Electric Vehicle FAQ’s

Types of Electric Vehicles:

- **Hybrid Electric Vehicles (HEVs)**, such as the Toyota Prius, have a gas tank without plug-in to charge the battery. The battery charges through regenerative braking and by drawing power from the engine. HEVs are not eligible for the EV Charger Rebate.

- **Plug-in Hybrid Electric Vehicles (PHEVs)** run on both gas and electricity.

- **Battery Electric Vehicles (BEVs)** are all electric, all the time, and have no internal combustion engine or gas tank.

What is a Time-of-Use Rate? A time-of-use rate incentivizes the use of electricity during specific low demand periods. The retail rate for the use of kilowatt-hours is higher when demand for electricity is higher, so the time you use electricity becomes just as important as how much you use. This rate offers a significant benefit to electric vehicle drivers as most charging is done overnight during the low-demand-low-rate times.

How do Electric Vehicle Batteries Perform in the Cold Weather?

Cold weather affects the range of both electric and internal combustion engine vehicles. For electric vehicles, extremely cold weather can impact the travel distance up to 50 percent; yet electric vehicles still work well in cold climates. It is recommended that you store your electric vehicle in a garage during the winter and allow it to heat up while it is charging.

What are the Benefits of Electric Vehicles?

- **Lower Fuel Costs.** A typical BEV would save $730 in gasoline expenses when they drive an average of 12,000 miles.
- **Tax Credit.** Most BEVs receive a $7,500 federal tax credit, PHEVs generally get somewhat less. The credit is based on the battery size. The battery installed in HEV is too small to qualify for a tax credit.
- **Lower Maintenance Costs.** Most BEVs have much lower maintenance costs because of the simplicity of the design and components and the regenerative braking leads to less wear on the brake system. PHEVs are more complex that have both gas and electric components.
- **High Quality and Fun Driving Performance.** Most electric cars can do 0-60 mph in less than 8 seconds, and some in under 3 seconds. Immediate, quick, smooth and silent acceleration is the electric car’s trademark.
What is the Charge Time?
Charging stations are often categorized into three levels: Level 1, Level 2 and Level 3 (DC Fast Charger). All electric vehicles come with an adapter to plug the car in at home to a standard 120-volt outlet, known as Level 1 charging.

![Image of a car charging](image1)

**Level 1 charging:** Provides the slowest charge, around 3 to 5 electric miles per hour. Even at this slow speed, however, the majority of electric vehicle owners plug in at home to refuel.

![Image of a car charging](image2)

**Level 2 charging:** Commonly found in public locations, including shopping centers, downtown areas, multifamily communities and workplaces. Level 2 charging stations can also be installed at home if a 240-volt outlet is available. Level 2 charging is three to five times faster than Level 1 and provides 10 to 20 electric miles per hour. It is a great option for public locations where people may be parked for a few hours and can charge their vehicle.

![Image of a car charging](image3)

**DC Fast Charge:** Provides an opportunity for a very quick charge. These stations are capable of charging a depleted electric vehicle’s battery to 80 percent capacity in under 30 minutes. DC Fast Charge stations are usually located in high-traffic public areas. Recently, more of these stations have been installed at gas stations across the country, where drivers can stop for a quick break while on road trips.

Where Can I Find Charging Stations?
Iowa Lakes Electric Cooperative has a publicly-accessible electric vehicle charging station at its headquarter facility in Estherville. In addition, there are many websites that provide a nationwide listing of the location of charging stations and the level of charger at those locations like the link below.
https://afdc.energy.gov/fuels/electricity_locations.html#/find/nearest?fuel=ELEC

Where Can I Test Drive an Electric Car?
At Your Cooperative! Member-owners of Iowa Lakes Electric Cooperative contact us to set up an appointment to drive the Cooperative’s 2019 Chevrolet Bolt or even to check-it out for an overnight test drive experience for you and your family shared experiences. Call us today at 800-225-4532 to schedule your turn to evaluate an electric vehicle for yourself from behind the wheel!