Prepping for plug-in vehicles

AT CONDOS, TOWNHOMES AND APARTMENTS







Quick facts

Technologies for charging stations range from simple "plug and charge" standalone units, to networked units with automated user ID and payment systems.

f you own, rent or manage multi-family housing, installing plug-in vehicle charging equipment is a community project. Here are some suggested steps to help get multi-unit residential communities – such as condos, townhomes, apartment complexes and manufactured/mobile home parks – plug-in ready for electric vehicles.

1. Take a poll

See how many people in your residential community are interested in plug-in vehicles and when they might actually be in the market to buy one.

2. Explore your options

SDG&E® offers periodic workshops to help you learn about your options, including the types of plug-in vehicles and charging technologies that are available, the costs, and business models for plug-in charging. Visit seminars.sdge.com or email MultiUnit@sdge.com for information about upcoming workshops.

Technologies for electric vehicle supply equipment - also referred to as "EVSE" or "charging stations" - range from simple "plug and charge" standalone units that are open to all users, to networked units with automated user ID and payment systems. Electric vehicle supply equipment with more advanced communicating and scheduling features may offer: metering capabilities to track use; access control; user-specific billing and service fee options; and remote control and monitoring capabilities. Single or multiple cord sets may be housed in a box mounted to a wall, pole, ceiling or floor, depending on site-specific needs.

To get an idea of the wide array of EVSE options that are available for residential and



commercial charging, visit Plug In America at *PlugInAmerica.org/accessories*, Advanced Energy at *AdvancedEnergy.org/transportation/EVSE* or Electric Drive Transportation Association's *GoElectricDrive.com*.

3. List the challenges

To pave the way for charging stations where electric vehicles can plug in, each multi-family development has its own unique set of challenges to address. For example:

- How well will the property layout including the location and type of metering, wiring and parking spaces - accommodate the desired charging equipment?
- What existing rules in the covenants, conditions and restrictions (CC&Rs) would affect the installation of charging stations in common areas and private areas?
- Which assigned and unassigned parking spaces could accommodate EV charging equipment?
- What state or local regulations relate to common area use of charging infrastructure?

- Will some charging units, sidewalks or parking spaces need to meet Americans with Disabilities Act (ADA) standards for accessibility?
 - How should property owners deal with initial equipment and service costs versus future tenant demands and needs?

4. Come to a consensus on the scope

The installation of EV charging equipment in a multi-unit development involves shared decisions by property owners, property managers and residents. Those affected need to reach a consensus on the basic questions of who, what, when, where and how it will be paid for. The scope of your vehicle charging project gives potential contractors a starting point and should include:

- Estimated number of spaces.
- Electric vehicle supply equipment preferences (networked/not networked).
- Suggested location(s).

5. Choose a qualified contractor

When selecting an installer for charging equipment, consider the contractor's experience, licensing, insurance and training, such as the EVSE installation training offered through organizations like the National Electrical Contractors Association and Underwriters Laboratories.

6. Coordinate on-site evaluation

Your contractor will need to visit the site to answer any remaining questions about project requirements before designing it and providing estimates.

As part of the evaluation, the contractor should calculate power loads with the added charging stations, and decide whether existing electric panels need to be upgraded or replaced. If you're an SDG&E customer, your contractor should coordinate with SDG&E's Project Management group for review of the project design and, if necessary, an on-site visit.

7. Let the installation begin

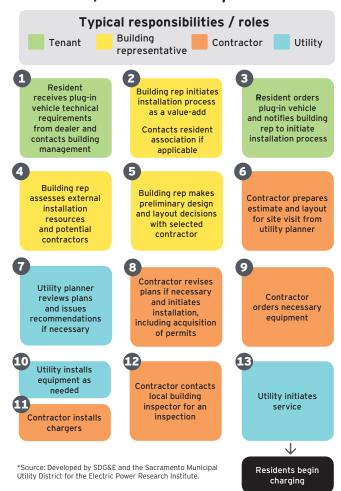
Once the contractor's price quote is approved, the contractor will order the selected charging stations, obtain any necessary permits, place the utility service order, schedule

installation, coordinate the project and arrange for any required inspections by SDG&E and the city.

8. Spread the news

Let residents know where, when and how to use the new charging stations for plug-in electric vehicles.

How to set up plug-in charging at your condo, townhome or apartment*



Connect with more information about plug-in vehicles at *sdge.com/ev* or email *MultiUnit@sdge.com* with your questions, stories and comments about getting multi-unit communities plug-in ready.

