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### What Is The Life Of an Electric Car Battery?

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One of the first things electric car shoppers usually wonder is, “How far can it go?” It's a question that makes sense considering the battery pack is typically the costliest component in an EV.

When you buy a gas-powered car, you probably don't worry about the longevity of the engine. But since electric cars are a relatively new technology, many shoppers question if an electric vehicle is a good choice for them.

It's difficult to find accurate statistics on the lifespan of electric vehicle batteries, because they haven't been around long enough yet. That said, The National Renewable Energy Laboratory says that today's batteries can last at least 12 to 15 years in moderate climates. That means they'll likely outlive the cars they're installed in, but many experts say 100,000 miles is a good estimate.

The lifespan of electric vehicle batteries can vary greatly based on a variety of factors that are controllable by the user, and many which are not. Therefore, in this article, we highlight some factors that can influence the longevity of your EV battery.

#### **Ambient Temperature**

The real enemy of electric car batteries is heat. As your EV charges and operates in hot temperatures, its ability to retain a charge will decline rapidly. This is especially true for EVs that are not climate-controlled. When storing an electric car in high temp areas, it can also affect the battery life.

#### **Charging Cycles**

An electric car battery will typically degrade after a certain number of charging and discharging cycles. The more cycles you go through, the faster the battery will lose its charge and go out earlier than usual.



## **Fast-Charging**

DC fast charging stations are convenient for long road trips in an electric vehicle, but you should use them sparingly when not taking a long trip. Using a fast charger too often will reduce the lifetime of your battery.

## **Charge Level**

One of the most important things to protect the life of an electric car battery is good charge management. To prolong your EV battery life, charge it up to 80% and try not to let it discharge below 20%. Most newer EVs have an auto-charge limit feature that will shut it off once it reaches this amount.