

Plug-in Electric Vehicles

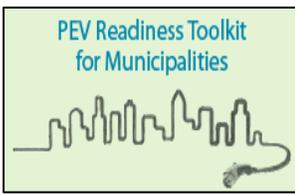
Resources for Public Agencies in San Diego

Plug-in electric vehicles (PEVs) are becoming more common, and local permitting agencies should be prepared for the growing PEV market and understand how PEVs can help agencies' achieve climate and sustainability goals. This fact sheet was developed by the San Diego Regional Electric Vehicle Infrastructure¹ (REVI) working group and offers San Diego's public agencies resources and technical training information as they become PEV ready.

Did you know?

- The San Diego region represents more than 20% of the California PEV sales market.
- Roughly 1 of every 35 new cars bought or leased in California during Q1 of 2013 was a PEV.

PEV Readiness Toolkit



The California PEV Collaborative offers numerous resources for local government officials on state and federal incentives for PEVs and electric vehicle supply equipment (EVSE). The PEV Readiness Toolkits include quick references for developing municipal planning and community development policies to support and promote PEVs. Visit <http://www.pevcollaborative.org/policy-makers>.

Building Support - engineers, plan checkers, project managers, and building officials

Permitting

Electric vehicle charging systems are relatively new to permitting departments and are often permitted through existing processes and permits. The Cities of Oceanside and San Diego have developed guidance documents to aid with the permitting, installation, and inspection processes.

- City of Oceanside *Residential Electric Vehicle Charger Guidelines*
<http://www.ci.oceanside.ca.us/civica/filebank/blobload.asp?BlobID=30053>
- City of San Diego *Information Bulletin 187: How to Obtain a Permit for Electric Vehicle Charging Systems*
<http://www.sandiego.gov/development-services/pdf/industry/infobulletin/ib187.pdf>
- The PEV Collaborative has developed *Streamlining the Permitting and Inspection Process for Plug-in Electric Vehicle Home Charger Installations*, which includes statewide codes and standards, recommended permitting fees, and background information on EVSE hardware.
http://www.evcollaborative.org/sites/all/themes/pev/files/PEV_Permitting_120827.pdf
- Department of Energy's Alternative Fuels Data Center EVSE permitting template for jurisdictions
http://www.afdc.energy.gov/pdfs/EV_charging_template.pdf

Regional Permit Fees

From mid-2011 to early 2013, the EV Project² reported that the median cost for permitting a residential EVSE installation was \$226. Permitting fees vary by jurisdiction, so it is a good idea to contact the permitting agency for specific fees.

Building & Electrical Codes

The National Electrical Contractors Association provides a common set of electric vehicle terminology and code in the presentation linked below³. Pacific Gas & Electric offers a condensed version of code requirements for EVSE installations, from disability requirements to PEV signage, at

<http://www.pge.com/includes/docs/pdfs/shared/environment/pge/cleanair/ev5pt3.pdf>.

Planning Department Staff - planners

¹ <http://energycenter.org/programs/pev-planning/san-diego>

² San Diego REVI meeting, *The EV Project: Initial Findings On Charging Behavior*, April 18, 2013. <http://www.theevproject.com/>

³ <http://iae-western.org/Files/2011/Programs/NECA%20EVSE%20Presentation%20NECA%20SD%202011%20Western%20IAE%20Section.pdf>

Addressing Accessibility for PEV Chargers

Assuring charging systems are accessible to all drivers is critical for public adoption. The Office of Planning and Research (OPR), in conjunction with the Department of the State Architect, is developing a guidance document to help public agencies standardize accessibility opportunities for PEV charging. To view or download copies of the draft guidelines, visit http://opr.ca.gov/docs/PEV_Access_Guidelines.pdf.

The City of San Diego has developed a comprehensive technical policy guide addressing accessibility and PEV parking at <https://www.sandiego.gov/development-services/pdf/industry/tpolicy11b1.pdf>.

Parking Guidelines

The California Green Building Standards Code (CALGreen) includes standard statewide Residential and Non-Residential Voluntary Measures for PEV and EVSE listed in Appendix 5A of CALGreen:

http://www.documents.dgs.ca.gov/bcs/CALGreen/2010_CA_Green_Bldg.pdf

CALGreen Code Sections for PEV and EVSE:

- A5.106.5.1 Designated parking for fuel-efficient vehicles
- A5.106.5.3.1 Electric vehicle supply wiring
- A5.106.6 Parking capacity

Parking Enforcement

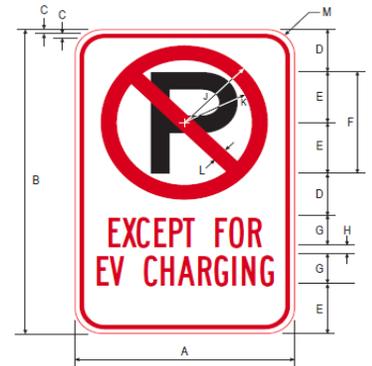
The City of Santa Monica has adopted an electric vehicle parking ordinance. This ordinance offers an example for other local agencies interested in incorporating and enforcing PEV parking into existing policy documents.

- 3.12.835 Electric vehicle parking (adopted at Santa Monica City Council Meeting 07/24/2012)⁴

The California Department of Motor Vehicles has codified electric vehicle parking enforcement with Vehicle Code (VC) Section 22511 *Off-Street Parking: Electric Vehicle*, a standard template available for use by local jurisdictions.⁶

PEV Signage

The California Manual on Uniform Traffic Control Devices has released a statewide traffic operations policy directive on zero-emission vehicle signs and pavement markings standardizing signs and markings for PEV charging stations and parking stalls.⁵



Safety Training for First Responders



The ATTE program trained SANDAG's Freeway Service Patrol (FSP) drivers.

Firefighters, police officers and other first responders encounter PEVs when responding to incidents. For their safety and the safety of the public, it is essential that they receive PEV training.

National Alternative Fuels Training Consortium – First responder safety training
<http://afvsafetytraining.com>

National Fire Protection Association – Online first responder safety training
<http://www.evsafetytraining.org/training.aspx>

Miramar College: Advanced Transportation Technology and Energy Program (ATTE) - Technical education, training and resources
<http://www.attemiramar.com/>

First Responder Guides for Tesla Vehicles
<http://www.teslamotors.com/firstresponders>

⁴ <http://www.smgov.net/departments/council/agendas/2012/20120724/s2012072407-A-1.htm>

⁵ <http://www.dot.ca.gov/hq/traffops/signtech/signdel/policy/13-01.pdf>

⁶ <http://www.dmv.ca.gov/pubs/vctop/d11/vc22511.htm>