

## **Electric Vehicle (EV) Charging Station Owner-Operator Resource: Public Level 2 EV Charging Station Fees and Policies Guide**

### **Resource Overview:**

Appropriate usage and additional parking/idle fees at publicly accessible EV charging stations are necessary to ensure optimal usage of EV charging stations and positive customer experiences, both of which are vital to increased EV adoption. Below are typical EV charging structure types and principles for consideration in setting EV charging rates to deliver optimal usage and positive customer experience.

*Signage at publicly accessible EV charging stations is also important to deliver these outcomes. Best practices on station signage design and language will be provided in a separate guidance document.*

### **Recommended Fee Types for EV Charging Stations:**

- **Energy-Based Charging Fee:** A fee based on the total amount of electricity (measured in kilowatt-hours, kWh) used by the vehicle while charging; the fee amount may vary based on time of day. This fee type is preferred for its predictable revenue for station owner-operators and predictable cost to vehicle owners.
- **Idle Parking Fee:** Additional fee charged if the vehicle stays plugged in after it's done charging. This fee type encourages drivers to move their cars once charging is complete and is considered a best practice.

### **Best Practices for Setting EV Energy-Based Charging Fees**

Energy-based fees should be set carefully, balancing affordability for users with the need to cover costs and, as applicable, achieve revenue goals. Multiple factors should be considered when setting an energy-based fee, including local electricity rates, operational expenses, and the competitive landscape.

### Benefits of Balanced (i.e., Not Too High or Low) Energy-Based Fees for EV Charging Stations:

Benefits if the fee is not too low:

- Encourages drivers with access to home charging to primarily charge at home
- Helps ensure garage orphans (people without home charging) can access stations
- Reduces congestion so that public resources are available for drivers when needed (e.g., long trips, etc.)
- Financially supports the operation and maintenance of the charging station

Benefits if the fee is not too high:

- Increases site utilization percentage when rates are competitive compared with other options
- Enables garage orphans to transition to electric vehicles without being hindered by high charging costs

By setting energy-based fees thoughtfully, station owners can strike the right balance between affordability, utilization and optionally, profitability — ensuring sustainable and successful operation.

### How to set an energy-based charging fee:

1. **Start with Local Residential Electricity Rates:** These rates provide a baseline for users' expectations since they are familiar with what they pay to charge their EVs at home and will likely continue to charge primarily at home if public charging rates are no less than their home charging cost.
2. **Incremental Adjustment for Additional Costs:** Charging station owners face additional costs beyond electricity, such as equipment maintenance, network fees, and property expenses. To account for these, the energy-based fee should be incrementally higher than residential rates—but not excessively so.
3. **Avoid Extreme Pricing:** Setting rates too low (e.g., below residential electricity rates) can impact the financial sustainability of charging stations and attract local drivers who would otherwise charge at home. Conversely, rates that are too high (e.g., significantly above residential rates) can deter EV drivers from using the station. High fees reduce station utilization and can lower total revenue despite the higher price.

### Example 2024 EV Energy-Based Fee Range:

A reasonable range for energy-based charging fees in 2024 was **\$0.30 to \$0.40 per kWh**, depending on local electricity rates and site-specific factors. This range allows for sufficient cost recovery while remaining competitive and appealing to EV drivers.

### ***Best Practices for Setting EV Parking/Idle Fees***

Implementing parking or idle fees at EV charging stations encourages efficient use of charging infrastructure while promoting equitable access for all users. These fees are typically applied when vehicles remain parked beyond their charging session.

#### Benefits of EV Parking/Idle Fees:

- Discourages non-charging EVs from parking in the spots
- Reduces congestion and supports quick turnover for better availability
- Increases public understanding of EV charging etiquette and proper use
- Aligns with sustainability goals by ensuring chargers are used more efficiently
- Ensures station owners are compensated for lost opportunity for charging revenue

Ultimately, parking/idle fees can help address issues such as charger congestion and availability, supporting responsible use of EV charging resources and financial sustainability for charging stations.

#### How to set a parking or idle fee:

A parking/idle fee should start after the vehicle is fully charged or after a preferred amount of charging session time (such as 2 to 6 hours). The fee should be set high enough to cover the lost charging opportunity cost (i.e., the energy-based charging fee converted into a typical per minute or hour amount). It should also be set above any parking fee for non-EV charging spaces, as applicable. This will encourage turnover and discourage drivers from misuse by parking fully charged for extended periods.

Example 2024 EV Parking/Idle Fee Range: \$3.00-\$12.00 per hour (levied typically as \$0.05 to \$0.20 per minute)

#### Best Practice:

Implement a grace period (e.g., 15-30 minutes) after charging is complete before the idle fee starts, so drivers have time to move their vehicles. Communicate fee change through signage / messaging. Consider potential adverse customer experience of high idle fees; use a daily cap of fees above example range.

### **Alternative Fee Types**

There are alternative approaches to charging service fees, each with unique considerations and applications. Three common alternative fee types, their use case scenarios, and potential impacts are outlined below. These fees are not typically recommended unless there is a clear policy rationale, such as enabling novel applications.

- **Parking Time Fee:** How long the vehicle is parked and connected (charging or not) measured in minutes or hours. This fee is not tied to the amount of energy provided, creating potential inequities between charging and equivalent gasoline costs based on an EV's charging capabilities.
- **Connection Fee:** A set fee for connecting to the charger, no matter how much energy you use or how long you charge. This fee type can discourage use.
- **Flat Fee:** A single fixed amount charged per session, regardless of time or the energy used. This fee can result in inconsistent charging revenue and inequities between charging and gasoline costs.

Examples of time-based and flat fees to book charging services are emerging and may be appropriate. Such fees should be clearly communicated and converted into likely or actual, after-the-fact energy-based fees.