

Interested in installing EV chargers at your commercial facility, and not sure where to start? This document provides helpful tips to guide you through the journey.

<u>Click here</u> to jump to details to share with your installer.

#### Step 1. Consider costs and take advantage of rebates

Apply for rebates from UniSource Energy Services (UES) for your commercial EV charging station. UES's <u>Smart EV Charging</u>

<u>Program</u> offers rebates as well as technical support to commercial businesses, multi-family complexes and nonprofit organizations that purchase and install EV charging ports at their location. Rebates are issued at the completion of the project. No new applications will be accepted after December 2025. All projects must be completed such that rebate funds can be distributed prior to December 2026.

See full eligibility requirements and apply for rebates here.

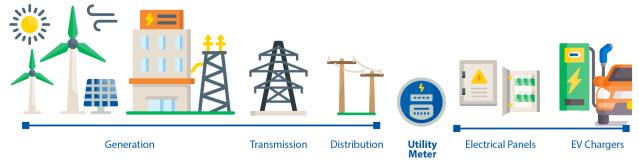


The Smart EV Charging Program's rebates and technical assistance are offered at no charge. Costs for EV charging equipment vary widely based on the selected vendor and charger type (see more on Charger Types in Step 2). On average, Level 2 (L2) charging port equipment (hardware) costs alone may range from \$2,000-\$4,000+ per port. Smart Plugs, which offer slow Level 2 charging for multifamily, are often less than this on a per-plug basis. DC Fast Charger (DCFC) hardware costs may vary more based on charging output, as shown below:

DCFC Power Output	Approx. Hardware Cost Ranges
50 kW (~30-60 min full charge time)	~\$20,000-\$30,000+
150 kW (~20-30+ min full charge time)	~\$75,000-\$100,000+
350 kW (~≤20 min full charge time)	~\$120,000-\$150,000+

Additional costs beyond the EV charging hardware will contribute to the overall cost of a project, including:

- EV charging station installation
- Permits, construction, and commissioning
- EV charging station software and maintenance contracts
- "Front-of-the-meter" upgrades, e.g., transformer upgrades
- "Behind-the-meter" upgrades, e.g., electrical panel upgrades



#### Front-of-the-meter

**Behind-the-meter** 

The figures provided here and in your rebate proposal are just approximations. Actual project design and costs will be determined by your selected contractor(s) and EV charger vendor(s).



Steps 2, 3, and 4 may be interchangeable depending on your installer's process.

#### Step 2. Select your EV charger installer

Electrical contractor selection is a good starting place for a project. Some questions you might consider when selecting your electrical contractor, electrician, or EV charger installer include:

- Does the contractor have any relationships with EV charging manufacturers (including those on UES's <u>Qualified Product List</u> if you're participating in the rebate program)? Will the contractor be able to support you with labor warranty service for these EV chargers?
- Is the contractor licensed, bonded, and insured in Arizona? Search the company and look for a C-11 or CR-11 license on the Arizona Registrar of Contractors: <a href="https://roc.az.gov/">https://roc.az.gov/</a>
- Does the contractor have training in EV charger installation and commissioning?
- Will the contractor conduct a site visit to assess any needed electrical upgrades and/or help you identify the best EV charging location?
- Does the contractor have references associated with other EV charger installation projects they can share with you?
- Is the contractor familiar with UES's <u>Electric Service Requirements</u>?
- Will the contractor provide you with a detailed proposal and estimate? It is good practice to get three estimates to compare services and costs.



Program participants select their own contractor. All contractors must hold a CR-11 or C-11 license and follow local permitting requirements for projects to be eligible for program rebates. Note that UES does not endorse or have any formal partnerships with any contractors, electricians, or EV charger installers related to the UniSource Smart EV Charging Program. Customers should check a contractor's credentials carefully before signing a contract.

# Step 3: Work with your installer on your project's design

Depending on the existing infrastructure at your facility, your installer may recommend:

- Connecting the EV chargers to an existing electric panel
- Connecting the EV chargers to an upgraded electric panel
- Connecting the EV chargers to a dedicated new electric service

Each of these design configurations have different cost and complexity associations, which vary based on the project. Smart EV Charging Program participants must have the chargers connected to a Time-of-Use plan, and the program team can help participants understand the impact of that switch based on their existing usage.

# IMPORTANT information for your installer on the next page:



## Important note to pass on to your installer:

For projects that will require a service upgrade or dedicated new service, your installer must submit a request via <a href="https://www.uesaz.com/construction-services/">https://www.uesaz.com/construction-services/</a>.

Your installer should be **prepared to share permitted plans and load calculations** with UES in order to
advance your project. Projects that do not provide these
documents may incur additional fees.

For UES Smart EV Charging Program participants, you can show your installer instructions for form submission on pg. 9. Much of the information is also relevant for projects outside of this program.

If you plan to apply for rebates, please apply before your installer submits a request for service! The program cannot provide rebates for completed or substantially completed projects.



#### **Step 4: Select your EV chargers**

Step 4 is interchangeable with Step 2, but your installer may have insights into different charger types and how project design may align with certain chargers.

There are three main types of chargers for commercial charging stations: Smart Outlets (Slow Level 2), Level 2 (L2) and DC Fast Chargers (DCFC). The main difference between these chargers is how much power they deliver to the vehicle and how fast the vehicle battery can be charged. The table below shows the difference in estimated charging times for most EV types.

Charger Type	Typical Output	Approx. Charging Time (varies based on vehicle, current state of charge, etc.)
Smart Outlet	3.8 kW	~15 miles per hour; 10+ hours full charge
L2	7-19 kW	10-25+ miles per hour; 4-10 hours full charge
DCFC	50-350 kW	180-240+ miles per hour; 20-60 minutes full charge

Please note that Level 1 chargers are typically used for private residential use and are not included in this program. For more information on resources available for residential charging, click <a href="here">here</a>.

Participants in the UES <u>Smart EV Charging Program</u> will be provided with a recommendation on what type of charger is best suited for your needs based on such factors as type of business or organization, number of parking spaces available, who will use the chargers, and the utility infrastructure needed to make the site ready to support EV charging.



Participants in the <u>Smart EV Charging Program</u> must select chargers from the <u>Program's Qualified Product List</u>. You may want to consider the following questions when requesting bids or information from EV charging vendors:

- Could you provide pricing and information on your charger models listed in UES's Qualified Product List? What are the costs for the EV charger hardware versus the costs to keep the chargers connected to a charging network?
- What payment or operational options are available for me to purchase the chargers (e.g., leasing, charging-as-a-service, full owner/operator, etc.)?
- With the available charging network software, what payment options can I set up to charge a premium for use of the EV chargers? How will customers, visitors, employees, etc. pay for charging (e.g., through an app, QR code, etc.)? What processing fees are involved?
- What warranty or operations and maintenance service options are available? What is the best way to contact you if my chargers stop working? Remember, your chargers must be operational for at least 5 years to be in compliance with the Smart EV Charging Program; if your stations go out of service and you do not pursue repairs, you may be required to return your rebate.
- Are replacement hardware parts (e.g., for cables) available?
- Who should I contact if something goes wrong? Is this contact the same for hardware vs. software/network issues? What are typical response times?



#### My project is finished – now what?

As advised above, you should be familiar with your service and labor warranty agreements with your installer and EV charger vendor. Your EV charger vendor should help you get set up to offer premium charging pricing, as well as to share data back regarding your chargers.

<u>Smart EV Charging Program</u> participants must keep their stations operational and connected to an eligible Time-of-Use rate for a minimum of 5 years.

UES is not responsible for maintaining, operating, or troubleshooting your chargers. Please contact your EV charging vendors or installer partner.

Depending on your charger use case, you may also want to distribute a charging policy. For example, workplace charging setups may benefit from an employee chat group where employees can manage swapping their vehicles to charge. Additionally, you may create a policy that establishes maximum time a single vehicle can be plugged in. You can see an example of a policy <a href="here">here</a> and <a href="here">here</a>.

Finally, your charging station network may allow you to limit or incentivize when charging occurs. By promoting charging peak during <a href="https://example.com/of-peak">of-peak</a> hours, you may be able to save on electricity costs on a Time-of-Use plan, while supporting the grid! Win-win.



### Ready to get started?

Apply for rebates here!

### **Questions?**

Reach out to us at 520-917-8444 or EVCommercial@uesaz.com

#### **FOR INSTALLERS**

#### **New Service or Construction Requests**

Last updated 12/5/2024

This section should be shared with your EV charger installer, who will be responsible for filling out these forms. Much of the instructions are applicable to EV charging projects that do not go through the Smart EV Charging Program as well.

Your electrical contractor should help you assess whether any new/upgraded service or construction requests are needed. If so, applicable forms may be found at <a href="https://www.uesaz.com/construction-services">https://www.uesaz.com/construction-services</a>. Your selected contractor should be able to help you submit these forms.

**For projects in Mohave County**, your form will be submitted online. In the "Additional Information" section, please have your contractor note the following:

"This application is related to EV charger installation. This project is associated with the UniSource Energy Services Smart EV Charging Program."

For Santa Cruz County, you may fill out the form available online and submit it via email to <a href="Mogalescustomerservice@uesaz.com">Mogalescustomerservice@uesaz.com</a>. In the 'Service Address' portion of the application, please add ", EVC" at the end of your service address. For example, if your EV chargers are going to be located at 123 Main St, you would put "123 Main St, EVC" in the 'Service Address' line of the application. When submitting your form, please include the following text in the body of your email (or mention it upon drop-off):

"This application is related to EV charger installation. This project is associated with the UniSource Energy Services Smart EV Charging Program."

If you plan to apply for rebates, please <u>apply</u> before your installer submits a request for service! The program cannot provide rebates for completed or substantially completed projects.