Electric Vehicle Charging for Multi-unit Housing

DRIVE ELECTRIC VERMONT

Why add EV charging on your property?

- Stand out to prospective residents. EV adoption is increasing, and more drivers are looking for housing options where they can charge onsite. Adding EV charging could help increase property values and reduce turnover.
- Add a new revenue stream. You can generate additional income by charging a fee for residents to charge their EVs at your property.
- Take advantage of financial incentives. Tax credits and other incentives could help offset your installation expenses, making a more affordable investment.

Key considerations

1. **Location, location, location:** To minimize installation costs, choose a location near the electrical panel or other electrical source. For properties without assigned parking, the electrical source should be on a shared meter. Wall-mounted chargers are generally cheaper; if you can't install the chargers on a wall, consider a location that will need minimal site work. Charging planned for parking structures should consider state and local fire code requirements, which may increase costs.
2. **Choosing a charging station:** Most EV charging stations can be used by both all-electric and plug-in hybrid vehicles. Outlets or charging stations with internet networking capability allow for usage billing, monitoring, and other advanced features. If you plan to make the chargers is available to the public for a fee, your equipment must be **NTEP-certified** as required by the State of Vermont.
    a. Level 1 charging uses a standard 120-volt outlet, which provides 3-5 miles of range per hour of charge.
    b. Level 2 charging uses 240-volt power and provides 20-30 miles of range per hour of charge.
    c. Level 3 charging (DC fast charging) provides an extremely fast charge and is very expensive to install. We generally don't recommend this option for multi-family properties.
1. **Planning for the future:** Make sure there are an adequate number of charging stations or outlets for your residents. Having a dedicated charging plug for each EV provides the best user experience. This could be a mix of standard outlets and Level 2 charging stations. Many Level 2 charging stations have two plugs, allowing multiple cars to charge at once. The most expensive part of charger installation is usually the site work and conduit installation. Consider installing oversized electrical conduit to allow for easier upgrades later.
2. **Creating a positive user experience:** Install signage to let users know which parking spaces are for EV charging. At those spaces, you can also include signage about usage rules or time limits. Keep charging cords off the ground to reduce maintenance issues, simplify snow removal, and maintain easy access to the equipment. Cords should not stretch across pedestrian walkways when in use.

Making the financials work

Your budget for EV charging should include both upfront costs and operating consider all the costs. The next page contains more information on the upfront installation and equipment costs as well as the ongoing operating expenses.

Upfront costs

Installation is often the most expensive part of an EV charging station project. Installation costs will vary significantly depending on proximity to existing power connections, capacity of existing electric service, and type of unit installed. A typical home installation for a Level 2 charging station may cost $500-$1,000, but multi-family properties can exceed $10,000, depending on whether electrical upgrades are needed, among other factors. The best way to understand all potential costs is to get an estimate from a licensed electrical contractor. See our additional resources below for EV charging installers active in Vermont.

Some expenses may be offset by various incentives. Check out Charge Vermont, local utility subsidies, and federal tax credits.

Equipment costs by charger type

Type	Costs (excluding installation)	Example Models
Non-internet connected	Hardware: $700 - $2,000 Software: N/A	Enphase Level 2 models
Internet Wi-Fi connected, payment & usage tracking	Hardware: $300-$1,500 Software: $10/mo	Plugzio EV Match Loop
Cellular networked commercial charger	Hardware: $5,000-$8,000 Software: $250-$400/yr Subscription: $1,200/year per port (incl. hardware, software & installation)	ChargePoint Level 2* Flo EV Charging*

**These models are NTEP-certified, so you can charge a fee for public use if desired.*

Ongoing costs

One way to cover your operating costs is to charge residents to use your EV chargers. You can charge a fee based on time spent at the charger (minutes), energy consumed (kWh), and/or included in monthly rent as an amenity.

An average all-electric EV driver who charges at home 85% of the time will use about 300 kWh per month. That adds up to around $66 per month in electricity based on Vermont's average electric rate of $0.22 per kWh. If the charger is also accessible to the public, you could expect another 125 kWh per month, or about 30 hours of active use, costing an additional $30 per month. Networked charging equipment that collects payments often requires an annual fee to provide monitoring software using cellular data service or Wi-Fi. Depending on the vendor, this might add another $120-$400 per port in annual operating expenses.

Get started

Schedule a free consultation with the EV experts at Drive Electric Vermont. We'll help answer your questions and provide customized recommendations for EV charging on your property.