# ELECTRIC VEHICLE CHARGING 101

## Electric vehicles (EV) work the same as gas- and diesel- powered cars and trucks, but EVs use electricity as fuel.

As more people use EVs, Seattle City Light is proud to expand access, create future programs, and build more chargers - especially at- or near-home charging. Seattle City Light is increasing charging options for everyone, and provides information about how and where to charge your EV.

## EV CHARGING BASICS

**Charging your EV can be convenient. There are various ways to charge including at home and on the road.**

### Types of Chargers

The time required to reach a full charge (80%) depends on the size of the EV battery.

| Direct Current (DC) fast charger | Level 2 | Level 1 |
|---|---|---|
| **RANGE PER HOUR (RPH) OF CHARGE TIME**<br>At least 150 miles | **RANGE PER HOUR (RPH) OF CHARGE TIME**<br>12 - 30 miles | **RANGE PER HOUR (RPH) OF CHARGE TIME**<br>4 - 5 miles |
| **VOLTAGE**<br>480 volts | **VOLTAGE**<br>240 volts | **VOLTAGE**<br>120 volts |
| A DC fast charger uses direct current (DC) to quickly charge an EV. | A Level 2 charger uses alternating [AC] power, the same type of outlet that powers a dryer. Professional installation is required. | A Level 1 charger uses AC power or a standard household electrical outlet. Most EVs come with a portable Level 1 charger to plug into a standard outlet at home. |

## Range

Get to your destination in one charge. If your commute is less than 80 miles, most EV models will get you there in one charge. If your commute is longer, consider an EV with 200+ miles range.

## Cost

Electricity is cheaper than gas. As a City Light customer, driving electric costs 2-3 cents per mile.

## Environment

EVs powered by our electricity reduce air pollution and greenhouse gas emissions.

## Where to Charge

**Plugshare.com** shares a comprehensive map of EV charging stations including Seattle City Light Level 2 and DC charging stations.



**Want to know more about EV charging and electric transportation resources available from Seattle City Light? Visit Seattle.gov/city-light/electric-vehicles**

Seattle City Light