

MAXIMIZING THE VALUE OF LEVEL 2 ELECTRIC VEHICLE CHARGING STATIONS

The placement of the charger impacts both visibility of the charger and the utilization rate. ■

Placing the charger in a highly visible location maximizes awareness of host sustainability efforts and increases charger utilization.

Properly managing charger use will increase EV driver satisfaction. ■

Sometimes EV drivers do not move their vehicles after they are fully charged, which blocks other drivers from using the charger. To manage this issue, hosts have used waitlists, organized internal methods for EV drivers to communicate directly with each other, and/or set idling fees and installed signs.

It is easier to remove a fee than to add one. ■

If a host initially offers free charging, drivers are likely to complain if a user fee is later added.

Agree on a charger point of contact and communication protocol with drivers. ■

Potential site hosts should consult with facilities and maintenance staff early in the process to determine the required staff time and budget to maintain chargers and to develop a clear repair protocol. Site hosts should also develop a method of communication for EV drivers to report issues.

Work with a provider who can guarantee parts over the charger's lifetime. ■

Charger providers often discontinue older models, which results in replacement parts being unavailable three or four years after the charger is installed. If the charger cannot be repaired, it either needs to be retired or replaced, which is expensive.

Consider working with a charger provider who will own the charger. ▲ ●

Some charger providers pay for the installation and maintenance of a charger and even share a small portion of any profits from the charger with hosts.

Consider that some people may feel that a benefit for EV drivers is unfair. ● ▲ ▲ ■ ●

Some employees feel that it is unfair that parking spots be dedicated to EV charging and that some employees receive free "fuel" from their employer. This can also be an issue in public parking lots, where space is at a premium.

Once EV chargers are provided, a host will always be expected to have them. ■

EV drivers will also expect that the chargers provided are working properly and may even ask for additional chargers to be installed if existing chargers are frequently in use.



NEW YORK
STATE OF
OPPORTUNITY.

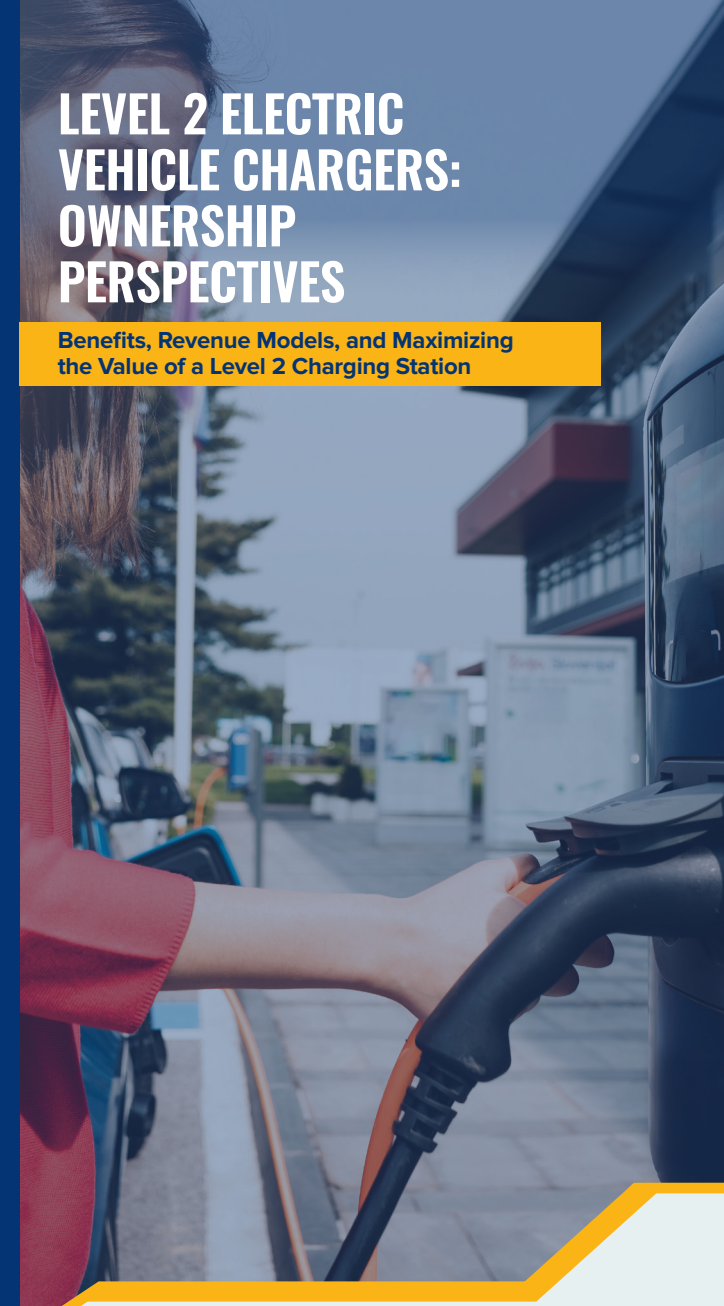
NYSERDA

New York State Energy Research
and Development Authority
17 Columbia Circle, Albany, NY 12203-6399

toll free: 866-NYSERDA
local: 518-862-1090
fax: 518-862-1091
info@nyserda.ny.gov
nyserda.ny.gov

LEVEL 2 ELECTRIC VEHICLE CHARGERS: OWNERSHIP PERSPECTIVES

Benefits, Revenue Models, and Maximizing the Value of a Level 2 Charging Station



NEW YORK
STATE OF
OPPORTUNITY.

Charge NY



BENEFITS OF HOSTING EV CHARGING

Site hosts across New York State have reported that hosting EV charging stations has been a net positive as the many benefits outlined below far outweigh any challenges.

EV Charging as an Amenity ● ▲ ●

Similar to workplaces offering fully stocked kitchens or apartment buildings offering an on-site gym as an amenity, EV charging is a great way to attract and retain tenants, employees or customers.

Sustainable Branding ● ▲ ▲ ■ ● ■ ●

EV chargers facilitate more sustainable forms of transportation while also providing a highly visible manifestation of sustainability efforts. Site hosts also often have access to environmental data from the chargers that can be used in marketing materials, such as reduced greenhouse gas emissions or gallons of gasoline avoided.

Employee Satisfaction ● ●

Many employees are interested in working for employers who are committed to sustainability. Communicating to employees on how EV chargers advance an organization's sustainability commitment can be equally important as external marketing efforts.

Drawing New Customers ▲ ▲ ▲ ■ ■

Providing an EV charger increases the likelihood that EV drivers will stop at a host location to charge. While EV drivers wait for their vehicles to charge, they are likely to spend money at a host establishment.

Potential Challenges ■

Hosting an EV charger also poses challenges for the site host:

- As chargers are new to many, it can sometimes be difficult to navigate the repair process.
- Once a charger is installed, EV drivers will expect hosts to always have them, to have enough to meet demand, and that they will work properly and be fixed in a timely manner.
- Non-EV drivers may complain about parking spots dedicated for EV charging, especially if they are in preferred locations, or the fact that EV drivers receive free "fuel."

THREE COMMON REVENUE MODELS FOR LEVEL 2 EV CHARGERS

Free to Use ● ▲ ▲ ■ ● ■

The host does not recoup the cost of installation and maintenance directly from the charger. Instead, value for the host is derived through other benefits such as employee or tenant retention, sustainable branding, and selling other goods and services to the emerging-market segment of EV drivers. The advantage is that it is easy for EV drivers and sends a strong signal about the host's commitment to the environment and its customers or employees.

Small User Fee to Cover Costs ● ▲ ▲ ■ ● ■ ●

The site host charges drivers a reasonable fee for the use of the EV charger. This fee can be set low to cover the operating costs of the charger, such as electricity and repairs, or slightly higher to cover the lifetime cost of the charger, including installation and equipment costs. This option can reduce the overall cost of hosting an EV charger while still receiving many of the benefits mentioned earlier. The advantage is that the overall cost to the host does not increase as the EV charger utilization increases because operating costs are recouped through fees.

Profit Center ▲ ●

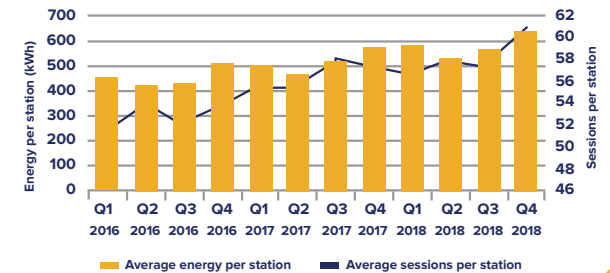
The site host must charge a large enough fee and achieve a high enough utilization rate that they see a reasonable return on investment for each EV charger installed. Use fees are typically set either per kWh, per hour, per session, or some hybrid thereof. A challenge with this model is striking a balance between setting a fee high enough to achieve profit while not disincentivizing drivers from using the charger. The advantage is that if a business can implement its plan successfully it will achieve a profit directly from the EV charger while also gaining value from the benefits mentioned earlier.

THE FOLLOWING TAGS IDENTIFY THE COMPONENTS OF THIS BROCHURE MOST RELEVANT TO EACH SITE CATEGORY

- All categories
- Hotel
- Leisure
- ▲ Multi-unit dwelling
- ▲ Parking garage
- ▲ Retail
- Transit
- University and medical campus
- Workplace

LEVEL 2 EV CHARGER ENERGY USE & SESSIONS PER STATION 2016-2018

Between 2016 and 2018, Level 2 EV charger average energy use and session use increased in New York State by 41% and 19%, respectively. EV charging stations are also known as electric vehicle supply equipment or EVSE.



Insights in this brochure were gathered through interviews with existing Level 2 EV charger site hosts in New York State. For additional details please refer to the following resources.

Resources:

Best Practice Guides and Case Studies

nyscrda.ny.gov/ChargeNY-best-practices

- Level 2 Charger Report
- Signage Best Practices
- Siting and Design Guidelines
- Workplace Charging Policies

EV Charging Financial Analysis Tool

<https://atlaspolicy.com/rand/ev-charging-financial-analysis-tool/>

Public funding sources:

Charge Ready NY: nyscrda.ny.gov/Charge-Ready-NY

Grant Funding for Municipalities:

dec.ny.gov/energy/109181.html