

Electric Vehicle Service Equipment for Multi-Family Housing.

If 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, townhouses, apartment complexes and mobile home parks – "plug-in ready"

1. Find out the interest level

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

2. Explore your options

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: 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 your site's needs.

To get an idea of the wide array of EVSE options that are available to residential and commercial charging, visit Plug In America at www.pluginamerica.org/accesories, advanced energy at www.advancedenergy.org/transporation/EVSE or Electric Drive Transportation Association's www.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?
- How will the power be metered? Individually, or through a common "house" account?

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)
- Proposed locations

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5. Choose a qualified contractor

When selecting an installer for charging equipment, consider the contractor's experience, licensing, insurance and training, such as 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 requirement 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 utility work is required, your contractor should coordinate with City Light's Customer Engineering Department.

7.) Installation of the equipment

Once the contractor's price quote is approved, the contractor will order the selected charging stations, obtain any necessary permits, and place the utility service order, schedule installation, coordinate the project and arrange for any required inspections by local electrical inspection authority and City Light.

Metering & Rates

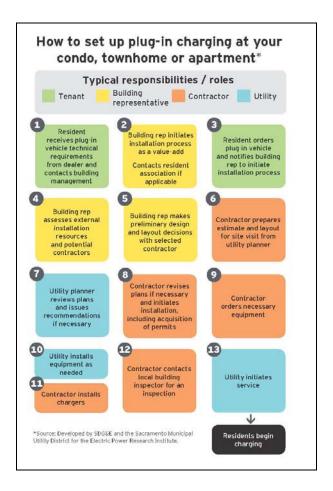
At this time, City Light does not have special rates for EV users. Residential Communities have the option of installing separate meters for each charging station, or running the chargers off of a common account, with all power paid for by the HOA or building management, and the account holder collecting payment from participants.

Advantages of City Light Metering:

 HOA or building management is "out of the loop" on billing issues – customer will have two meters on their bill; the meter for their unit, and the meter for their charging station.

Advantages of HOA/building management common account arrangements:

- Customer saves money no second daily metering charge.
- Commercial rates for common areas are slightly lower than residential rates.
- HOA or building management saves considerable installation costs – separate utility meters may require extensive modifications to building's structural, electrical, and metering infrastructure.



Payment arrangements for customers charging on HOA or building management common accounts are between the customer and HOA or building management. Account holder is responsible for all balance due on Seattle City Light accounts.