



EV QUESTIONS & ANSWERS ABOUT ELECTRIC VEHICLES

Consumer Reports has declared that the era of the electric car has arrived. With prices dropping and technology changing, Kentucky's Touchstone Energy Cooperatives have seen a surge of interest in electric vehicles. The following questions and answers are for members seeking information:

Q. Why are more people buying electric vehicles?

A. Electric vehicles offer significantly lower fuel costs, lower maintenance costs, environmental benefits and improving driving ranges. The choices have never been greater. Electric cars are available in almost all vehicle categories. According to Consumer Reports, some electrics are the top-rated vehicle in their automotive class.

Q. What are the types of electric vehicles?

A. Major types include:

1. Plug-In Hybrid: These models use electric batteries that transport the vehicle 25 to 50 miles before switching to a gas engine. Battery re-charging is done by plugging into an electric power source.
2. Battery Electric Vehicle: These cars have no gas engine and are very efficient, with many models featuring government rebates and attractive dealer warranties. The powertrain has a battery that must be recharged. These cars produce zero tailpipe emissions, run quietly, use far less energy than gas-powered cars and require no oil changes.

Q. What do electric vehicles cost?

A. The price range is wide. Several popular models are priced from \$20,000 to \$40,000. Higher priced SUVs run from \$50,000 to \$65,000, while luxury sedans range from \$80,000 to \$110,000. In the near future, many more choices are expected. Some new electrics qualify for a federal tax credit up to \$7,500, depending on battery size.

Q. How much would you save on fuel costs by only using electricity as fuel?

A. Typically, a Battery Electric Vehicle would save about 75 percent on annual costs to fuel compared with a gas-powered car. Assuming two vehicles are about the same size and driven the same miles, the Battery Electric Vehicle would be about \$100 less per month to fuel.

Q. How far can a Battery Electric Vehicle travel?

A. Range will depend heavily on driving style and average speed, but most newer models can travel 200-300 miles before needing to be recharged. Studies show that many drivers travel less than 40 miles a day, and driving ranges of the cars continue to improve.

Q. How long do the cars take to recharge?

A. The inverter and the quality of the charger make a big difference in the time it takes to recharge. Using a 240-volt Level 2 charger, most vehicles need at least three to eight hours to recharge fully. Level 1 chargers that use a standard 120-volt outlet can take twice as long for a complete charge. At 480 volts, Level 3 units charge to 80 percent of capacity in 30 minutes or less, but manufacturers only recommend occasional quick charging because that can shorten battery life.

Q. What are the typical battery warranties?

A. Automakers are required to warranty the batteries on any hybrid for eight years or 80,000 miles in most states (including Kentucky). In 15 states, they're required to warranty them for 10 years or 150,000 miles, according to Consumer Reports.

Q. How much do home chargers cost?

A. Wall chargers are called Electric Vehicle Supply Equipment (EVSE), and their cost is additional to the purchase price of the vehicle, ranging from \$500 to \$2,000 depending on amperage, features and installation.

Q. Why is the co-op getting involved with electric vehicles?

A. We've seen growing interest in electric vehicles. The savings can be significant, and we want to help members who've expressed interest make informed decisions.

Q. Where can I get more information?

A. See a local car dealership, and check out the following resources:

"Best Hybrid/Electric Vehicle Buying Guide"
www.consumerreports.org/cro/cars/hybrids-evs/buying-guide.htm

"Electric Cars 101: The Answers to All Your EV Questions"
www.consumerreports.org/hybrids-evs/electric-cars-101-the-answers-to-all-your-ev-questions/

To find charging stations nationwide go to
www.plugshare.com