

Community Charge

Powering Our Neighborhoods Together









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Electric Vehicle Charging Procurement Guide

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Welcome to Community Charge!

Installing charging stations for electric vehicles (EVs) on your property for use by your community provides many public benefits:

- Increasing access to EVs, which save drivers hundreds of dollars per year on fuel costs and roughly half the usual maintenance costs over the lifetime of the vehicle,
- Improving air quality and public health, and
- Fighting climate change.

Providing EV charging can also increase retention among your staff or tenants, prepare you for more stringent building codes, and help meet internal sustainability goals. However, installing EV charging can be a complex, time-consuming process, particularly for nonprofit and public entities with strict procurement requirements. That's where *Community Charge* comes in.

Community Charge is a joint project of <u>PowerOptions</u>, <u>Green Energy Consumers Alliance</u>, and the <u>LISC Massachusetts</u>. The program reduces the administrative burden, cost, and complexity of installing EV charging stations by offering pre-vetted procurement routes for **public and nonprofit site owners**. Through the *Community Charge*, eligible site hosts have two procurement choices:

- 1. Vendor-Owned (Charging-as-a-Service): Stations are located on your property but installed, owned, operated, and maintained by a procured *Community Charge* program provider. Under this structure, there's no upfront cost and the provider shares the profits with the host.
- **2. Host-Owned:** You, the site host, own and operate the EV charging stations, but use *Community Charge* to either procure hardware, software, or installation "a la carte", or procure turnkey installation services that handle all three aspects in one.

This Electric Vehicle Charging Procurement Guide will help you:

- Understand the basics of EV charging;
- Determine which incentives you may be eligible for;
- Review your procurement options;
- Get started on procuring EV charging through Community Charge.

Community Charge is brought to you by:

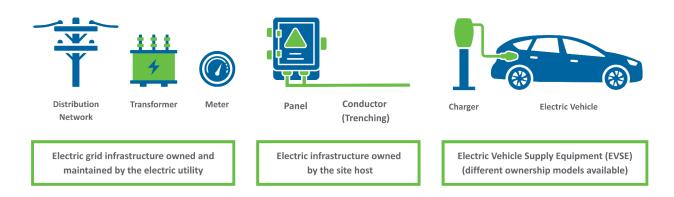
<u>PowerOptions</u>, a nonprofit energy buying consortium with 25 years of experience conducting
programmatic procurements for energy products and services on behalf of its members.
 PowerOptions has over six years of experience assisting members with EV chargers and fleet
electrification support through procurements, financial modeling, incentive support, and
member education.

- Green Energy Consumers Alliance, a nonprofit with over 40 years of experience engaging with
 consumers on clean energy technologies that has educated thousands of consumers on EVs and
 helped them make the switch since 2016.
- <u>LISC Massachusetts</u>, the local office of the national nonprofit with over 15 years of experience helping affordable housing owners in Massachusetts maximize the energy efficiency of their properties and integrate appropriate clean energy technologies.

Community Charge is made possible thanks to support from the <u>Massachusetts Clean Energy Center</u>, under the Accelerating Clean Transportation for All, Round 2 Program.

EV Charging 101

Technically speaking, an EV charger is actually called "Electric Vehicle Supply Equipment," or EVSE. Its job is to safely and efficiently transfer power from your site to a vehicle that plugs in.



All the chargers offered through *Community Charge* are **smart chargers**, meaning they connect to the internet and allow features like load management, remote session monitoring, and revenue collection. Smart chargers also allow the site host to restrict access to certain users; for example, tenants in a multifamily building, or students/faculty/staff at an educational campus.

Most smart chargers that are available to the public are also **networked chargers**, meaning they are part of a larger network managed by a particular company. Being part of such a network makes a station discoverable to more users on charging apps, but it also requires the payment of a regular networking fee. That fee gives you access to **software** where you can track station usage and set pricing for users. When setting pricing, you can:

- Charge per unit of electricity consumed (kilowatt-hour (kWh));
- Charge per minute or hour spent charging;

- Differentiate charges based on the power level used (for example, a vehicle charging 40 kWh with a peak draw of 200 kilowatts (kW) pays more than a vehicle charging 40 kWh with a peak draw of 50 kW);
- Add idle fees for fully charged vehicles that remain parked;
- Offer different charging rates for different classes of customers (for example, residents of a multifamily building vs the general public).

Depending on the station and network, drivers can pay via an app on their phone, RFID card, or credit card machine installed on the EV charger.

Charging Levels

There are three levels of EV Charging: Level 1, Level 2, and Direct Current (DC) Fast Charging.

Level 1: Level 1 charging, also known as **trickle charging**, uses a 120-volt outlet and only adds about four miles of range per hour spent charging. For many people, Level 1 charging is enough to support their driving needs if they can charge at home. Because it's not conducive to shared parking areas or spots with shorter dwell times, this procurement guide excludes it.

Level 2: Level 2 charging stations use 240-volt alternating current (AC) input. With power levels ranging from 6 to 19 kW, they can deliver 20 to 50 miles of range per hour spent charging.

DC Fast Charging: DC fast chargers, sometimes called Level 3 chargers, use a 3-phase 480-volt AC input. Power levels range from 50 to 350+ kW, and charging times range dramatically as a result. In general, an EV can charge from 0 to 80% in about half an hour at a DC Fast Charger.

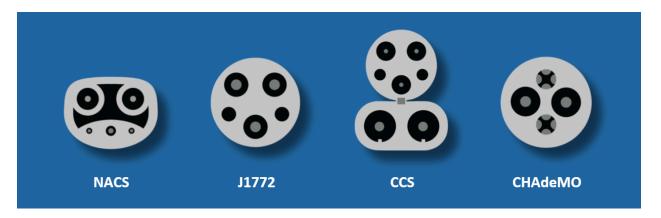
Level 2 and DC Fast Chargers meet different needs for EV drivers. Level 2 chargers are more appropriate in places where vehicles are parked for several hours. DC Fast Chargers are particularly useful along major travel corridors or in dense urban environments where most people don't have access to off-street parking or EV charging. Property managers may consider surveying their community to determine what level of charging may best meet their community's driving patterns.

Ports, Plugs & Adaptors

Ports are the receptacles on EVs through which electricity runs from the charging station's connector or plug. Ports are located on the front, side, or back of the vehicle, and for a charging session to occur, the plug and port need to both physically fit together and support communication between the vehicle and the charging station.

Historically, the EV market has been split into a couple of different plug standards, though it is now converging on the North American Charging Standard (NACS).

Port	Level(s)	Description
North American Charging Standard (NACS)	1, 2, and DC Fast Charging	 Charges all Tesla vehicles Becoming the universal standard for North America for all major manufacturers as of model year 2025 Most non-Tesla manufacturers now offer adaptors so that their drivers can use NACS DC fast chargers and are building the NACS port in natively to new vehicles
J1772	1 and 2	 Historically, standard for all non-Tesla vehicles for Level 1 and Level 2 charging
Combined Charging System (CCS)	DC Fast Charging	 Most common non-Tesla plug type in the US for DC Fast Charging Consists of J1772 port with two additional prongs underneath Historically used by North American and European manufacturers
CHAdeMO	DC Fast Charging	 Historically used by Asian manufacturers Less common non-Tesla DC Fast Charger Phasing out; currently only used by Nissan LEAF and Mitsubishi Outlander Plug-In Hybrid



A variety of third-party adapters are widely available for purchase by drivers so, for example, drivers with NACS ports can use CCS plugs and vice versa.

Other Hardware Considerations

Beyond charging level and plug type, site hosts will want to consider:

- **Pedestal or wall mount:** DC Fast Charging stations are generally installed as standalone units in front of parking spots, but with Level 2 stations, there are wall-mounted options in addition to pedestal stations.
- Single-port or dual-port: Single-port stations have just one plug and can therefore only charge one EV at a time. They're a good fit for locations where cable reach might be limited due to the distance between the available spot for the charging pedestal and the parking spot or other considerations. Some single-port DCFCs may offer up to three types of plugs to accommodate different vehicles, but still only support one vehicle charging at a time. Dual-port chargers come with two plugs and can charge two vehicles simultaneously. This setup is more efficient for shared parking spots, reducing the need for one charger per vehicle. Charging can be distributed in different ways based on resident needs or management preferences, such as charging the first car that plugs in first or splitting power between both.
- **Cord management:** Different charging stations have different systems to prevent charging cords from getting damaged or creating a trip hazard, such as retractable cords or swinging arms.
- Accessibility: Under some incentive programs for EV charging, locations that must already
 provide handicapped accessible parking spaces in their parking area under the American
 Disabilities Act Design Standards are required to make at least 5% of the charging spots
 accessible to people with disabilities by adding mobility features. However, these spaces are not
 limited to be used solely by people with disabilities.

Operations & Maintenance

Site hosts who decide to own, operate, and maintain their charging stations should expect to:

- Track usage, set usage rates, and pay utility bills for the stations;
- Regularly inspect and clean the station;
- Monitor usage and customer feedback to identify any performance issues;
- Update software when needed;
- Make any needed repairs.

EV chargers generally come with warranties that cover defects in manufacturing, but not improper installation or use. Some manufacturers offer extended warranties for a price.

Incentives

Depending on your site's location and type, you may be eligible for federal, state, and/or utility incentives to help cover the cost of installing charging. The *Community Charge* team will help you navigate these incentives!

Federal Tax Credit

Until June 30, 2026, your site may be eligible for the commercial Federal Alternative Fuel Infrastructure Tax Credit (30C); after that date, the credit will no longer be available. Tax-exempt entities must claim the tax credit through elective pay (also called direct pay), meaning they will receive a direct payment from the IRS in lieu of a reduction in taxes owed.

Amount: Fueling equipment is eligible for a tax credit of 30% of the cost or 6% in the case of property subject to depreciation, not to exceed \$100,000 per item. Eligible projects that meet <u>prevailing wage and apprenticeship requirements</u> may be eligible for the full 30% tax credit regardless of depreciation status.

Eligibility Requirements: Eligible properties must be located in low-income or rural census tracts. To determine eligibility, locate your property in this <u>census tract identifier</u> from Argonne National Laboratory.

Stacking: If eligible, you can stack the federal tax credit with other incentives mentioned in this section.

How To Claim: Direct pay, or elective pay, allows public and nonprofit entities to directly benefit from the tax credit. To receive a direct payment:

- Identify and pursue the qualified project or activity,
- Determine your tax year,
- Satisfy all eligibility requirements for the tax year,
- Complete a <u>pre-filing registration form</u> once the charger is in service,
- Receive a registration number from the IRS, and
- File <u>form 8911</u> on your tax return by the due date (April 15, 2025) and make a valid elective payment election. This includes properly completed and attached source credit forms, Form 3800, General Business Credit (or its successor).

State Programs

The Massachusetts Department of Environmental Protection (MassDEP) offers several incentives to acquire and install Level 1 and Level 2 EV charging installations under its MassEVIP program. All charging equipment must meet Energy Star requirements and be listed in the State Appliance Standards Database (SASD).

Multi-Unit Dwelling & Educational Campus

Eligibility: Multi-unit dwellings with five or more residential units and educational campuses with at least 15 students on site.

Funding: Up to 60% of the hardware and installation costs with a maximum of \$50,000 per address.

Stacking: You can stack this MassEVIP funding with the federal tax credit. If the station will be publicly-accessible, you can also stack this funding with available utility funding. If the station will *not* be publicly-accessible and you are awarded MassEVIP funding as well as utility funding, your utility award will be reduced by the amount of your MassEVIP award.

How to Claim: Additional requirements, eligibility criteria, and the online application can be found here.

Public Access

Eligibility: Property owners or managers with publicly accessible parking that are in a non-residential location. Stations must generally be practically accessible by the public 24/7/365.

Funding: Government-owned land is eligible for 100% of the hardware and installation costs to a maximum of \$50,000 per street address. All other public locations are eligible for 80% of the hardware and installation costs to a maximum of \$50,000 per address.

Stacking: You can stack this MassEVIP funding with the federal tax credit. If the station will be publicly-accessible, you can also stack this funding with available utility funding. If the station will *not* be publicly-accessible and you are awarded MassEVIP funding as well as utility funding, your utility award will be reduced by the amount of your MassEVIP award.

How to Claim: Additional requirements, eligibility criteria, and the online application can be found here.

Workplace & Fleet

Eligibility: Applicants with 15 or more employees in non-residential places of business; OR locations with parking spaces reserved for EV fleet vehicles.

Funding: Up to 60% of the hardware and installation costs with a maximum of \$50,000 per address.

Stacking: You can stack this MassEVIP funding with the federal tax credit. If the station will be publicly-accessible, you can also stack this funding with available utility funding. If the station will *not* be publicly-accessible and you are awarded MassEVIP funding as well as utility funding, your utility award will be reduced by the amount of your MassEVIP award.

How to Claim: Additional requirements, eligibility criteria, and the online application can be found here.

Utility Programs

Many utilities across Massachusetts offer incentive programs to cover different costs associated with installing EV charging. These programs are generally broken up into two categories:

- Make Ready programs cover the costs of upgrading the electrical infrastructure, bringing service to the specific EV charging station location. Make Ready programs cover upgrades to utility-owned electrical infrastructure, site-host-owned electrical infrastructure, or both.
- **EVSE Rebate** programs offer funding specifically for the purchase and/or installation of the EV charger hardware.

Eversource, National Grid, & Unitil

Eversource, National Grid, and Unitil each offer Make Ready and EVSE rebate programs for various use cases, including multifamily, public, workplace, and fleet. In general, these utility programs can cover up to 100% of both utility-owned and customer-owned infrastructure upgrades, subject to per-port or per-site (street address) price caps.

In general, the programs are set up as follows:

- You must choose equipment from a list of qualified equipment
 - Eversource maintains a list of approved equipment here;
 - National Grid required equipment is listed on the EPRI VPL list here;
 - Unitil maintains a list of approved equipment <u>here</u>.
- If you are installing a charger for non-public use, you must apply for available and aligned third-party funding, such as MassEVIP, and utility incentives cannot be stacked with third-party funding. (This does not apply for publicly-accessible chargers).
- There are per-port and per-installation caps on costs (see utility websites for details).
- In several cases, the rebate level depends on whether your location is in an <u>environmental</u> <u>justice (EJ) community</u> and if so, what kind.

Further information is available on the utilities' websites.

- National Grid: Multi-unit dwelling programs <u>here</u>, public and workplace programs <u>here</u>, and fleet programs <u>here</u>
- Eversource: All program information here
- Unitil: All program information <u>here</u>

Contact the *Community Charge* team at <u>CommunityCharge@PowerOptions.org</u> to find out which incentives your property may qualify for, and for expert help navigating the application process.

Municipal Light Plants

Forty-one cities and towns are served by municipal light plants (MLPs) instead of the investor-owned utilities. (You can see the full list here.) Many of these municipalities offer incentive programs for the installation of EV charging stations. If your site is located in a community served by an MLP, the Community Charge program team will assist you in identifying potential incentive opportunities.

Building Codes

EV-readiness is built into Massachusetts building codes. These codes vary based on the type of building and town. Massachusetts building codes fall under three categories – Base, Stretch, and Specialized. If you are planning a new project or a substantial renovation in the coming years, it's worth reviewing what code your community has adopted (which you can do here), and what that code requires regarding EVs.

Procurement Options

Community Charge reduces administrative burden, cost, and complexity¹. Under the program, public and nonprofit site hosts have several options:

- **Vendor-Owned (Charging-as-a-Service):** Through *Community Charge*, there are no upfront or ongoing costs to you, the host. The provider pays for the hardware, software, installation, and electricity, and compensates you, the host, via a profit-share agreement. The profits are largely driven by how much the station is used, so hosts are incentivized to help promote usage.
- **Host-Owned:** You, the site host, finance, own, operate, and manage the charging stations. As the station owner, you set rates and keep all the profits. You are responsible for insuring the stations (if you choose to do so) and addressing any issues.

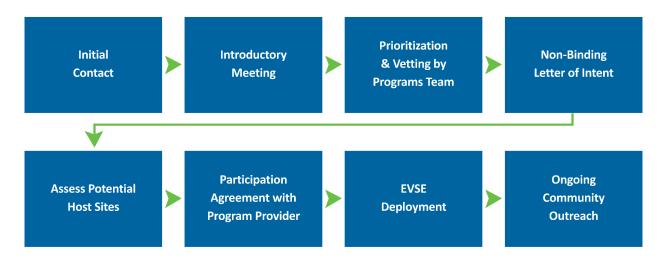
¹ Beyond *Community Charge*, public entities have two options for procurement: procuring the hardware, software, and installation through the state contract managed by the Operational Services Division or issuing a competitive Request for Proposals under MGL c. 30B. The statewide contract may offer limited options, and issuing a competitive bid places a high administrative burden on site hosts.

	Host-Owned	Vendor-Owned (Charging-as-a-Service)
Upfront Costs	The site host purchases charging hardware, software, and installation (either à la carte or as a turnkey package).	No upfront cost — the vendor owns and installs the charging stations.
Ongoing Costs	 The host pays for the electricity used by the chargers. Staff time for administration and reporting. Any repairs or maintenance not covered by warranty. 	None — the vendor covers operating, maintenance, and electricity costs.
Revenue Stream	 The host earns revenue directly from drivers based on charging rates and station usage. The host controls pricing and keeps all profits. 	The vendor collects charging revenue and shares a portion of the profits with the site host based on a pre-negotiated profit-share agreement.
Site Host Responsibilities	 Track usage and set charging rates. Pay utility bills and manage customer payments. Inspect, clean, and maintain the stations. Monitor performance and update software as needed. Support outreach and education efforts through the Community Charge program. 	 Keep the station area clear and accessible for both drivers and the vendor. Support outreach and education efforts through the Community Charge program.

Get Started

To get started with Community Charge, simply email CommunityCharge@PowerOptions.org.

The first step will be an initial 30-minute consultation call with PowerOptions to understand your site, needs, and goals. After the call, the *Community Charge* team will review your project internally, and if it's a good fit, we'll send a Letter of Intent (LOI) and connect you with a pre-approved vendor offering pre-negotiated, competitive pricing. Once the LOI is signed, the vendor and host will finalize a participation agreement and move forward with installing the charging stations.



Participation is first-come, first-served, and sites must meet program requirements:

- Stations must be operational by July 2027.
- Stations must serve low- to moderate-income drivers.
- The host must be a nonprofit or public entity located in Massachusetts.

Frequently Asked Questions

What site hosts are eligible to participate in Community Charge?

Only sites owned by public or nonprofit entities are eligible to participate. For-profit owners of low-income housing are eligible to participate if properties are owned in association with a nonprofit.

What kinds of stations does Community Charge support?

Community Charge supports both Level 2 and DC Fast Charging stations.

What are the costs of participating in Community Charge?

There is **no cost** for eligible participants to receive a consultation from PowerOptions and get connected with a participating vendor. There are no upfront costs for the vendor-owned procurement pathway; for the site-owned procurement pathway, depending on the chosen procurement option and site needs, costs may vary. However, *Community Charge* has pre-vetted competitive pricing for all program options.

What are some benefits of adding EV charging to my site?

The benefits of installing EV charging vary from earned revenue from charging sessions to increased resident satisfaction or employee retention, to greater visibility for your site with your EV charging stations on charger navigation tools such as PlugShare.

Will the charging stations installed via Community Charge generate revenue for my organization?

For host-owned stations, it's up to you, the site host, to determine what rate you charge station users. Depending on the electricity rate you pay, the rate you set for users, and the level of utilization, the revenue you generate may or may not be larger than the costs of running the station. Most site hosts set up the rate they charge users to break even with the costs of supplying the electricity. For the vendor-owned option, the owner of the stations will enter into a profit-share agreement with the host.

Can I access both state and utility incentives for installing charging stations?

Both the state of Massachusetts and our electric utilities offer incentive programs for installing charging stations. Per an order from the Department of Public Utilities, if the stations you are installing will *not* be publicly accessible, to apply for funding from your utility, you must (a) also apply for any available MassEVIP funding, and then (b) subtract any funding you receive from the state MassEVIP program from your award from the utility. If the stations are publicly accessible, you can stack state and utility funding.

Where can I learn more about how to operate and maintain EV charging stations?

Your chosen EV charging station will come with a user guide that lists required regular maintenance.

Where can I learn more about EVs in general?

You can visit the Massachusetts Clean Energy Center's electric vehicle webpages, available here.

Who are the vendors working with Community Charge?

After an initial consultation, PowerOptions will connect you with one of several pre-selected vendors based on your property, needs, and goals.

Who do I contact for more information?

Please email CommunityCharge@PowerOptions.org.