



Plug-In Electric Vehicle Deployment Program

**2011 Plug-in and Electric Vehicle Showcase
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- 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)

NINE COUNTY JURISDICTION OF THE 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

Clean Vehicles Key to Cleaner Air



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

- Fund projects to achieve **early-compliance emissions reductions**
 - Nitrogen oxides (NO_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

SID Effort to Identify EV Barriers and Resolve Them 2009 -2012

- “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

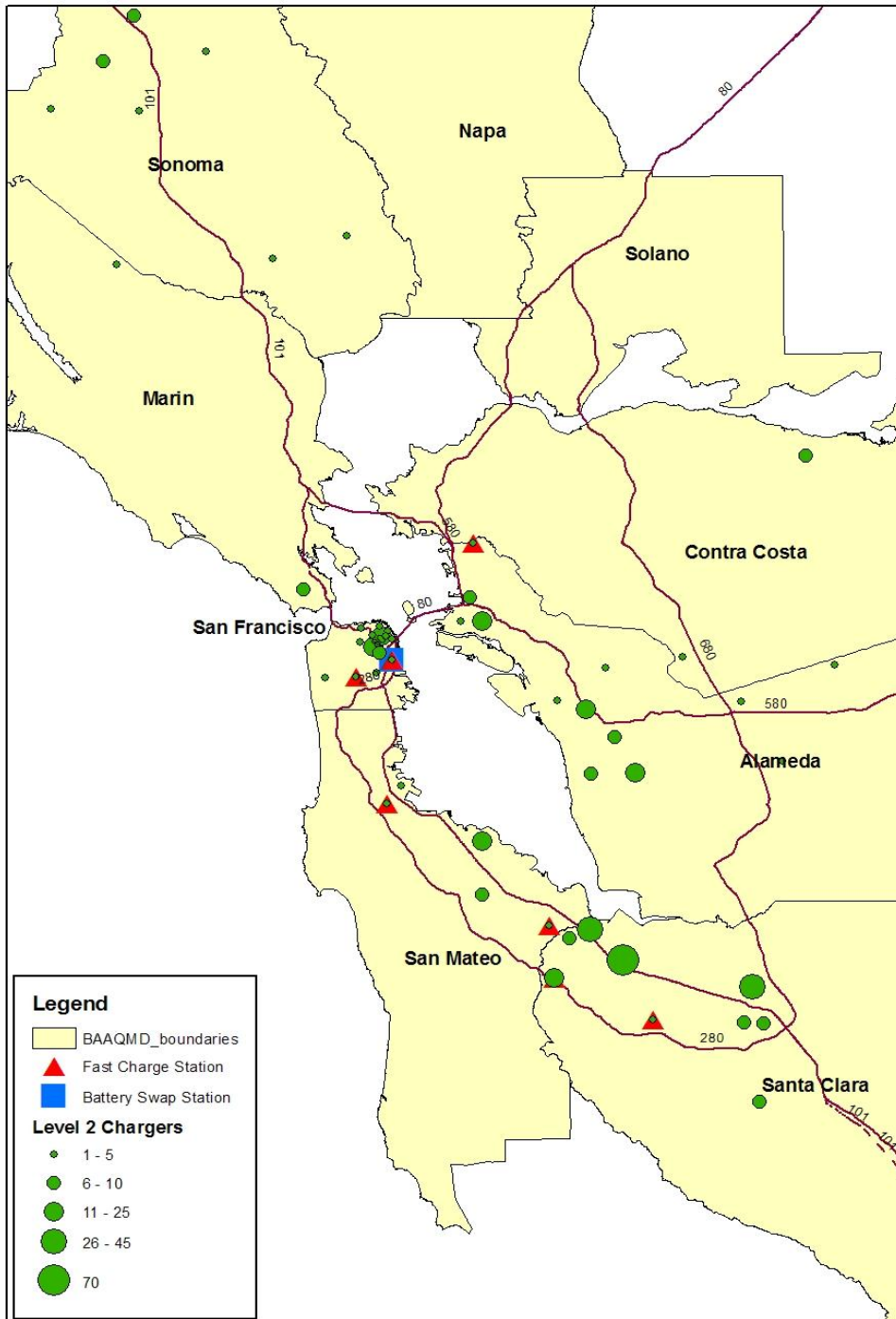
BAAQMD invests \$1.3 Million in public infrastructure in 2010

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



Home Charger Project

PEVDP

- 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)

Home Charger Project

PEVDP

- 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 for updates

DC Fast Charger Project PEVDP

- 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?



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SID Websites:

<http://www.baaqmd.gov/Divisions/Strategic-Incentives.aspx>

www.baaqmd.gov/EVready