

EV Charging Equipment Ownership, Management, and Billing



EV Charging Equipment Ownership Models

San Francisco real estate developers and Property Managers*, when selecting Electric Vehicle (EV) Supply Equipment, also need to make ownership, software, billing, maintenance, and EV driver support decisions for their multifamily residential, commercial, and industrial building tenants.

This fact sheet will cover:

- Electrical Vehicle Supply Equipment (EVSE) ownership & maintenance models
- EVSE charging session access & price-setting
- Key EVSE features

* Building owners and property managers are key stakeholders and will be collectively referred to as "Property Managers" in this fact sheet.

Planning for Success

EVSE is a type of fueling station and, unlike gas stations, are part of your building's infrastructure. EVSE provides an attractive amenity, allowing people to fuel their vehicles while at home, work, shopping, or entertainment destinations.

Like any nascent industry, the EVSE market is varied, growing quickly, and undergoing innovations on multiple fronts. While choosing the right EVSE for your project can feel overwhelming, it is a decision that deserves your careful consideration since it will impact your project in several ways. In addition to your choice impacting the aesthetics and cost of the EVSE, the decision also impacts the relationship between EV drivers and the property, interactions with the electric utility, and the operation, support, and maintenance responsibilities for the EV charging equipment for years to come.

Pro Tip: Fact sheets on the [program website](#) provide advice on choosing the type and quantity of EVSE for your project and on incorporating EVSE into new and existing buildings.

EVSE Business Models

EVSE ownership and operating models are available to meet a wide range of Property Manager needs and budgets. Some vendors operate charging networks and will seek out attractive properties where they can place charging

equipment for access by their network subscribers; these vendors typically install and operate charging at such locations with no fee, or even with modest payments to the site. For most Property Managers, however, the available business models involve various combinations of site ownership and service agreements that span hardware, maintenance, software, and customer support.

As of Spring 2025, these are the three main business models in the San Francisco Bay Area:

| EVSE Business Model | EVSE Responsibility | | | |
|------------------------------|---------------------|---------------------------------|-----------------------|---------------------------------|
| | Hardware Ownership | Hardware Maintenance | Network Software | EV Driver Support |
| Property Manager Owned | Property Manager | Property Manager or EVSE Vendor | Subscription* or none | Property Manager or EVSE Vendor |
| Leased | EVSE Vendor | Property Manager or EVSE Vendor | Subscription | Property Manager or EVSE Vendor |
| Charging-as-a-Service (CaaS) | EVSE Vendor | EVSE Vendor | EVSE Vendor | EVSE Vendor |

**Subscriptions for network software may be with the EVSE vendor or, in the case of open charge point protocol (OCPP) equipment, with a third party EVSE network software provider.*

Business Model: Property Manager Owned EVSE

With this model, the Property Manager purchases the EVSE outright. If the EVSE is “smart”, or connected to a network, the Property Manager can subscribe to an EVSE network provider to have access to some or all these typical cloud-based software platform capabilities (see Fig. 1).

Additionally, many vendors offer maintenance and EV driver support either a la carte or as part of the subscription arrangement. Or the Property Manager can have their own personnel provide those services for a reduced fee.

Another option is to install "non-smart" (non-networked) EVSE, which typically costs less than networked EVSE both for installation and operating costs. (Electric usage can be measured by routing through sub-meters.) The tradeoff for lower costs is that there’s no way to remotely monitor functional status, see usage reports, or collect payments; non-smart EVSE also limit the ability to participate in some rebate or incentive programs that require reporting or interactivity with demand response programs.

Business Model: Leased EVSE

In this model, the Property Manager leases the EVSE from a vendor for a monthly fee. This fee typically includes access to the cloud-based EVSE software platform and all its capabilities. Again, maintenance and EV driver support may be offered by the vendor but can also be provided by the Property Manager in exchange for a lower lease rate. By leasing, Property Managers can avoid or get reduced fees for EVSE installation, but it’s important to understand the lease rate structure and what is (and is not) covered.

Business Model: Charging-as-a-Service (CaaS)

Just as a Property Manager hires vendors to take care of the laundry, pool, and landscaping, there is a growing number of vendors offering a comprehensive EVSE service, or “Charging-as-a-Service” (CaaS). In this model, the Property Manager hires a CaaS provider who owns the EVSE and is responsible for monitoring, maintenance, and EV driver support. The EV driver still has multiple payment options, and the Property Manager still has discretion to set the EV charging session billing rates and access.

Figure 1. Network Software Capabilities

- Remote monitoring of functional status, which can be used to quickly identify charging ports needing maintenance.
- Regular (typically monthly) usage reporting detailing which EVSE is being used, when, and for how long.
- Determining which EV drivers have access to the EVSE (public, semi-private, or private).
- Setting EV charging session billing rates for EV drivers (free of cost, discounted, marked up to cover costs, or marked up to be revenue positive).
- EV charging session payment collection through RFID fob, credit card, or smartphone app.

EVSE Vendor Offers: Key Considerations

Vendors are free to name their business models as they like. Seek clear answers for who is responsible for hardware ownership, maintenance, software, and customer support to set your property up for success. Other key considerations to look for when signing an agreement with an EVSE vendor are:

- **Installation Responsibilities:** Seldom do agreements include any vendor responsibility for installing electrical capacity and circuits to the EVSE location (“make-ready” infrastructure), and hence the Property Manager is responsible for that substantial portion of the installation.
- **Service Level Agreements (SLA):** SLAs define key metrics like the hours of customer support, length of time allowed to address maintenance needs, and uptime guarantees.
- **LCFS Credit Ownership:** EVSE can qualify for the California Air Resource Board’s (CARB) [Low Carbon Fuel Standard \(LCFS\) credits](#). Many EVSE vendors’ default agreements state the vendor gets to file for and receive the credits, but this can be negotiated.

Typical EV charging vendor fees for both the leased and CaaS models were in the following ranges as of 2023:

- Networking fees are typically charged per port on an annual basis and range from \$60 to \$400 per year, with a 1-3 year commitment.
- Most EVSE vendors include a standard warranty of 1-3 years, and many vendors offer extended warranties ranging from \$70 per year to \$350+ per year with varying coverages.
- User transaction fees (in addition to networking fees) are common and range from 3% to 15% per transaction. Additional flat per transaction fees (\$0.25-\$0.50) are also common.

| EVSE Business Model | Upfront Project Costs | Operational Costs | Notes |
|------------------------------|-----------------------|-------------------|---|
| Property Manager Owned | \$\$\$ | \$ | Operational costs are primarily usage, software licenses, repair, and maintenance. |
| Leased | \$\$ | \$\$ | Ongoing lease and, possibly electricity usage, costs. |
| Charging-as-a-Service (CaaS) | \$ | \$\$\$ | Operational costs are higher relative to the other models, and to the extent these costs are passed on to the EV driver, this option can negatively impact affordability. |

Property Managers are encouraged to get multiple bids from vendors as it is common for vendors to tailor offers to projects.

Open Charge Point Protocol (OCPP) Compliance

A key consideration when selecting EVSE is OCPP compliance. The OCPP is a set of policies and standards set by an EVSE industry group with the goal of EVSE interoperability. OCPP compliance is voluntary and choosing an “open” OCPP compliant network software now gives the EVSE owner the option of switching to another OCPP compliant EVSE network in the future, like switching cell phone networks but keeping the same phone. EVSE software that is not OCPP compliant is considered a “closed” network and may limit future changes. The most current version is OCPP 2.0, which was published in 2018. Additional information is available [here](#).

Opportunities Today...and Tomorrow

EVSE offer an increasingly attractive amenity, drawing tenants and visitors to well-operated sites, or providing a valued benefit to employees. Utilities, meanwhile, are continuing to develop programs that offer EVSE revenue generation opportunities; these include the previously mentioned CARB LCFS credits and programs where shifting the time of EV charging to off-peak hours is rewarded. This is just the beginning.

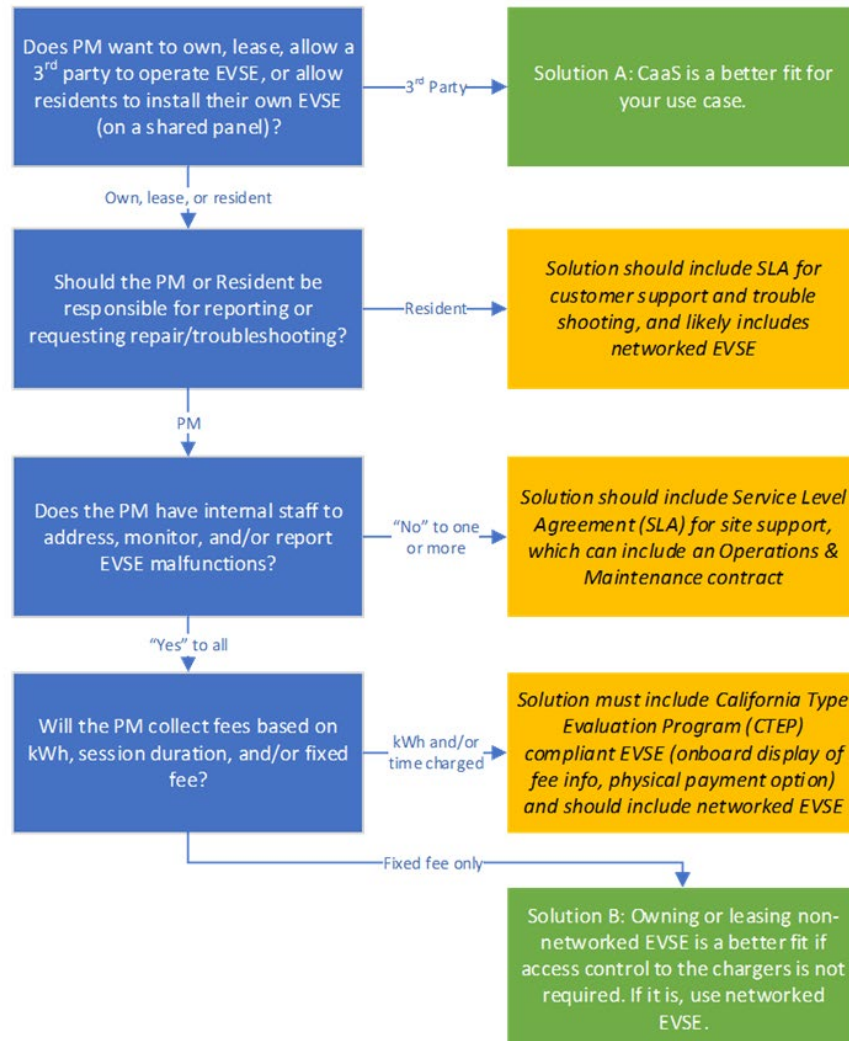
Pilot programs are gathering real-world data on “vehicle-to-grid” (V2G) technology where EV batteries soak up excess carbon-free electrons generated during the day and then discharge those electrons during peak demand in the evening. These pilot programs are defining and testing the necessary updates to hardware and software across

vehicles and charging sites. In supporting overall EV adoption and pioneering V2G, California businesses continue their leadership to safe, clean, and reliable energy sources, with new revenue opportunities.

Pro Tip: The EV Charge SF team provides complimentary technical assistance to guide you through the EVSE hardware, software, and vendor options.

Figure 2. EVSE Ownership Decision Tree

Assumption: EVSE will be installed on a common area shared panel.
Property management (PM) will, at minimum, coordinate day-to-day EV charging policy, such as access to or assignment of chargers and initial notifications about malfunctioning EVSE.



Questions?

Contact: **San Francisco Public Utilities Commission** at (415) 554-0773 or email PowerPrograms@sfgwater.org

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For more information about SFPUC's **EV Charge SF program**, please visit our program [website](#).