







As your Touchstone Energy® cooperative, we want to be your source for energy and information. Since electric vehicles (EVs) are becoming more mainstream, we put together a variety of fact sheets and information to help answer questions you might have.

Contact us for more information about EVs.

One common question people have about electric vehicles (EVs) is how long the battery will last. Because the EV industry is still young, we don't yet have a solid answer to this question; however, batteries are expected to last a minimum of 10 years — and potentially the life of a car — and all EV models come with a battery warranty of at least 8 years/100,000 miles.

Over time, batteries do degrade to some extent, but improvements in battery technology and management systems mean that many of the concerns of even a handful of years ago are not as prominent today. Still, there are a few conditions that researchers believe put more wear on battery packs:

- High ambient temperatures
- Prolonged periods at 100% or 0% state of charge
- Heavy/exclusive use of DC Fast Charging

If you're out of warranty and need to replace your battery, it will likely cost several thousand dollars.

An additional note to keep in mind is that even when batteries become unsuitable for propelling an EV — or when the car they're in goes out of service — they can be moved to other applications, such as stationary energy storage. Batteries are believed to still have approximately 70% capacity at that time. Beyond that, battery recycling is poised to take off as an industry in the coming years and decades. Reusing batteries in other situations before the end of their full operational life and then recycling them can extract additional value.



As battery technology continues to develop, we should see battery life spans extend and costs of replacements decrease. It is also encouraging that there are second-life uses for batteries after they are removed from vehicles.

This article was provided by Advanced Energy, a nonprofit energy consulting firm. For more information, visit www.advancedenergy.org.

FOR MORE INFORMATION, VISIT TOUCHSTONEENERGY.COM