



Amp Up Your
**Commercial
EV Charging
Programs**

APRIL 2024



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Chapter 1 /

Powering EV Charging Initiatives

Powering EV Charging Initiatives



Range anxiety. It's one of the biggest reasons people give for not buying or using electric vehicles. In fact, according to a 2023 survey of 2,000 American adults conducted by [Verra Mobility](#),

79%

experience range anxiety

79% of respondents were concerned about finding nearby charging stations to keep their EV going.

\$6.5 billion

in utility EV program spending

The federal government, states and electric utilities have worked to reduce range anxiety by increasing the number of EV charging stations nationwide. According to [Atlas EV Hub](#), \$6.5 billion in utility EV program spending has been approved across the United States, including \$5.3 million for EV charging infrastructure.

\$5.3 million

for EV charging infrastructure

But currently, most EV charging happens at drivers' homes. This is perfectly suitable for people with a garage to install a charger in and those whose EV charge lasts until they're able to make it home and recharge each night, but there's a growing need for more public EV charging infrastructure to serve everyone else. This means utilities have to engage commercial property owners such as retailers and restaurants, office buildings, destinations like museums and movie theaters, hotels, and apartment and condo management companies to encourage them to install chargers. And since many of those currently unable to charge at home are the low-income residents of disadvantaged communities, these efforts support utilities' efforts to make EV programs more equitable as well.

The scale is significant: the commercial charging market needs to accelerate quickly. The [National Renewable Energy Laboratory \(NREL\)](#) estimates that by 2030, over 1 million publicly accessible Level 2 charging ports and 182,000 publicly accessible direct-current fast-charging (DCFC) ports will be necessary to support the nation's privately owned light-duty vehicle fleet. Meanwhile, single-family and multifamily homes will need another 26 million charging ports.

By implementing commercial programs to incentivize EV charging, utilities can become key drivers in consumers' transition to electric vehicles. They can also aid in fleet electrification, which promises to improve air quality and extend the benefits of electric mobility to rideshare, transit, and school bus riders. And commercial EV charging incentive programs can bolster utilities' equity initiatives by making access to chargers readily available for everyone, regardless of where their EV journey begins or ends.

By 2030, the United States will need:

1 million

publicly accessible Level 2
charging ports

182,000

publicly accessible direct-current
fast-charging (DCFC) ports

26 million

charging ports for single-family
and multifamily homes

Powering EV Charging Initiatives

»» Navigating the road ahead

Commercial EV charging can be considerably more complex and costly than home charging set-ups. [NREL](#) estimates that a commercial Level 2 port costs up to \$10,000 to install, while a commercial DCFC can top out at \$250,000. With expenses this high, it's critical that both the design and implementation of a utility's commercial EV charging program are effective.

And yet, there's no widely used roadmap for these types of programs. When dealing with the complexities of commercial EV charging, one size certainly doesn't fit all. Rather, there's a wide range of programs that have already proven successful for utilities across the country.

Powering EV Charging Initiatives



Duke Energy North Carolina and Indiana customers can rent a Level 2 or DC fast charger for their business and pay a flat rate each month. The [Charger Solution Program](#), implemented by Franklin Energy, offers businesses, multifamily dwellings, and industrial sites term rentals of EV charging equipment, with the utility owning the equipment. To increase adoption, the utility covers the cost of site evaluation, engineering design, permitting, installation, warranty, and maintenance, making the process seamless for customers. Businesses can then provide these chargers to employees, residents, and customers as an amenity, and they can earn revenue through the chargers' pricing strategies and increased business from attracting EV drivers.

LEARN MORE ABOUT

Duke Energy's Charger Solution program.



Portland General Electric's Fleet Partner program is a utility-owned **make-ready program**. It includes a free feasibility study, turnkey final design, and construction of make-ready infrastructure, along with a customized make-ready incentive. PGE owns and maintains the make-ready infrastructure for 10 years, but customers purchase, own, and control the chargers themselves.

LEARN MORE ABOUT

Portland General Electric's Fleet Partner program.



In New York, all investor-owned utilities offer a **make-ready incentive program**. In this program design, customers own the make-ready infrastructure and chargers, but the utility offers make-ready rebates to help offset the costs. NYSEG and RGE's Commercial EV Make-Ready program, implemented by Franklin Energy, offers incentives of up to 100% for the installation of charging infrastructure. The chargers help local businesses stand out as leaders in sustainability, attract new visitors, and create a new revenue stream.

READ THE CASE STUDY

Learn more about NYSEG's Make-Ready program.



In an alternate approach to driving commercial EV charging adoption, Black Hills Energy has opted for an electrical vehicle supply equipment (**EVSE**) **incentive program** in their Colorado service area. Commercial customers can receive a rebate of up to \$2,000 per Level 2 port and a \$20,000-\$35,000 rebate for DCFC.

LISTEN TO THE WEBINAR

Hear how Black Hills Energy helped their commercial customers turn EV charging into a profitable amenity.

Chapter 1 /

Powering EV Charging Initiatives

Dodging the potholes

While program designs may vary, many utilities face similar challenges when it comes to implementing their commercial EV charging programs, including:



Delivering comprehensive, hands-on customer education, including a realistic customer journey and timelines along with timely advisory support for complicated elements like permitting



Whether and how to provide turnkey customer-facing offerings, including site assessments, a trade ally network, product procurement and distribution, project management, and rebate processing



Establishing key program resources like a qualified product list, a contractor portal with project workflow tracking and rebate processing, and a program management platform



Ensuring utility readiness for the program, including interconnections, relationships with permitting authorities, and optimal data flow



Throughout this e-book, we'll show you how to navigate potential obstacles and provide solutions for three key program phases: customer engagement and enrollment, site design and equipment selection and installation, and charger operation and service.

By taking these elements into account during your program design and implementation, your utility can help ensure commercial EV charging program success now and into the future.



Chapter 2 /

Engagement and Enrollment



Engagement and Enrollment

A successful commercial EV charging program starts long before customers enroll, by first recognizing key engagement challenges and then implementing solutions.



1 SPARKING AWARENESS AND INTEREST

THE CHALLENGES:

Customers can be hard to reach.

Finding the decision-maker at a multifamily housing building or a retailer, for instance, can be frustrating. Is it the owner, the landlord, the property manager, or even someone else? Combing through property records or knocking on doors can be time-consuming for your staff.

Decision-makers may not have the time or interest to focus on what you're offering.

Because commercial EV charging stations are not yet mainstream, you may have difficulty explaining your program and engaging potential customers.



THE SOLUTIONS:

Start with a targeted marketing program. The “spray and pray” approach, where marketers send out generic emails or make scripted phone calls to every possible potential customer, won’t work with something as nuanced as a commercial EV charging program. Instead, begin by analyzing customer characteristics and past-participation data to develop a data-driven segmentation and targeting strategy. Next, educate your in-house team on the program design and ask customer service reps, key account reps, and energy advisors to help service customer leads. You can also reach potential customers through local chambers of commerce, trade associations, and community events.



Rely on your network. Reach out to trade allies and EVSE vendors and offer to train them on your program fundamentals, then connect the vendors with the trade allies to facilitate product-specific installation training. This can be a triple win, magnifying your reach while introducing your network to new partners and facilitating market transformation through training.

Engagement and Enrollment

2 MAKING THE BUSINESS CASE

THE CHALLENGES:

For companies that operate fleets, the business case for charging is directly tied to the business case for fleet electrification. According to a Rocky Mountain Institute (RMI) [survey](#) of fleet managers, companies with large fleets need to fundamentally restructure their business operations to transition to EVs, including procurement, accounting, capital-project planning, budgeting, and operations.

Companies that don't have fleets may not understand the advantages of a commercial EV charging program. For multifamily housing, workplaces, retail destinations, or public amenities like parks or libraries, EV charging is likely not a business imperative or a profit center.

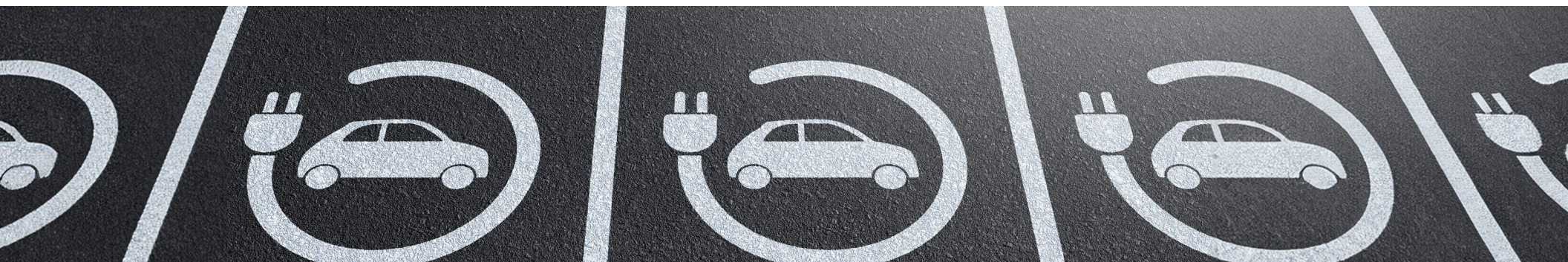
THE SOLUTIONS:



Consider including fleet advisory services in your program. Because many fleet managers lack knowledge about the complexities of transitioning to EVs, a utility can become a key resource for electrification needs. This can be beneficial for both you and your customer. For instance, your utility can help a company incorporate value-adds for its EV fleet, like battery backups and solar generation, and choose the right rate plan and fleet-management platform to optimize charging and minimize costs. A fleet advisory service can also help customers avoid costly mistakes like building charging infrastructure that becomes undersized as their fleet expands.



For non-fleet customers, build the case for a commercial EV charging program as an amenity. Easily accessible EV chargers can help attract and retain customers, visitors, tenants, and employees. Offering free EV chargers (and deducting them as a business expense) can also showcase a company's commitment to sustainability.



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SPARKING AWARENESS AND INTEREST

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MAKING THE BUSINESS CASE

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ACCELERATING THE ENROLLMENT DECISION

Engagement and Enrollment

2 MAKING THE BUSINESS CASE

THE CHALLENGES:

Even companies who are interested have no idea what to budget and struggle to get estimates. In one-on-one interviews with facility managers and retail business owners, Franklin Energy learned that decisionmakers lack the knowledge and resources to create a budget placeholder. They can find pricing for equipment, but don't know what they need. They have no idea what the other make-ready and installation costs will be, and they say that getting quotes from qualified installers is difficult as many won't conduct an onsite assessment or provide a detailed estimate for free.



THE SOLUTIONS:

Consult free external resources. Organizations like [Charge@Work](#) and [EVAL](#) can help workplaces design custom EV charging pricing strategies, [PlugShare](#) offers a nationwide charging map, and [CALSTART Drive to Zero tools](#) can help companies calculate the benefits of zero-emission fleet delivery vehicles.

Provide budgeting examples and offer free site consultations to help decision makers estimate an appropriate project budget and take action.

Include case studies and/or pricing scenarios for various project types in your online educational resources. Offer free (initial) onsite or virtual site assessments. An energy advisor can either visit the site or set up a video conference call to “walk the site” with the customer – determining the charging needs, touring the parking area, evaluating the electric supply, and roughly estimating distances. Information gathered in this initial appointment can be entered into a site assessment tool specifically configured for EVSE project estimation and forwarded to a participating commercial electric/engineering firm to provide a high-level equipment recommendation, line design, and ballpark project estimate. This meets the customer's go/no-go budgeting need and serves as a valuable screening step to prevent wasted site assessment and detailed estimation time. Our experience is that only 20-30% of project leads/assessment requests actually turn into EVSE installation projects, due to sticker shock. Participating trade allies are more likely to undertake this high-level estimation step for free, if a trained energy advisor undertakes the initial legwork.



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ACCELERATING THE ENROLLMENT DECISION

Engagement and Enrollment

3 ACCELERATING THE ENROLLMENT DECISION

THE CHALLENGES:

Everyone may be a stakeholder. Identifying and marketing to a single commercial decision-maker could be difficult. Depending on the type of business, there may be layers of people who all want to be involved.

Time management can be an issue. Stakeholders may be uncertain of how and when their EV charging program will be implemented, or they may have unrealistic timeline expectations. Larger Level 2 installation processes can take 8-10 months from an initial site walk to charger energization, and DCFC installations typically require at least a year.

THE SOLUTIONS:

» **Herd the cats.** Ask the customer about relevant stakeholders beyond ownership or upper management and ensure all of them are involved. This might include a landlord, energy manager, human resources, the sustainability team, and tenants or employees.

» **Be transparent.** Sharing the program progress/customer journey and setting realistic timelines can help manage customer expectations and prepare the team for the decisions and approvals they'll need to make. This may make a commercial EV charging program more hands-on in terms of customer support than some of your other programs, so you'll need to allocate resources accordingly.



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ACCELERATING THE ENROLLMENT DECISION



Chapter 3 /

Site Design, Equipment Selection, and Installation

Site Design, Equipment Selection, and Installation

DISCOVER FRANKLIN ENERGY'S APPROACH
TO EV PROGRAM IMPLEMENTATION
BY EXPLORING OUR EV SOLUTIONS.



This part of the commercial EV charging program design and implementation process has the potential to be riddled with pitfalls, bottlenecks, and customer attrition. There are four main issues that influence how smoothly you can move customers through the pipeline: choosing vendors, developing utility-side make-ready infrastructure, creating customer-side make-ready infrastructure, and managing program throughput. Here's how you can address and solve each one.

1. CHOOSING VENDORS

THE CHALLENGES:

There will likely be red tape. Because commercial customers can have layers of stakeholders, it may take time to select installation contractors and/or EVSE vendors, especially if this involves a formal procurement process. Many customers may also not know where to search for these contractors and vendors, or how to assess the quality of their bids.

The EV knowledge curve can be steep.

Customers often aren't familiar with the full range of EVSE products or features—many may not know the difference between a Level 2 charger and a DCFC, or which one is right for their site. They may not know what types of questions to ask prospective EVSE vendors or installers, or what EV incentives and rebates they may qualify for.



THE SOLUTIONS:

Provide your customers with EV education. Implementing an EV make-ready program for your commercial customers may not be enough. To keep customers engaged, consider providing in-depth EV education along with your make-ready program. You could include detailed information regarding EV charging infrastructure, as well as keeping customers informed on available EV program incentives and rebates.

Create a marketplace. Consider setting up a marketplace that allows customers, including all stakeholders, the ability to browse through curated equipment recommendations (like commercial-grade Level 2 chargers) and compare models and features.

Line up trade allies. You can make the customer experience smoother by establishing a trade ally network of skilled, experienced installers who are familiar with your commercial EV charging program and qualified to install chargers on your product list.

Enter the portal. Establishing a contractor portal allows trade allies to submit documentation on the customer's behalf, manage these complex projects in a way that's transparent to all stakeholders, and apply for rebates. Here's an example of one utility's [trade ally portal](#).

Site Design, Equipment Selection, and Installation

2. DEVELOPING UTILITY-SIDE MAKE-READY INFRASTRUCTURE

THE CHALLENGES:

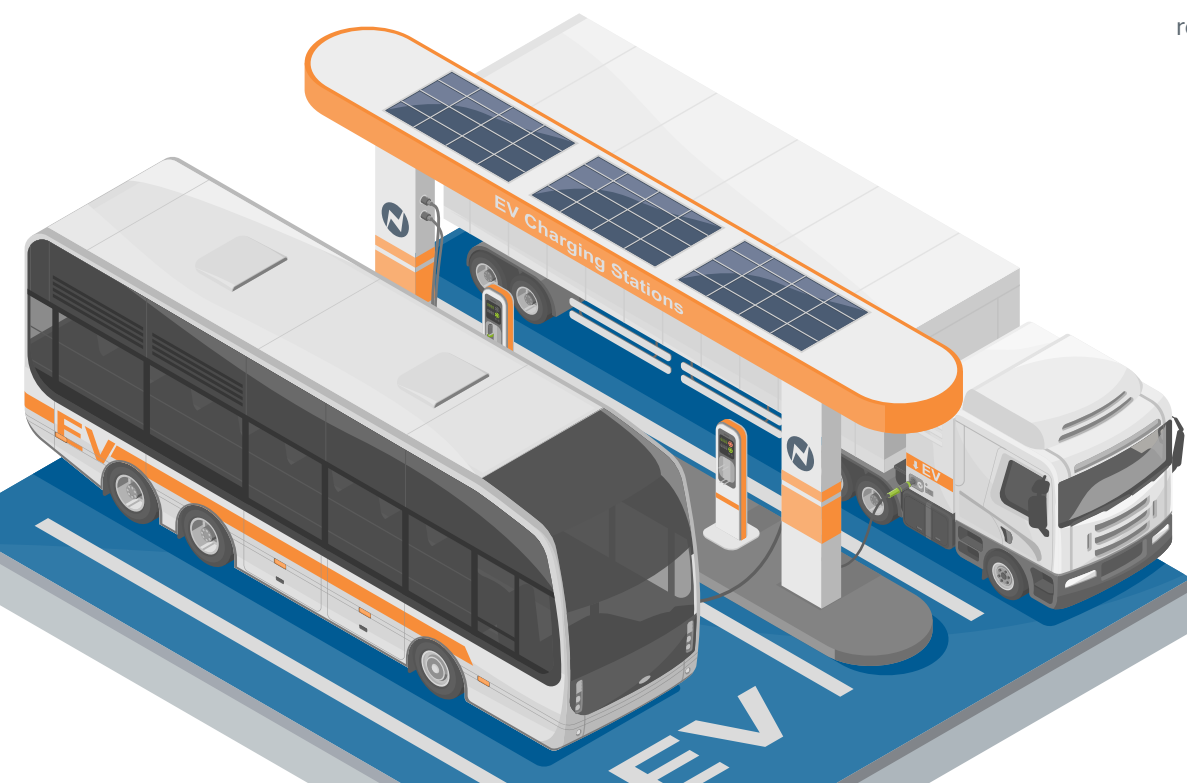
You'll need to invest time upfront. A commercial EV charging site may require new service connections and upgrades/interconnections, even at small business locations. These can take considerable time depending on the site size.

THE SOLUTIONS:



Huddle with HR. Ensure your utility service request team has the resources to handle your anticipated volume of sites, including those that lose interest or drop out along the way.

Prioritize. Consider earmarking and fast-tracking service requests specifically for your commercial EV charging program.



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CHOOSING VENDORS

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3

CREATING CUSTOMER-SIDE INFRASTRUCTURE

4

MANAGING PROGRAM THROUGHPUT

Site Design, Equipment Selection, and Installation

3. CREATING CUSTOMER-SIDE MAKE-READY INFRASTRUCTURE

THE CHALLENGES:

Soft costs can be a hard reality. The Rocky Mountain Institute's report "[Reducing EV Charging Infrastructure Costs](#)" notes that "soft costs" like permitting delays, utility interconnection requests, regulation compliance, and having to re-engineer projects because they were based on incorrect information can be more expensive than hardware for your commercial EV charging program. To make matters worse, these costs are often difficult to quantify.

You may need multiple contractors. If the installation site is in a parking lot, for instance, considerations such as fire lanes, ADA access, and conduit runs can drive up costs, especially if electrical teams need to consult with civil engineers.

THE SOLUTIONS:



Work with local permitting authorities in advance. Because not all authorities with jurisdiction are familiar with EV charging infrastructure, permitting may take longer than expected. Identify who to work with and what resources those people will need to accommodate the pipeline of customers you anticipate.



Do your design homework. Depending on the site and customer desires, it can be expensive to develop initial designs, but these designs may be necessary to calculate the final installation costs. Consider whether and how to include site designs as eligible costs.



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Site Design, Equipment Selection, and Installation

4. MANAGING PROGRAM THROUGHPUT

THE CHALLENGES:

One hand may not know what the other's doing. Given the long lead times and the complexity of these projects, your program team may lose insight into where your customers are in the design, equipment selection, and installation pipeline, or what (if anything) is holding up the process.

THE SOLUTIONS:



Rely on implementers. An EV program implementation contractor can design, implement, and manage your commercial EV program, incorporating pre-vetted trade allies and other partners. They can also offer back-end portals and tools to keep you and your stakeholders in the loop about customer problems or delays.



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Chapter 4 /

Charger Operation and Service



Charger Operation and Service

1. CUSTOMER CONSIDERATIONS

THE CHALLENGES:

Determining charger access. You and/or your customer will need to determine how chargers are accessed and controlled. Is it physically, like behind a fence, or digitally controlled? Will your commercial customers advertise their EV chargers to all potential EV drivers or limit access to “subscribed” users?

“Charging” for charging. For some commercial customers, such as multifamily dwellings, workplaces or retailers, the customer needs to decide if chargers are a free amenity for their tenants or patrons, or if they are fee-based. Charging a fee can help customers recover operating costs, while providing access free of charge could attract more tenants or guests, establish their brand as a sustainability leader, and potentially improve their bottom line.

Establish an operating network. Your customers’ chargers will likely need to be connected to an operating system that will help them manage and control access to their chargers and potentially integrate with their fleet management system. You should support these decisions by supplying open-protocol network suggestions that could also be integrated into a future managed-charging DERMs system.

Maintenance matters. EV chargers require regular site-based maintenance, so customers need a strategy for keeping their equipment operational and drivers’ access clear from impediments like snow, waste, and non-EVs.

There are other financial implications. Along with up-front capital, customers will want to know how their new chargers will affect their energy and demand costs, and how to budget accordingly. Selecting the right utility rate, load-sharing among EV chargers during congested hours, or opting into managed charging programs may help customers reduce their costs.

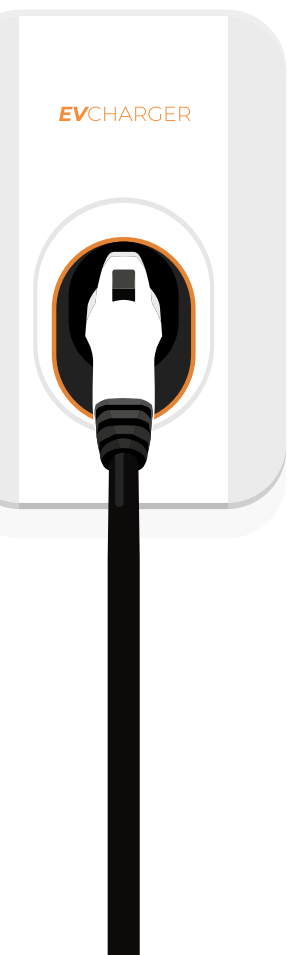
THE SOLUTIONS:



Lend a hand. Consider offering a post-installation support call to walk customers through some of the options and obligations under their EV charging program. Consider including EV charging maintenance as part of the service you provide to your commercial customers or offer it for a fee.

Offer utility-based solutions. To complete the commercial EV journey and provide the outstanding customer experience your customers have come to expect, incorporate rate-analysis tools into your commercial EV program design. This will help your customers choose the right commercial utility rate for them and anticipate how their choices—and that of visiting EV drivers—will impact their utility bill.

Optimized charging approaches. The education that utilities include alongside their commercial EV charging program should include information on optimized charging approaches, such as charging EV drivers more during peak hours, load-sharing among EV chargers, or opting into EVSE-based managed charging programs. Whether you offer managed charging programs or not, there are many ways to help customers optimize their charging to help their bottom line—and the grid.



2. UTILITY CONSIDERATIONS

THE CHALLENGES:

How will you track chargers? You'll need a plan for tracking and reporting all the chargers installed as part of the program, including capturing site characteristics such as customer segment, location, and charger access (public vs. private).

How will you manage data? Most utility EV programs require the installation of chargers that include software, but each software vendor has a different approach. To give you the best insight into EV load and meet regulatory reporting obligations, you may want to aggregate anonymized charging data. Before chargers are installed, you'll need to determine what data you can collect regarding charger uptime and utilization, how you'll get that data, and what permissions the customer may need to grant you as part of their enrollment process.

THE SOLUTIONS:



Decide whether you need application program interface (API) technology or an alternative data collection plan for charger utilization and uptime. One approach to follow is the federal government's [EV Charging Analytics and Reporting Tool \(EV-ChART\)](#). This tool helps standardize and collect data for the National Electric Vehicle Infrastructure (NEVI) and other federal programs. And, digging into the EV-ChART process may help your internal teams understand what data they might want to collect, and how to go about it.

Steer your customers toward your marketplace/qualified product list. This helps ensure they purchase products with software requirements and connections to backend providers that you've already vetted, and with whom you have data-sharing contracts.



Conclusion

Within the next half-decade, research shows that demand for commercial EV chargers will throttle up quickly. Fleets will increasingly electrify and will need guidance on how to design and install supporting infrastructure. People who live in multifamily homes will need EV chargers not only where they live, but also where they work and play. And retailers and other businesses will progressively view EV charging infrastructure as both a moneymaker and a marketing strategy for the growing number of customers who prioritize sustainability.

The scale of cost and complexity of installing commercial EV charging means that utilities have a unique opportunity to provide expertise, incentives, and stellar customer experiences. But there's a limited window of opportunity to position yourself as a knowledgeable advisor within this quickly expanding market. Creating a commercial EV charging program can be complex and challenging, but it's doable—especially when you know how to navigate potential obstacles and provide effective solutions for your customers.

Franklin Energy is an expert in designing and implementing a range of commercial EV charging programs for utilities.

Learn more about how we can help you target, educate, and empower your commercial customers through their EV journey and beyond.



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