

Electric Vehicle Charging at Home

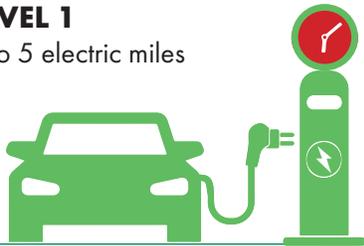
Contact Barron Electric Cooperative to see if you qualify for a free EV charging station

Based on surveys, 80 percent of charging occurs at home. There are different levels of charging stations available.

	PLUG-IN HYBRID	BATTERY ELECTRIC VEHICLE (EV)
RANGE	12-48 mi. (electric) 200-640 mi. total	110-373 mi.
FUEL TYPE	gasoline + battery	battery
MPGe <i>miles per gallon equivalent</i>	42-133	68-141

LEVEL 1

3 to 5 electric miles

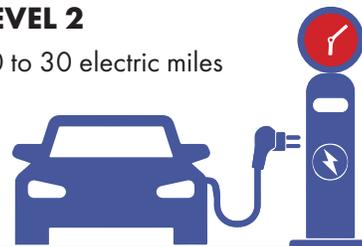


1 Hour

Requires access to a 120-volt outlet

LEVEL 2

10 to 30 electric miles



1 Hour

Requires a 240-volt/40-amp circuit to accommodate the charger

Electric Vehicle Charging Levels

	LEVEL 1 CHARGING	LEVEL 2 CHARGING
VOLTAGE	120V single-phase AC	208-240V single-phase AC
AMPS	12-15	<50 (typically 30)
CHARGING LOAD	1.8 kW	3.6-11 kW (typically 7.2 kW)
CHARGING TIME	3-5 electric miles per hour	10-30 electric miles per hour



typical range per kilowatt-hour (kWh) = 3 miles

Before You Buy

- Have a trusted electrician install a 240-volt/40-amp circuit to connect your charging station.
- Install the charger near a frequent parking spot. Sheds and garages limit exposure to the elements.
- A Level 2 charger plus installation can cost between \$250 and \$1,000.
- Allow ample space on the floor, walls and ceilings; be mindful of overhead doors or objects that may obstruct a vehicle's ability to plug-in. Avoid locations that will require the cord to be wrapped around or draped over a vehicle.



Free Charging Station from Barron Electric

Barron Electric offers a free Level 2 electric vehicle charger to members who purchase an EV. The charger works with all EVs, including Tesla vehicles, using Tesla's charging adapter. We encourage charging at night when demand for electricity is low. Some conditions do apply. Visit our website for more details.

www.BarronElectric.com

Electric Vehicle Charging on the Go

An EV road trip may mean charging along the route or at your destination

The type of EV you drive will determine your charging options. Public charging stations offer **Level 2** or **Level 3** chargers.

Plug-in Hybrid Vehicles (PHEVs) can charge at **Level 1** and **Level 2** charging stations. PHEVs have a shorter electric range and a gas tank back-up. Battery Electric Vehicles (BEVs or EVs) are powered entirely by electricity. BEVs can charge at **Level 1, 2 or 3** chargers.

Level 1 and **Level 2** chargers can often be found at hotels, shopping centers, tourist areas and workplaces. These sites are ideal for “destination charging,” because vehicle owners can charge their car while they spend extended amounts of time at these locations.

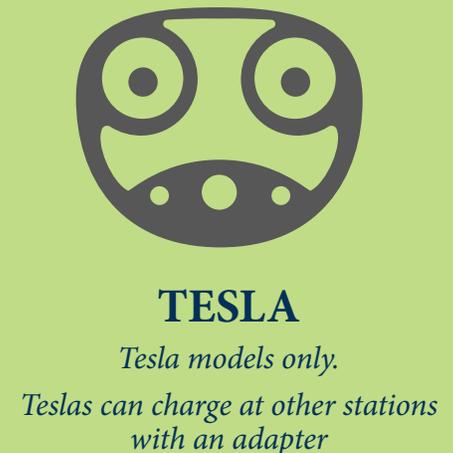
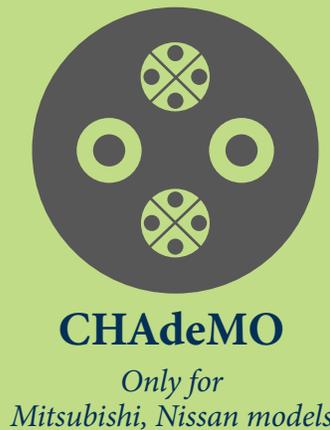
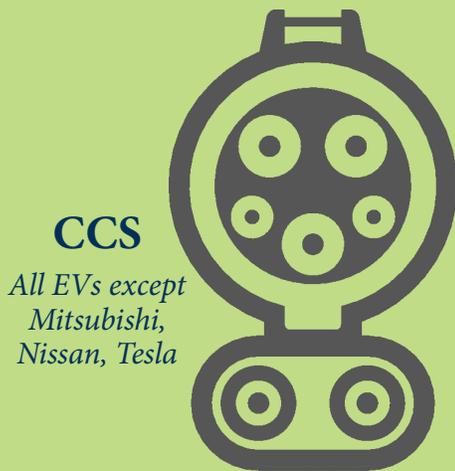
Level 3 / Fast Charging Stations

LEVEL	Electricity Demand	Miles per Hour of Charge
3 (480 volts)	50 kW	120 miles
Tesla Super Charger (480V)	120 kW	170 (30 mins)
3 Plus	150 kW	200 (30 mins)
3 Max	350 kW	200 (15 mins)

Level 3 chargers (also known as DC fast chargers) can charge an EV up to 80 percent within 30 minutes or less.

EV users can download a charging app, such as [PlugShare.com](https://www.plugshare.com), to find nearby charging stations.

Know your charger



Your electric cooperative recognizes the need for convenient and publicly available electric vehicle charging stations. We've joined with other cooperatives in Wisconsin, Minnesota, Iowa and Illinois to develop Levels 2 and 3 charging stations within co-op service territories, building the CHARGE EV network.

A map of existing CHARGE EV charging stations and more information can be found at www.charge.coop.