Plug-In Electric Vehicle Deployment Program

2011 Plug-in and Electric Vehicle Showcase
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Damian Breen
Director of Strategic Incentives
Bay Area Air Quality Management District
Overview

- Introduction to the BAAQMD
- Why Clean Fleets Matter?
- Potential Barriers To EV Adoption and Solutions
- BAAQMD Plug-In Electric Vehicle Deployment Program
- Next Steps
Bay Area Air Quality Management District (BAAQMD)

- Established in 1955
- 9 Counties
- 7 million population
- 5,340 square miles
- **Mission:** To protect and improve public health, air quality, and the global climate
Why Clean Fleets Matter

• In the Bay Area On-road vehicles account for more than:
  – 25% of Air Pollution
  – 28% of Greenhouse Gas (GHG) emissions

• Clean, zero and partial-zero, vehicle technology is a promising solution to meeting air pollution and GHG emissions reduction targets
1955
- 3 million people
- 1.7 million cars
- **35 million** vehicle miles driven daily

2006
- 6.7 million people
- 5.1 million cars
- **155 million** vehicle miles driven daily

Clean Vehicles Key to Cleaner Air
• Fund projects to achieve **early-compliance emissions reductions**
  – Nitrogen oxides (NO\textsubscript{x}), ozone precursors (ROG), particulate matter (PM) and greenhouse gas (GHG) emissions

• Administer approx. 9 different funding sources, each with its own set of project requirements

• Approx. $80 million available in FY 10/11
“High incremental cost of EVs and chargers”
- 3,000 rebates for home chargers

“Range anxiety” concerns
- Establish network of DC fast charges and public level II chargers

“Non-standardized and slow permitting process”
- Facilitate sharing of best practices with permit officials in the region
Plug-In Electric Vehicle Deployment Program

• For 2011-2012 - Allocated $5 Million (PEVDP)
  – Residential Chargers (~ 3,000)
  – DC Fast Chargers (~50) in 10-mile intervals adjacent to major roadways and in urban areas
  – Public Chargers (TBD ~ 1,000-2,000) high-density parking areas (e.g., transit, employment centers)

• Builds on previous $1.3 million awards made in 2010
BAAQMD invests $1.3 Million in public infrastructure in 2010
Scheduled to be installed by 2012:

402 – Public Level 2 J1772 Chargers
6 – DC Fast Chargers
1 – Battery Swap Station
Home Charger Project
PEVDP

• **Program Goals:**
  – Deploy up to 3,000 Level 2 residential chargers by December 30, 2012
  – Collect usage data through GPS, electronic and surveys to inform future investment

• **Four (4) contractors allow residents to choose broader range of EVs and charger technologies at varying price points**

• **Program to begin in mid-March; may be retroactive back to 12/01/2010**
• Vendors participating in BAAQMD’s program (Contracts in process):
  – AeroVironment ($700 rebate/discount)
  – Clipper Creek ($700 rebate/discount)
  – Coulomb Technologies (ChargePoint America Program)
  – ECOtality (The EV Project)
BAAQMD expands US Dept. of Energy and California Energy Commission programs into the Bay Area:

- **ECOtality’s The EV Project:**
  - Charger and install provided at no cost (in most cases)
  - DC fast charge inlet provided on Leafs at no charge

- **Coulomb Technologies’ ChargePoint America**
  - Charger and install provided at no cost (in most cases)

- Program details are currently being finalized. Visit [www.BAAQMD.gov/Evready](http://www.BAAQMD.gov/Evready) for updates
• **Program Goals:**
  – Deploy up to 50 DC fast chargers by June 30, 2012 (initial deployment of 36)
  – Collect usage data to inform future investment

• **Installed at ~10-mile intervals along major roadways to support:**
  – Extended travel within Bay Area and interstate corridors
  – EV drivers that lack home charger

• **Supports West Coast EV Corridor (Washington/Oregon and Southern CA)**
• Convene stakeholders to prepare Bay Area readiness assessment:
  – Identify strategic infrastructure deployment locations, existing service gaps, and inform future funding recommendations
  – Receive public input to inform next phase of public charger deployments
  – Share best practices with permitting officials
  – Evaluate sustainable business models
• Complete assessment to:
  – Determine readiness to support EVs and the necessity to deploy additional public chargers
  – Develop criteria to inform funding priorities

• Based on results, by 12/2011, provide ~ $1.1 million to support additional:
  – Residential chargers,
  – Public level 1 and 2 chargers,
  – DC fast charge network.
• $6 million in Transportation Fund for Clean Air Regional Fund to support clean fleet projects – solicitations tentatively scheduled July 2011:
  – $4 million – for Alternative Fuel Vehicle and Infrastructure Projects, and
  – $2 million – for Advanced Technology Demonstration Projects

• Draft policies available for comment May 2011 (tentative)

• Comments Welcome!
Questions?
BAAQMD Grants Contacts

Karen Schkolnick (TFCA)
District Grant Programs Manager
kschkolnick@baaqmd.gov  (415) 749-5070

Michael Neward (TFCA)
Administrative Analyst
mneward@baaqmd.gov  (415) 749-4703

SID Websites:
www.baaqmd.gov/EVready