



A GUIDE TO

INSTALLING CHARGING AT APARTMENTS & CONDOS

GREEN ENERGY CONSUMERS ALLIANCE

You are a property manager in Massachusetts or Rhode Island who is interested in learning more about installing electric vehicle (EV) charging for your tenants. Congratulations on taking a big step to make your property EV-friendly!

YOU SHOULD KNOW

- There are federal and, in some cases, state/utility incentives available to help you cover the costs of installing charging.
- There's no one-size-fits-all plan for EV charging. Installation should be tailored to the specifics of your property to minimize costs and maximize utilization.
- A qualified vendor can help design your charging site to reduce overall costs and meet your building's needs.

These FAQs will help you learn more about your next steps...



EV CHARGING INSTALLATION. WHAT DOES THE PROCESS LOOK LIKE?

A typical EV charging installation involves planning what you need, getting project approval, installing the EV chargers, enacting plans and policies to manage your chargers, and operating the chargers.

Planning will be affected by:

- Building size (number of units or parking spaces) and layout (e.g. garden style, high-rise)
- Existing electric service and available capacity
- Parking type (assigned/deeded vs shared parking; parking garage vs surface lot)
- Building management authority (property manager, condo board, etc.)
- Operating model (costs recovered through rent or condo/HOA fees, charger usage fees, or electricity usage billed directly to tenant)

A qualified vendor will help you find an electric vehicle charging solution that accommodates the unique characteristics of your site.

HOW MUCH WILL INSTALLATION COST?

Installation costs vary according to the specifics of your property, but costs generally fall into two buckets: infrastructure and equipment.

- Grid Scale Distribution Infrastructure (electric utility owns and maintains)
 - Distribution network
 - Transformer
 - Meter
- Property Electric Infrastructure (utility company upgrades to meet load)
 - Electric panel
 - Conductor
- EV Supply Equipment (building owner owns and maintains)
 - Electric vehicle
 - Charger

The total average cost of a plug (without incentives) can be between \$500 and \$6,500. To get a sense of where you might be in this range, there are some things you need to know about your property and some decisions you need to make.

Rebates are available and we will talk about them throughout this document.

If you're doing major construction, like resurfacing your parking lot or building a parking garage, installing charging will be cheaper if you integrate it into your construction plan.



Less Expensive

EV SUPPLY EQUIPMENT PURCHASE

More Expensive



Non-networked stations do not connect to the internet

Networked stations are “smart” (WiFi-enabled and programmable)

INSTALLATION



Near existing service, wall-mounted, Greenscape trenching, indoors

Distant wiring runs, structural drilling, Hardscape trenching, outdoors

OPERATION & MAINTENANCE



No networking costs and small business electricity rates (below 20 kW load)

Monthly networking fees and commercial electricity rates (with demand charges)



Data collection



\$500 - \$1,000

\$1,200 - \$1,700

\$1,700 - \$2,700

\$3,000 - \$6,000

WHAT INCENTIVES ARE AVAILABLE?

Depending on where you live, the number of units in the building, and other factors, you may be eligible for incentives to help you install charging at your apartment or condo.

FEDERAL

The Inflation Reduction Act (IRA) extends the [Alternative Fuel Infrastructure Tax Credit](#) until 2032. To qualify, the equipment must be installed in a location that meets the following requirements: the census tract is not an urban area; is a population census tract where the poverty rate is at least 20%; or is a metropolitan and non-metropolitan area census tract where the median family income is less than 80% of the state medium family income level. [Check your property's eligibility.](#)

If you, the driver, are the entity installing charging, you can receive a 30% tax credit, up to \$1,000. If it's the property owner/management company installing charging instead, they will qualify for a commercial version of this tax credit, which, according to the [Department of Energy](#), is "a tax credit of 30% of the cost or 6% in the case of property subject to depreciation, not to exceed \$100,000. Eligible projects that meet [prevailing wage and apprenticeship requirements](#) may be eligible to receive the full 30% tax credit, regardless of depreciation status." See our [incentives page](#) for information about available Federal Charging Incentives.

MASSACHUSETTS

See available state incentives for charging at home [here](#). If you are a resident of Massachusetts and get your electricity delivered by a municipally owned utility or [Unitil](#), please check your delivery company's website for information on their electric vehicle programs (Unitil customers can also email ev@unitil.com). If you are a customer of National Grid or Eversource, there are a lot of different eligibility requirements depending on the number of units and the location.

2-4 Unit Building Incentives

- If you are on the utility's low-income electricity rate, you qualify for a rebate of up to \$2,000 for in-home infrastructure upgrades and up to \$700 for the purchase and installation of a home charger. To qualify, you must enroll in any available managed charging program.
- If you are not on the utility's low-income electricity rate but live in [an environmental justice community](#), you qualify for a rebate of up to \$2,000 for in-home infrastructure upgrades but NO rebate for the purchase and installation of a home charger. To qualify, you must enroll in any available managed charging program.

- If you are neither on the utility's low-income electricity rate nor live in [an environmental justice community](#), you qualify for a rebate of up to \$1,400 for in-home infrastructure upgrades but NO rebate for the purchase and installation of a home charger. To qualify, you must enroll in any available managed charging program.

To apply for your incentives, visit [National Grid's EV Hub](#) if you're a National Grid customer or [Eversource's EV Charging Station Program page](#) if you're an Eversource customer.

5+ Unit Building Incentives

If you live in a 5+ unit building, the building is considered a commercial rather than a residential installation by National Grid and Eversource. In these cases, it is the property owner or manager who will apply for incentives with the electric utility.

Regardless of location, the electric utility will cover up to 100% of utility-side infrastructure upgrades and up to 100% of customer-side infrastructure upgrades for the installation of Level II charging. On the customer side, incentives are capped based on average costs. The incentives for the purchase and installation of the charging station hardware vary depending on location:

- If you live in an [environmental justice community](#) (neon green, dark green, teal, or dark blue on [this map](#)), you qualify for a rebate of up to 100% of the charger costs.
- If you live in an area that does not meet the income requirement of an environmental justice community but does meet one or both of the other two requirements (yellow, light blue, or pink on [this map](#)), you qualify for a rebate of up to 75% of the charger costs.
- If you live in an area that does not meet any of the requirements of an environmental justice community (not shaded on [this map](#)), you qualify for a rebate of up to 50% of the charger costs.

In all cases, if you choose to install a networked charger, you are eligible for a \$480 networking rebate (Up to \$120 per year, per port, and pro-rated if less than four years).

Important note: The Department of Public Utilities requires site hosts in this category to pursue additional third-party funding, such as the state incentives listed below. However, if you receive third-party funding, the total will be subtracted from the funding received from the utility. The federal tax credit does not count as additional third-party funding.

Apply for incentives by visiting [National Grid's Commercial & Fleet Electric Vehicle Charging Programs page](#) if you're a National Grid customer. Eversource customers, please instead visit [Eversource's Electric Vehicles & Charging Stations page](#).

Massachusetts State Incentives

The Massachusetts Department of Environmental Protection (DEP) administers a program called MassEVIP, which offers incentives for the installation of charging for various locations, including multi-unit dwellings (5+ units). The program funds up to 60% of the hardware and installation costs, to a maximum of \$50,000 per street address. Funding for this program is available on a first-come, first-served basis. [Click here to apply for MassEVIP.](#)

Any funding you receive from MassEVIP will be subtracted from the funding you receive through National Grid, Eversource, or Unitil electric vehicle programs, per the Department of Public Utilities.

RHODE ISLAND

Rhode Island offers an incentive program through [PowerUp RI](#), in collaboration with the Office of Energy Resources and the Rhode Island Infrastructure Bank. If you are a property manager or a landlord, then you are eligible for the standard rebate.

- If the installation of an EV charger does not involve upgrades to the electrical system, you qualify for a rebate up to \$350 or 50% of the purchase of a Level 2 residential EV charger, whichever is lesser.
- If the electrical system does require an upgrade to install the charger, then you qualify for a rebate up to \$700 or 50% of the purchase and installation costs of a Level 2 residential charger, whichever is less.
- Review applicant and charger eligibility, terms and conditions, and how to apply [here](#).

HOW DO I CHOOSE CHARGING EQUIPMENT?

There are three speeds of EV charging: Level 1, Level 2, and DC fast charging. As a building owner, DC fast charging is probably not the best fit for you. Although it's the fastest, DC fast charging is best in locations where drivers don't linger very long. Since tenants generally leave their vehicles parked at home, you can take advantage of a slower (and less expensive) charging installation. There are two types for you to consider:

Level 1 charging ports are best in parking spaces where vehicles dwell for 8+ hours, recharge 4 miles of driving range per hour plugged in, and installation is budget-friendly.

Level 2 charging ports are best where vehicles dwell for 1-8+ hours, recharges 11-35+ miles of driving range per hour plugged in (depending on the vehicle model), and they are the best "bang for your buck" in terms of enabling electric vehicle adoption at a moderate cost.



HOW DO I CHOOSE CHARGING EQUIPMENT?

You can decide, depending on the charging equipment you select and the operating costs you incur. Here are some options:

- Pay for the cost of electricity as an amenity.
- Choose a networked charging station that monitors electricity consumption and bills users according to a price you set.
- Charge EV owners a monthly fee for access to the charger. This solution has the added benefit of not requiring a new meter or networked equipment.

WHO CAN USE THE CHARGERS?

You can decide, depending on your parking area and choice of charging equipment.

- If the parking area is only available to tenants, it's easy to limit charging to those who live in your building, regardless of what type of charger you choose.
- If the parking area is not limited just to tenants:
 - Non-networked stations (whether Level 1 or Level 2) could be accessible to anyone who pulls up and plugs in their car.
 - A networked station can be set up to only provide access to people who live in your building (via a special code) or to those who pay to charge.

MY PROPERTY HAS ASSIGNED PARKING. CAN I STILL INSTALL EV CHARGING?

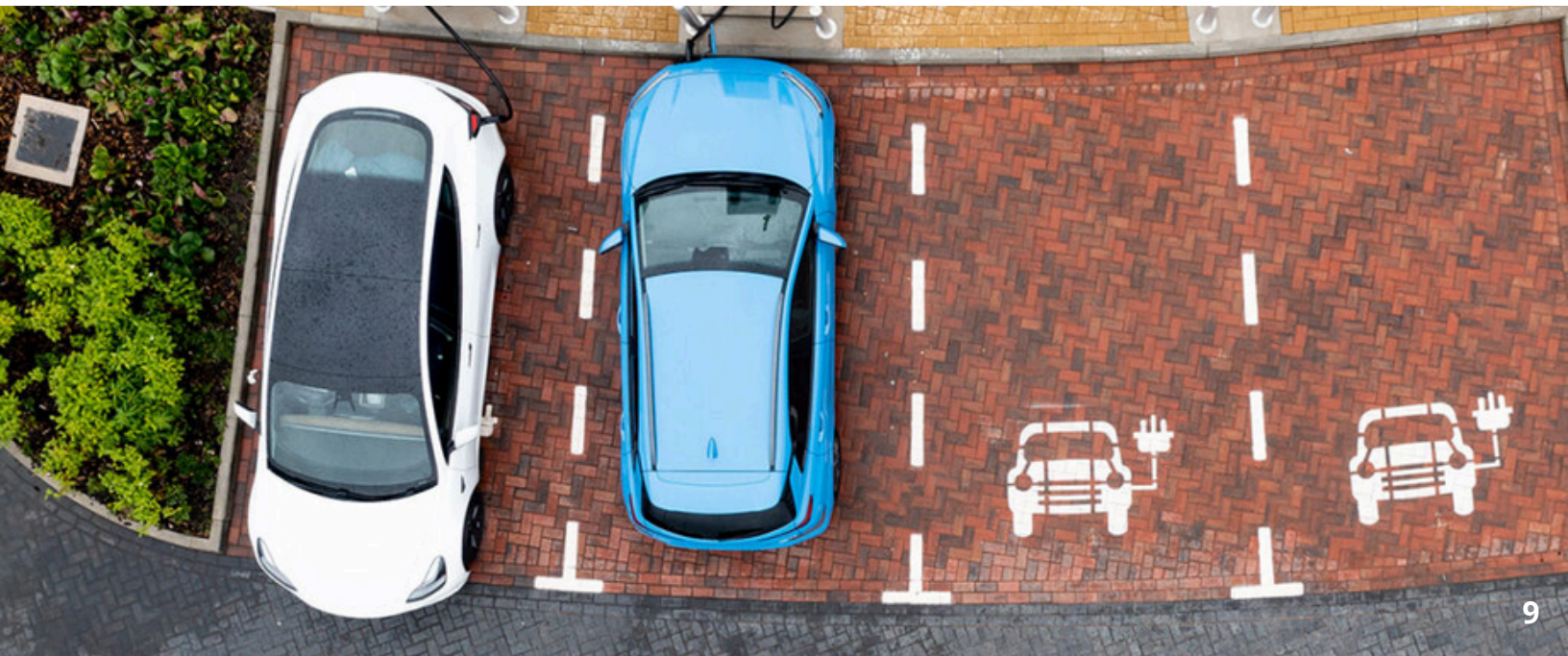
Yes! Here are some options:

- Convert some “visitor” or unassigned parking spaces to charging spots.
- Install charging ports for each assigned spot or in between spots to allow sharing.
- Upgrade existing electrical infrastructure so that tenants or condo owners can easily choose to install their own charging port or use their own Level 1 charging cable.

Whatever you decide to do, make sure the solution is scalable to meet all future charging needs. You don't need to install charging equipment right away, but you should make sure that upgraded electrical capacity will be ready to meet the additional load in the future.

WHERE DO I GO FOR HELP?

If you live in Massachusetts, the best place is to start with your utility. They can point you to current incentives and approved vendors. [Click here](#) for an approved list of vendors from Eversource, and [click here](#) for an approved list of vendors for National Grid. If you live in Rhode Island, there are not (as of April 2024) incentives for you to take advantage of, so the best way to start is by approaching an electrician or a charging station vendor directly.



EV CHARGING EQUIPMENT CHECKLIST

There are lots of different EV charger models available on the market. If your electric utility offers incentives for EV charging, they likely have a list of approved options. The vendor you choose to install the stations will likely have advice too. Here's a checklist to help you narrow down your choices.

Hardware

- ☐ Output power: What is the maximum power deliverable to an electric vehicle? Given as a kW rating and as estimated miles of range added per hour of charging time.
- ☐ Dimensions: What are the overall height, length, width, and weight dimensions?
- ☐ Mounting: What time of mounting does the station require?
- ☐ Pedestal: Hard-wired to permanent pole or box. Typically mounted on a concrete base.
- ☐ Wall: Either hard-wired or temporarily wired to a wall. Typically includes a mounting plate.
- ☐ Network coverage: What type of cellular or data connectivity will I need?
- ☐ Hardware fees: What is the line item and total cost per station?
- ☐ Safety: Is the product tested for safety and UL-certified?

Management Software

- ☐ Remote management: Can charge station information and settings be accessed remotely?
- ☐ Price and policy configuration: How can the price and policy be set on the station? Can I determine who gets access to the stations?
- ☐ Energy management: Can the system manage energy usage and control costs?
- ☐ Data reporting: What type of reporting and analytics does the software offer?
- ☐ Mobile application: Does a mobile app exist for EV drivers to find and pay for sessions?
- ☐ Software fees: What are the software fees paid by station owner? What type of contract?

Installation

- ☐ Process: What is the installation process like? Who is responsible for what? How long does the typical installation take?
- ☐ Site requirements: What does my site need to have in terms of infrastructure in order to install the station?
- ☐ Installation fees: What are the installation fees?

Service & Maintenance

- ☐ Onboarding and training: How will people in my organization be set up and trained to manage the stations?
- ☐ Service request: What happens if there is a hardware or software service request? What is the service level agreements?
- ☐ Service fees: Who pays for the service?
- ☐ Theft/damage: What systems are available to prevent theft or vandalism? What happens if the station/cables are vandalized or stolen?

ABOUT US: GREEN ENERGY CONSUMERS ALLIANCE

We're a nonprofit organization based in Massachusetts and Rhode Island. Our mission is to empower consumers and communities to speed a just transition to a zero-carbon world.

[Visit our website](#) to learn more about our work advocating for electric vehicles.

Need help? Email us at drivegreen@greenenergyconsumers.org



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