



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

Bay Area Air Quality Management District

# Bay Area Electric/Alt. Fuel Vehicle and Infrastructure Project

*Application to Department of Energy for*

*Clean Cities FY09 Petroleum Reduction Technologies Projects  
for the Transportation Sector – Area Interest #4*

Staff Workshop on the Alternative and Renewable Fuels and Vehicle  
Program and the American Recovery and Reinvestment Act of 2009

California Energy Commission, April 27, 2009



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

## Clean Cities FY09 Petroleum Reduction Technologies Projects - Area #4

- **\$15 Million**
- **Proposal:** Rapidly expand use of alternative fuels and advanced technology through investments in new electric/alternative-fuel vehicles and infrastructure, retrofit existing vehicles, and education
- **Air Quality Benefit:** Significant reductions in greenhouse gasses, criteria pollutants, and toxic air contaminants
- **Jobs:** Create new and protect existing jobs in manufacturing, retail, and service/maintenance
- **Matching Funds:** Leverage approximately \$25 million in funding from CEC, BAAQMD, private sector and local cities and counties
- **Application due date: May 29, 2009**



## Survey Results 32 Bay Area Cities and Counties

### Current Status:

- **2,077:** # Vehicles (HEVs-1217 / EVs – 819 / PHEVs – 41)
- **74:** # EV charging sports
- **4:** # CNG fueling stations

### Future (within 0- 24 months):

- **1,417:** # Vehicles (HEVs-459/ EVs – 295 / PHEVs – 251  
CNG – 405/ LNG – 7)
- **886:**# EV charging sports
- **6:** # CNG fueling stations

**Currently more than 40 Bay Area agencies developing application proposal for EV and Alt Fuel projects**



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

BAAQMD Application for Federal Stimulus Funding (ARRA 2009)

## Potential Partners

- Bay Area Cities and Counties
- Clean Cities Coalitions
- Universities and Community Colleges
- Transportation Agencies
- Other Special Districts
- Large Private Fleet Operators (taxis, shuttles, car sharing)
- Local Equipment and Maintenance Vendors
- Community Groups



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

## Potential Project Types

### Vehicle Fuel:

- Electric (EV)
- Plug-In Hybrid Electric (PEHV)
- Hybrid (HEV) diesel/gas
- Compressed Natural Gas (CNG)

### Infrastructure:

- Electric Charging Station/Spots
- Electric Battery Swap Stations
- CNG Stations
- Hydrogen Stations

### Applications:

- Passenger Vehicles
- Neighborhood Electric Vehicles (NEVs)
- Patrol Vehicles
- Pickup Trucks
- Delivery & Vans
- Street Sweepers
- SW Collection Vehicles
- Shuttle Bus
- Large Battery Bus
- Off-road



BAAQMD Application for Federal Stimulus Funding (ARRA 2009)  
**Partner Highlight - Alameda County**

BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

	<b>Qty.</b>	<b>Total Project Cost</b>	<b>Total DOE Request</b>	<b>Matching Funds</b>	<b>Total Petroleum Displaced (Annually in Gallons)</b>
<b>VEHICLES (EV/PHEV/HEV/CNG)</b>	<b>119</b>	<b>\$4,165,392</b>	<b>\$1,157,683</b>	<b>\$3,007,709</b>	<b>207,122</b>
<b>INFRASTRUCTURE (13 EV charge stations)</b>	<b>91</b>	<b>\$1,092,000</b>	<b>\$546,000</b>	<b>\$546,000</b>	<b>N/A</b>
	<b>TOTAL:</b>	<b>\$5,257,392</b>	<b>\$1,703,683</b>	<b>\$3,553,709</b>	<b>207,122</b>



BAAQMD Application for Federal Stimulus Funding (ARRA 2009)

**Cont'd Alameda Co. (Vehicles)**

BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

Fuel Type	Qty.	Total Project Cost	Total DOE Request	Total Est. Incremental Cost	Matching Funds	Total Petroleum Displaced (Annually in Gallons)
CNG	1	\$320,000	\$91,315	\$91,315	\$228,685	1,735
EV	46	\$1,487,708	\$610,868	\$610,868	\$876,840	124,419
PHEV (retrofits)	40	\$452,280	\$0*	\$452,280	\$452,280 *	48,000
Hybrid (gas/diesel)	32	\$1,905,404	\$455,500	\$602,764	\$1,449,904	32,968
<b>TOTAL:</b>	<b>119</b>	<b>\$4,165,392</b>	<b>\$1,157,683</b>	<b>\$1,757,227</b>	<b>\$2,555,429</b>	<b>207,122</b>

\* PHEV issue



# 2009 Timeline for Alternative Fuel Funding Opportunities

*There may be additional deadlines and funding opportunities of interest besides those listed below*

BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

<b>3/26</b>	BAAQMD issues informal survey and notices potential partners
<b>4/24</b>	BAAQMD submitted proposal to Bay Area Council Economic Institute regarding BAAQMD's regional alternative fuels project
<b>4/27</b>	CEC staff workshop – Sacramento
<b>4/30</b>	BAAQMD Mobile Source Committee – San Francisco
<b>5/6</b>	BAAQMD Board of Directors meeting – San Francisco
<b>05/01</b>	BAAQMD's deadline for partners to submit application materials
<b>5/1-5/22</b>	Clarification and preparation of CEC/ DOE application
<b>5/8</b>	<b>BAAQMD submits application to CEC</b>
<b>Week of 5/25</b>	<b>BAAQMD submits application to DOE (due 5/29)</b>
<b>August *</b>	<i>DOE notifies applicants selected for award</i>
<b>September *</b>	<i>DOE enters into contract with applicants selected for award</i>
<b>October *</b>	<i>Awardees selected by DOE enter into contract with sub-awardees</i>

\* Tentative date



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

## CEC Workshop Questions

- Will CEC provide scoring criteria?
- What are eligible vehicle costs (balance of incremental cost? Vehicle-"base" cost)?/ eligible infrastructure costs? Admin? Education?
- Are there any additional reporting, contracting, and/or project duration requirements?
- What is the schedule for contracting with CEC
- Request assistance to resolve inconsistencies in DOE solicitation:
  - "CARB certification" requirements for PEHV conversions
  - Solar infrastructure limitations
  - Guidance for structuring applications to CEC and DOE in light of inconsistencies
- Process for funding allocation in future years?



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

BAAQMD Application for Federal Stimulus Funding (ARRA 2009)

## Contact Information

Karen M. Schkolnick  
District Grants Program Manager  
BAAQMD

Phone: (415) 749-5070

E-Mail: [kschkolnick@BAAQMD.gov](mailto:kschkolnick@BAAQMD.gov)