative Background
• AB 32: CA Global Warming Solutions Act (2006)
  - Codified a mandate to reduce California’s greenhouse gas emissions to 1990 levels by 2020.
  - Established a Cap & Trade program
  - Established the Green House Gas Reduction Fund (GGRF)
  - Money to be reinvested in communities
• SB 535: Disadvantaged Community Investment Plan (2012)
  - Required methodology to identify DACs
  - Set target for GGRF funds to benefit DACs
  - Set ground rules for agencies working in DACs
• SB 1275: Charge Ahead California Initiative (2014)
  - One million EVs on the road by 2023, and ensure low-income communities have access to and direct benefits from EVs.
  - Directs ARB to establish an income criteria for electric car rebates and to create equity programs
  - EVRF Plus-Up Pilot Program
Identifying Disadvantaged Communities

- Cal Enviro Screen Scoring Tool (CES)
- Combined measure of exposure & pollution factors and socio demographic indicators of at risk communities
- 20 total factors
- Pollution & Environmental Factors:
  - Solid Waste Facilities
  - Traffic Density
  - Ozone Concentration
- Population Characteristics
  - Poverty
  - Unemployment

- Census Tracts in Top 25% percentile of CES Index classified as disadvantaged communities

Source: Office of Environmental Health Hazard Assessment
http://oehha.ca.gov/zej/ces2.html

Clean Vehicle Adoption through CVRP

Where are ZEVs Located? (Percent Change)

Highest volume counties:
1. Los Angeles
2. Santa Clara
3. Orange
4. San Diego
5. Alameda

Where are ZEVs Located? (Percent Change)

Disadvantaged Communities
- 6.5% of total rebates in 2014
- 71% increase in rebates allocated to DACs in 2014
- 49% increase in the rest of California

CVRP Equity Team

Goal: Increase awareness of CVRP and other complementary clean transportation programs

- Dedicated outreach efforts with partners in DACs:
  - Air Districts
  - Community-Based Organizations
  - ARB Pilot Project administrators
- Multi-lingual access
- Equity-focused data transparency

CVRP Equity Team: Outreach

- 25 events in 2015
- 700+ attendees
  - Khmer Health Forum
  - LA Koreatown Festival
  - MacArthur Park Resource Fair
CVRP Equity Team: Outreach

Stacked Incentives: EFMP, EFMP-Plus Up Pilot Project & CVRP

Our Mission:
Accelerate the transition to a sustainable world powered by clean energy

EFMP-Plus Up Participants

CVRP Equity Team: Multi-lingual
Lessons Learned

- CVRP alone may not be enough to incentivize adoption equally in all areas of the state
- Messaging & delivery essential
- Coordination of complementary programs is key

Thank You

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We work nationally in the clean energy industry and are always open to exploring partnership opportunities.