

Electric vehicle charging stations:

A guide for board members





EV charging 101 for your community association

Electric vehicles (EVs) continue to rise in popularity. According to the [International Energy Agency](#), in 2021, electric car sales reached a record high of 6.6 million, nearly double the sales of 2020. With no trips to the gas station, less maintenance, and emission-free driving, it's easy to see why many are switching to electric vehicles.

“*In the past handful of years, we've seen the interest in EVs grow from a rarity to commonplace. These are no longer one-off challenges, but rather, a conversation that all communities, not just high-end high-rises, need to be ready to tackle if they want to attract new residents and keep their existing community members happy.*”

– Chris Normandeau, Director of FirstService Energy, an affiliate of FirstService Residential

Jumpstarting EV in your community

Why EV?

Electric vehicle charging is an essential component of the transition to clean energy and reduced carbon emissions. Community associations play a crucial role in promoting EV adoption and supporting the deployment of charging infrastructure.

Some of the main benefits of EV charging in communities are:

- Increased property values
- Enhanced sustainability and reduced carbon footprint
- Meet needs of current and future residents
- A sense of community by promoting shared infrastructure and resources

How do I start?

The growing demand for clean energy and electric vehicles means your community must start preparing for increased demand for EV charging stations on the property. This may create challenges in navigating infrastructure requirements, legal implications, management concerns, and even aesthetics.

The Department of Transportation offers a [preliminary checklist](#) for communities to consider when planning to install EV charging stations.

Additionally, you can contact a team member from [FirstService Energy](#) who can provide additional information and customized solutions for your community.

“Some of the benefits of installing charging stations in our community were a surge in popularity among prospective residents, increased property values, state-of-the-art amenity for a modern, sustainable lifestyle, and a partnership with FirstService Energy, which provided amazing guidance and expertise in navigating the process of installing EV charging stations.”

- Chris Petrik, property manager for FirstService Residential in Baltimore, Maryland

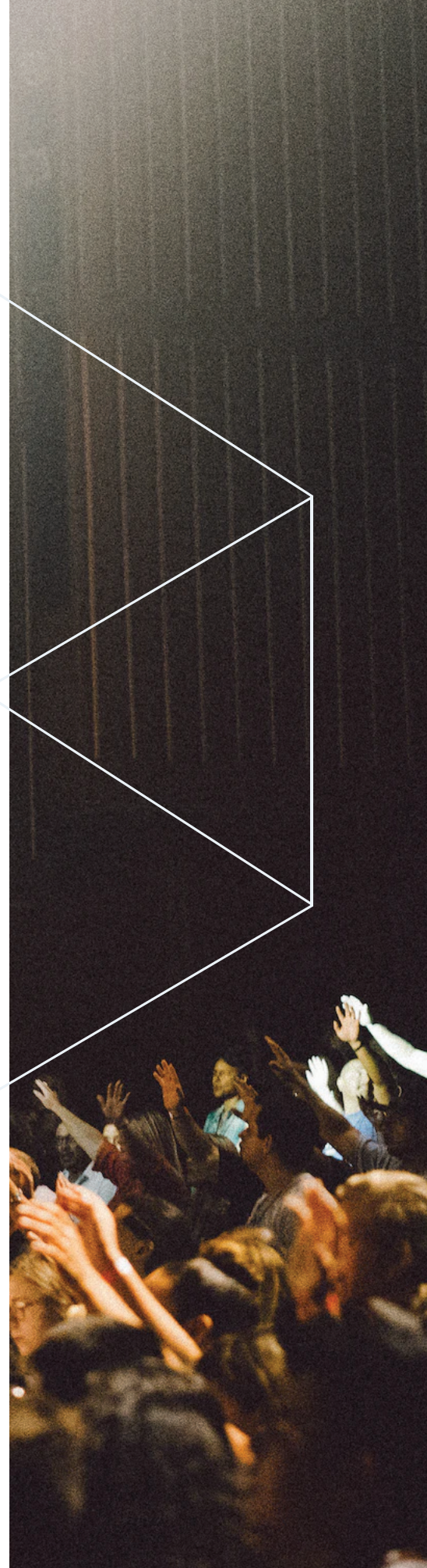
The EV value proposition: Who weighs in?

When considering the installation of charging stations, a few parties need to weigh in:

- The EV owner(s)
- The association board members
- The community management staff (chief engineer, property manager, etc.)
- The homeowners and residents
- The electric utility provider
- A qualified contractor

Additionally, the board should review the community's governing documents and all applicable federal, state, and local laws.

Consider creating an advisory committee, and count on experts like FirstService Energy, which can pull together data and resources from other communities that have completed EV infrastructure, your local power company, a qualified contractor, and more.



Making space: EVs and parking considerations

From state-mandated designations to physical confines of garages and parking lots to property ownership (deeded parking spaces), accommodating an EV system is as critical as investing in it. In many communities, owners have deeded parking spaces, and association approval is required to move forward with a personal EV charger.

If your community does not have assigned parking spaces, implementing several charging stations for the entire community may be the best solution. However, the association will need to consider the limitations of electrical infrastructure or even the lack of space. Another factor to consider is the charger's distance to the building's electrical panel, as that is a factor in determining installation costs.

It pays to go EV: Government incentives

Organizations nationwide have started offering incentives for businesses and residences to install EV chargers. While most people are familiar with the federal tax credits available for installing EV chargers, many are unaware of additional programs that may be available. Incentives or rebates for installing EV chargers are available in 63% of the U.S. These rebates can come through the state, the utility company, or the municipality. There are also federal incentives and funding programs available for electric vehicles.

Where to start looking:

- BriteSwitch – [EV Charger Rebates](#)
- U.S. Department of Transportation – [Federal Funding Programs](#)
- U.S. Department of Energy – [Federal and State Laws and Incentives](#)

Experts at FirstService Energy can assist in securing available rebates for your community.

“We invested \$135,000 to install EV chargers in our community, including the necessary infrastructure like the concrete, the electric service, the bollards, the painting, everything that had to be done to install these stations. But thanks to \$50,000 in utility and state rebates and other incentives, the total investment was reduced to \$85,000.”

– Chris Petrik, property manager for FirstService Residential in Baltimore, Maryland

Charging for charging: How can your community fund the installation and usage?

Paying for installation

In most cases, residents pay for the installation of the charging station in their personal assigned parking space. In cases where numerous residents are requesting stations, the association may choose to allow the installation of multiple charging stations in a public parking area rather than the residents' assigned parking spaces. In this case, associations have various options to determine who will pay for the chargers if they are a shared amenity.

If the electric infrastructure is not equipped to accommodate charging stations, the association will generally pay for these system upgrades. Since this type of project is a capital improvement, the board determines if funding should come from reserves or elsewhere. Communities researching financing options can work with our partner [FirstService Financial](#).

Paying for energy

In addition to the installation cost, the electrical consumption cost must also be considered; with several EVs plugged in, someone must pay for the power. A few options for communities are:

1. **Institute a flat monthly user fee.**

Please consider that light users may not want to share the financial burden of heavy users.

2. **The association covers the additional electricity costs.**

This may be an issue with residents who drive conventional vehicles and don't want to contribute to the higher utility costs through their association dues.

3. **Sub-meter the electrical consumption of each EV.**

Although some communities resort to this option, it can be challenging to implement. It would mean the association manager or office staff must administer the charges and manage the billing, payments, etc., which can be very time consuming, even with only a few EVs.

4. **Implement an automatic charging accounting system or partner with a third-party service provider.**

While these solutions incur added administrative fees, they ensure that each user pays for their energy use while freeing the management staff to focus on property operations. This is the most popular option for communities that wish to add value to their residents without incurring an additional burden.

Let's talk about chargers: Understanding different options

There are generally three types of chargers available on the market. Level 1 is a relatively inexpensive traditional wall outlet such as those found in a bedroom or kitchen. Level 2 offers higher voltage and higher amperage. A dryer or stove are good examples in a single-family home.

Board members often ask about Level 3 because it's a higher charging speed and people often equate bigger with better. However, Chris Normandeau says this isn't an ideal solution for community associations. "The infrastructure is a lot more expensive. A lot of the time, you'll have to bring in new service from your utility, and the charger itself will be more expensive. Yes, you get a lot more charge per hour, but most residents who live in a community don't just stop by for an hour and then leave. They're home, and when we're home we often park overnight. So, I don't think this is the best option for most associations."

Communities should keep in mind three key items when considering purchasing EV chargers:

- **Quantity** – how many chargers does your association need?
- **Capacity** – what is your community's physical and electrical capacity?
- **Finances** – how will your community pay for the initial and over-time costs?

Charger Types

LEVEL 1

Electrical output	110V 10-20 amps
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Miles of charge/hour	3
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Average charger cost	\$500
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LEVEL 2

Electrical output	208-240V 30-80 amps
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Miles of charge/hour	30
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Average charger cost	\$2,000-\$7,500
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LEVEL 3

Electrical output	480V 100+ amps
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Miles of charge/hour	300
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Average charger cost	\$50k-\$150k
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EV charging safely: How communities should prepare for safe installation and operations

Allowing a trusted electrical engineer, electrician, and utility representative to review the existing service, transformers, panels, conductors, and other charging infrastructure is imperative – in fact, it should ideally be done before any residents purchase an EV.

Installing a single Level 1 charger for an EV in a single-family home is a simple solution. When residents are looking for dozens of Level 1 or Level 2 chargers however, other considerations, including what types of charging stations your association allows, should be kept in mind.

This is an important project, and you'll want it to go smoothly. Seek a licensed, fully insured contractor with experience in EV charging infrastructure. Ensure they pull all necessary permits and handle all required inspections. If you need help locating a contractor, a good property management company will have experience with dozens or hundreds of similar projects and be able to recommend vendors with similar experience while keeping the decision of who to work with in the board's hands.



Next Steps

When transitioning to an EV-friendly community, expect the process to take at least six months, including the initial exploratory phase with your residents, infrastructure, utilities, and vendors. Each community has its own unique challenges, and there is no single “right way.”

Associations should lean on their managers and educated advisors to help get started on the road to installing EV charging stations. By partnering with a professional management company like FirstService Residential, you gain exclusive access to FirstService Energy and FirstService Financial.

FirstService Energy offers customized and cost-effective solutions to boost efficiency, reduce energy and water consumption, and lessen the environmental impact of residential communities. They guide boards toward energy-smart solutions for today and tomorrow. They also have the experience and buying power to handle your EV charging needs and ensure you find the right solution for your community.

If your community is struggling with finding sufficient funds for this capital improvement project, FirstService Financial delivers best-in-class financial and insurance services to protect and enhance the value of our clients' properties. They can help your community find the programs that fit your needs.

[Contact](#) a member of our team to get started today.





FirstService Energy is the energy management subsidiary of FirstService Residential. The experts at FirstService Energy look at buildings' energy consumption and compare that to buildings of similar sizes in the same area. They help communities reduce their carbon footprint and save money on energy and water. FirstService Energy experts operate primarily in New York City, Toronto, Pennsylvania, New Jersey, Illinois, Virginia, DC, Maryland, Georgia, Massachusetts, Texas, and Florida. The teams offer local expertise and recommendations that bring even more value to the communities managed by FirstService Residential.