

# Plug-in Electric Vehicles

## Workplace Charging for Businesses in San Diego

As the number of plug-in electric vehicle (PEV) owners grows, businesses can offer workplace charging to help employees meet their commuting needs. Making workplace charging available to employees allows them more environmentally-friendly transportation options, demonstrates commitment to the community, helps attract and retain employees, and contributes toward green certifications.

### Key Considerations for Workplace Charging

The sections below describe the following key considerations for businesses interested in installing EV charging:

- Does your business own or lease its facilities?
- What type of charging is needed?
- What are different ways to pay for charging?

#### What are other businesses saying?

A survey of local businesses with EV Chargers revealed the following:

*Why did your company decide to invest in chargers?*

- Achieve goals in company's sustainability plan
- Provide additional service to customers

*What benefits do you see from investing in chargers?*

- Positive impact and association with the company brand
- Increased visitation
- Employee attraction and retention

*Survey conducted by CCSE in 2012 of institutions in San Diego County that have installed public and workplace EVSE.*

#### Does your business own or lease its facilities?

##### Building Owners

Employers that own their facility and parking area encounter fewer challenges when developing a plan for vehicle charging.

- ✓ Engage key stakeholders in the process, including PEV drivers, operations supervisors, building/facility manager, facility technicians, and legal counsel

##### Building Tenants

Employers that do not own their facility will likely be required to obtain an agreement from the building or property owner.

- ✓ If an agreement cannot be reached with the owner, look to partner with a neighboring parking lot owner or another business to develop a cooperative PEV charging program

#### What type of charging is needed?

Employers should determine the appropriate charging levels based on the electrical capacity available at their facility.

- ✓ Vehicles generally park at the workplace for 8-9 hours, which makes Level 1 charging an easy and cost-effective option
- ✓ Consider a hybrid approach with Level 1 serving the needs of most employees, and one or two charge-per-use Level 2 chargers available for those who need a quicker charge
- ✓ Installing in proximity to existing electric utility equipment is cheaper than adding new circuits and conduit that can increase capital costs significantly
- ✓ Incorporate PEV charging in future infrastructure plans and development

#### Levels of Charging

*Level 1 – 120 volt  
(standard household outlet)*

*Level 2 – 240 volt  
(large home appliances)*

#### Who will pay for the charging?

Employers can choose to cover electricity costs and allow employees to charge their vehicles for free, or an employer may want to recoup some or all of the electricity costs by requiring employees to pay for their charging.

### Option 1: Free to employees

Many businesses offer PEV workplace charging for free to their employees.

Here are some reasons why:

- ✓ It offers an incentive to employees to support PEV adoption
- ✓ It simplifies the employee charging policy and reduces administrative time and expense
- ✓ Free charging could be considered a reportable employee benefit

However, there are some risks with offering free charging:

- ✓ Businesses could incur demand charges that become prohibitively expensive with greater PEV adoption
- ✓ May create workplace friction among non-PEV owning employees not receiving reimbursement for gasoline costs
- ✓ Employees with home charging may choose to charge exclusively at work

### Option 2: Employees pay for charging

Billing employees for PEV charging can help recuperate capital and operational costs over time. Some considerations:

- ✓ Bill for exact usage (kWh), which may require more expensive equipment
- ✓ Set up a monthly/yearly subscription rate based on estimated usage
- ✓ Employ a third-party administered turn-key model that fully covers installation, maintenance, operation, and employee billing

## Resources

**SDG&E:** San Diego Gas & Electric (SDG&E) helps employers through the process of choosing and installing EV charging at their business. They offer workplace charging seminars, assistance in evaluating billing impacts, and other helpful tips for businesses. Visit: <http://www.sdge.com/clean-energy/business/employers-and-property-owners>.

**Employer EV Initiative:** Read about best practices, case studies, and more from employers across the state. Visit: <http://www.evworkplace.org>.

**San Diego REVI:** Find a Request for Proposal (RFP) template for public agencies or businesses interested in EVSE. Visit: <http://energycenter.org/plug-in-and-get-ready>.

**eVgo:** Local businesses can benefit from eVgo's Ready for Electric Vehicle (REV) Program for California office buildings and corporate complexes. They offer 100% free EV charging equipment and electricity reimbursement. Visit: <http://www.eVgoNetwork.com>.

## Steps to Workplace Charging

1. Engage PEV owners, facility staff, managers, and legal council
2. Survey employee interest in workplace charging
3. Discuss findings and PEV charging needs among employees and company decision-makers
4. Conduct a site assessment with a contractor to determine ideal charging locations and costs
5. Contact SDG&E to determine the potential billing impacts of PEV charging
6. Examine different charger options and compare the benefits and costs (e.g. Level 1, Level 2)
7. Determine equipment ownership— building/parking lot owner, EVSE vendor or lessee
8. Establish company policies for employee access, define employee benefit and cost recovery
9. Explore existing incentives or rebates for workplace chargers
10. Select equipment, obtain multiple installation quotes
11. Present installation plan and budget to management for approval
12. Purchase equipment and hire a licensed electrical contractor for permitting, installation and inspection
13. City/county inspection of the charger installation
14. Install signage, alert employees
15. Publicize and share with the community

Adapted from the Calif. PEV Collaborative  
*Workplace Charging Installation Guideline*