

Workplace Charging Challenge Partner Plan

The Department looks forward to working with you to meet the goal of the Workplace Charging Challenge – to increase the number of American employers offering workplace charging by tenfold in the next five years. To this end, the Department will promote best practices for successfully implementing workplace charging across the country. These best practices will draw on the success stories and Partner Plans provided by participating Partner employers. As a Partner, your organization has committed to developing a Partner Plan and establishing a robust workplace charging strategy. In addition to helping others learn from your experiences, developing this plan will help minimize barriers and smooth the way towards installing workplace charging at your organization. We suggest including the following components in your Partner Plan:

1. Workplace charging program background

- Describe the employer decision-making process to pursue workplace charging.
- Topics could include employer culture, workplace charging's place within larger corporate sustainability plans, availability of incentives, employee demand, etc.

The City of Sacramento and its residents have been early supporters and early adopters of plug-in vehicles. Additionally, the City of Sacramento itself has purchased numerous plug-in vehicles for use in its own fleet. The fringe benefit of this leadership by example is that as city employees use these vehicles for city-related tasks, the employees become more familiar with the technology. The city operates Nissan Leaf, Chevrolet Volt, Toyota Prius plug-in, and Ford Focus Electric sedans and is going out to bid on a couple of Toyota Rav4 EV vehicles.

The City of Sacramento has a sustainability plan, and the city's Fleet Manager is also the Sacramento Clean Cities Chairman/Coordinator. Consequently, the city has been a strong supporter of clean air vehicle technologies, including plug-in vehicles. When the city fleet considers replacement of vehicles, purchasing staff consider the possibility of choosing alternative fuel vehicles, such as PEVs and PHEVs.

Plug-in vehicle incentive availability includes a federal tax credit up to \$7,500 per vehicle and a state Clean Vehicle Rebate Project (CVRP) rebate up to \$2,500, depending on battery size and whether the vehicle is a plug-in or fully electric. Additionally, insurance discounts, HOV lane stickers, and low priced and free plug-in vehicle charging further incentivize plug-in vehicle purchases.

In terms of ensuring adequate charging infrastructure, the City of Sacramento has worked with SMUD, ChargePoint, and Clipper Creek to have charging infrastructure installed at City of Sacramento parking garages and fleet offices. A survey detailed in responses to following questions will provide the city with a better picture of employee charging needs.

2. Workplace charging goals and progress

- Per the Partner Pledge, Plans should include a *minimum goal* of provision of charging for a portion of PEV-driving employees at one or more major employer worksites, and a *best practice goal* of assessing and meeting all PEV-driving employee demand.
- Topics could include target number of charging stations, total number installed to date, employee utilization rates of those units, employee purchases of PEVs, and future expansion of electrified worksites, etc.

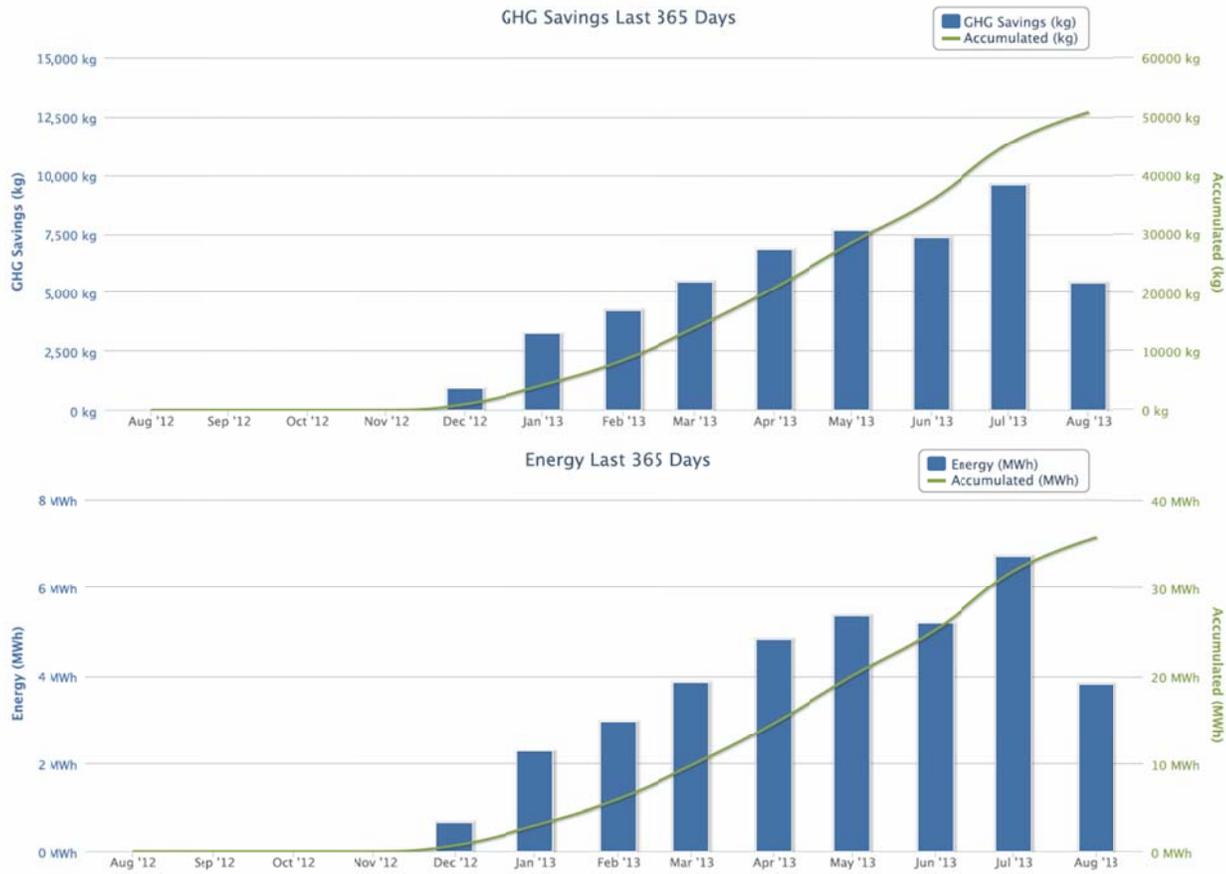
As of July 15, 2013, the AFDC Station Locator showed that within the City of Sacramento, there are 20 Level 1 charging stations, 193 Level 2 charging stations, and 27 legacy charging stations. Many of these stations are ChargePoint stations installed at city garages. In total, there are 29 ChargePoint stations at City of Sacramento facilities for the public and particularly city employees, as well as a few AroVironment chargers for city fleet vehicles only. The city and other companies/organizations within the city are seeking to install Level 3 infrastructure.

A minimum goal of provision of charging would be to maintain current infrastructure and marginally add both

Level 1 and Level 2 stations, as additional grant funding becomes available. A best practice goal would be to periodically assess charging station demand of employees through surveys similar to the one recently conducted (details explained later in this document).

The City of Sacramento is working with SMUD and Nissan to locate two DC fast chargers in front of the Amtrack Depot in the downtown area. These fast chargers would primarily serve the purpose of providing a “backup plan” for those EV drivers who are unable to access other charging stations and need additional range to get home.

The three graphs below taken from the city’s ChargePoint dashboard highlight the upwards trend of city public and employee charging station usage. Note that the lower number for August in each is due to the fact that only about half of the month had been accounted for as a part of the snapshot.





3. Workplace charging demand assessment

- Describe surveys or focus groups conducted either organization-wide or at pilot locations and how results influenced workplace charging plans.

An emailed survey link was sent out on Monday August 12, 2013 and hard copies of the survey were delivered. 337 responses were collected as of Monday, August 19, 2013. The survey asked questions regarding city employees' interest in purchasing PEVs, factors that influence their willingness to purchase PEVs, workplace charging availability, and whether or not they would be more inclined to purchase PEVs if more DC fast charging stations were made available in Sacramento.

Results:

- 73% of city employees already own or are at least somewhat interested in purchasing a PEV.
 - 3.26% already own a PEV
 - 18.40% are extremely interested
 - 51.93% are moderately interested
 - 85% of city employees drive 50 miles or less a day, well within the range of a fully charged electric vehicle.
 - Given the choices "Not Important", "Not Very Important", "Somewhat Important", "Very Important" and "Extremely Important", 93% of city employees say "Initial Purchase Price" is at least somewhat important, 89% say "New Technology" is at least somewhat important, 93% say "Vehicle Choice" is at least somewhat important, and 93% say "Charging Station Availability" is at least somewhat important.
 - Of the 92% of city employees who said their workplace has a common parking area, only 42% said they have EV charging stations available in this area.
 - Only 15.5% of survey takers know that there are over 60 charging stations in the Sacramento area (there are 100+).
 - 84% of city employees would be more inclined to drive an electric vehicle over a typical gasoline vehicle if additional DC fast charge stations were installed around Sacramento.
- Topics could include employee's interest in charging, how sites and charging level were chosen, etc.
Survey responses are summarized as of Monday August 19, one week after the survey had been sent out.

4. Workplace charging station procurement & installation

- Describe the process of obtaining and installing the charging stations at the worksite(s).
- Topics could include review of charging station options, integration of renewable options such as solar canopies, consultation with electrical contractors, coordination with property owner (if leasing), interaction with electrical

utility and planning for demand charges (if applicable), permitting and zoning, charging station location with parking lot/garage, Americans with Disabilities Act (ADA) compliance, stall and way-finding signage, etc.

- The City of Sacramento has partnered with Solar City to install solar canopies at City Hall in downtown Sacramento, the police department and building and planning offices at 300 Richards Blvd., the city's 24th Street South Area Corporation Yard, and the city's Meadowview Corporation Yard. Solar City installed 1.9 megawatts of power (<http://www.solarcity.com/pressreleases/86/city-of-sacramento-and-solarcity-announce-plan-to-install-solar-power-at-city-hall-and-three-other-sites.aspx>).
- The City of Sacramento has worked with a local installer, Haupt Electric, to install the ChargePoint stations.

5. Workplace charging management and policy

- Describe internal company policy that will address all aspects of a well-managed workplace charging program.
- Topics could include management logistics and review of utilization data, fairness, etiquette and charging rotation, liability, traditional security and cybersecurity, access controls, charging fees, hours of operation, etc. City of Sacramento works with the Sacramento Plug-In Vehicle Coordinating Council and other plug-in organizations in order to ensure standardization of best practices and communication among all appropriate organizations. The city's Fleet Manager and other staff are meeting with CalEPA, Sac EV, and other staff to discuss issues such as plug-in vehicle charging etiquette, fairness, fees, hours of operation, charging rotation, etc.

6. Workplace PEV activity or programs

- Many Partners aren't stopping at workplace charging when it comes to promoting PEV deployment among their employees and others in their stakeholder community, such as customers and supply chain – describe this and other activity that will help America meet the EV Everywhere Grand Challenge goal of making PEVs as affordable and convenient as gasoline-powered vehicles by 2022.
- Topics could include innovative benefits provided to employees such as PEV lease or purchase rebates, use of PEVs in workplace fleets, other ways the Partner organization is working to promote PEV deployment among its stakeholders, etc. To-date, Nissan is offering a special lease on the Leaf to City of Sacramento employees at select local dealerships. The Downtown Ford dealership has also offered a special lease on the Focus EV through Sacramento Clean Cities & City of Sacramento.

For assistance, visit the [Resources](#) page on the Workplace Charging Challenge website or contact WorkplaceCharging@ee.doe.gov.