

April 1, 2011

## **San Francisco Electric Vehicle Program Summary**

### **Program Plan for 2010-2012**

More than one third of the greenhouse gases generated in San Francisco, and in the entire Bay Area, are attributable to transportation. While San Francisco's first priority in addressing transportation emissions and congestion is Transit First – getting people out of cars and into alternate forms of transportation – it is evident that meeting our GHG reduction goals will also require a large scale shift away from gasoline vehicles to clean alternative fuels, and especially electric transportation.

Preparing for EVs has rapidly become a top priority not only for San Francisco, but for major cities and counties throughout the state. California's power grid is becoming increasingly renewable with the state's Renewable Portfolio Standard requiring 33% by 2020. As a result, electric vehicles not only produce zero tailpipe emissions, they increasingly link transportation to renewable power.

Here in San Francisco, EVs charged with power from City's PUC Power Enterprise (as will be the case with our municipal fleet and with cars charging at City-owned public garages) will be traveling on 100% renewable power from our hydroelectric resource.

In late 2008, Mayor Newsom was joined at City Hall by Oakland Mayor Ron Dellums and San Jose Mayor Chuck Reed in a call to make San Francisco and the Bay Area the "EV Capital of America". Since then, public and private stakeholders in the Bay Area have actively been engaged in the regional effort.

Within the City, an interdepartmental EV task force that includes nine departments and agencies and is led by the City Administrator is identifying City actions needed to make the local market EV-ready.

At the regional level, a collaboration of public and private stakeholders known as the Bay Area EV Corridor Project has formed to coordinate actions. This regional "corridor project" consists of two organizational focuses: a government-to-government working group with representatives from nine counties, numerous cities and four regional government organizations; and the public-private EV Working Group of the Bay Area Climate Collaborative.

San Francisco's program plan is summarized as follows.

### **Primary EV Programs: 2010-2012**

#### **Public Charging Stations – Phase 1**

The City is working to put public charging stations around the city to give EV drivers confidence that they will be able to charge away from home if needed. Phase 1 includes approximately 80 publicly-accessible chargers in 22 city-owned garages (19 downtown garages and 3 parking facilities at SFO).

#### **Public Charging Stations – Phase 2**

As electric vehicle ownership increases, Phase 2 will expand the availability of public charging in these three areas: (1) City-owned parking facilities in areas where demand for electric vehicles is high, (2) commercial parking facilities, and (3) curbside charging pilot program.

#### **Home Charger Installations – Streamlined Installation Process**

Whereas previous EV marketing efforts in some cities encountered purchasing barriers including installation permitting challenges, new buyers will have an easy experience in arranging to have EV charging equipment installed at their homes. In San Francisco, the Department of Building Inspection is prepared and ready. DBI issues same-day, over the counter permits for the necessary electrical work at a residence, and electricians registered with DBI can obtain the permits instantly on-line.

In addition, the City is working with regional partners in conducting training workshops throughout the region for permit and inspection officials, electrical installers and other stakeholders critical to the installation process.

### Home Charger Installations – Incentive Programs

The Bay Area Air Quality Management District has announced it will institute a grant program to help pay for the cost of installing chargers in residences in the Bay Area (this is part of the Air District's \$5 million EV infrastructure grant program). San Francisco is coordinating with this program to leverage funding assistance for permitting fees and installation costs for city residents.

### New Construction Requirement for EV Chargers

San Francisco is working with other Bay Area jurisdictions to add provisions to the Green Building Code that require parking spaces—in new homes, apartments, condominiums, hotels and other commercial and municipal buildings constructed in the City, or major renovations—to be wired to accommodate EV charging. This will avoid expensive retrofit wiring as the number of EV users increases.

### EV Chargers in Multi-Family Buildings

Since the majority of San Franciscans live in apartments, condos, mixed-use or other multi-family buildings, the City will initiate programs to encourage and assist owners of these buildings to install EV charging capacity for their residents. The City will work with interested building owners, the utility company, and charging equipment vendors to conduct pilot installations of EV chargers to serve as a guide and interest-builder with other owners of multi-family buildings.

### EV Chargers in Workplace Parking Lots

The City will conduct an outreach program, working with business organizations such as Business Council on Climate Change, and with the San Francisco Clean Cities Coalition, to encourage large employers to install chargers for this use, and to facilitate their application of grant funding from state or regional sources.

### EVs and Car Sharing Organizations

The City is working with car sharing organizations in San Francisco, City CarShare and Zipcar, to incorporate electric vehicles in their San Francisco fleets. The City will pursue funding opportunities to partner with them in installing charging stations in their parking pods.

### Electrifying the City Fleet

As older vehicles retire from the City's fleet, San Francisco will place top priority on EVs as they become available. San Francisco's fleet services manager is working with other Bay Area fleets to develop means for combining efforts and resources, including possible vehicle sharing programs, to accelerate procurement of plug-in vehicles.

### Solar Charging, Fast Charging and Battery Exchange Pilot Projects

San Francisco will seek funding opportunities to support innovative projects to advance electrified transportation in San Francisco, such as combined solar generation/EV charging stations, high voltage fast charging stations in select locations, and battery exchange stations (e.g., for a taxi fleet demonstration program).

### Public Outreach and Education

The city will conduct a concerted outreach program to inform consumers, apartment building owners, fleet operators, large employers and others about the benefits and opportunities for electric transportation. The outreach will be implemented by the Department of the Environment and in conjunction with the San Francisco Clean Cities Coalition.