ELECTRIC VEHICLES GENERAL FAQS



Q: HOW WILL I KNOW IF AN ELECTRIC VEHICLE IS RIGHT FOR ME?

A: If performance, positive environmental impact, convenience, and reduced operating costs are important purchase factors, then electric vehicles should be at the top of your shopping list. Owing an electric vehicle has never been more compelling.

Q: DO I NEED TO DO ANYTHING TO MY HOUSE TO PREPARE FOR EV OWNERSHIP?

A: In order to use an EV, you simply need access to an electrical outlet. If you wish to charge at faster speeds you may consider installing a level 2* charging station. Cadillac plans to offer charging solutions and installation support to make the process as easy as possible.

Q: ARE THERE ANY OTHER BENEFITS OF OWNING AN EV?

A: EV's are cleaner, quieter. Additionally, EVs have fewer moving parts. This often translates into reduced maintenance costs. For example, no oil changes ever. There are often federal, state, and local EV incentives. Finally, EV owners may benefit from preferred parking or HOV lane access in some parts of the country.

Actual charge times will vary based on battery condition, output of charger, vehicle settings and outside temperature.

Q. HOW CAN I FIND CHARGING STATIONS IN MY LOCAL AREA?

A: The availability of public charging has increased substantially over the past few years. There are numerous third-party apps and sites that can help you find local charging stations. Additionally, Cadillac's Energy Assist App will guide you to local stations in your area.

Q: WHERE CAN I CHARGE AN ELECTRIC VEHICLE?

A: The vast majority of charging happens at home (overnight, similar to your smartphones). For the times when you need to charge outside of the home, there are over 70,000 public charging stations in the US and this number is growing every day.

Q: HOW LONG DOES IT TAKE TO CHARGE AN EV?

A: Actual charge times will vary based on battery condition, output of charger, vehicle settings, and outside temperature. There are three levels of charging:

- AC Level 1 charging can deliver about 4 miles of range per hour (at home use)
- AC Level 2* charging can deliver 25 to 60 miles of range per hour *(at home use / at work)*
- DC fast charging can deliver 100+ miles of range in 10 minutes (public use)

Q: WHAT HAPPENS IF I RUN OUT OF CHARGE?

A: Studies show that 95% of EV owners have never run out of a charge. In the unlikely event this occurs, all Cadillac customers have access to Cadillac roadside assistance that will ensure customers get back on the road.

Charging

3

Q: DOES AN EV BATTERY LOSE ITS STATE OF CHARGE WHILE TURNED OFF?

A: While Lithium-Ion batteries have a self-discharge feature, the loss of charge while the vehicle is turned off is minimal. In fact, studies show that Lithium-Ion batteries self-discharge at rate of 1-2% per month in many cases.

Q: WILL THE BATTERY DETERIORATE OVER TIME LIKE THOSE IN CELL PHONES?

A: Lithium-Ion batteries are designed with protective measures to ensure longevity of battery life. Your electric vehicle will enjoy a long useful battery life.

Q: WILL THE BATTERIES BE ABLE TO BE RECYCLED ?

A: Cadillac batteries will enjoy a long useful life, however, Cadillac plans to explore recycling partnerships.

Q: HOW DO EXTREME TEMPERATURES AFFECT THE CAR'S BATTERY?

A: High voltage batteries are designed to safeguard against degradation due to extreme temperatures. Extreme temperatures may affect vehicle range.

Q: WHAT IS GM's ZERO, ZERO, ZERO VISION?

A: Your journey should be safe, clean and efficient, which is why General Motors is advancing our vision of a world with zero crashes, zero emissions and zero congestion through the creation of electric, self-driving, connected vehicles and shared mobility services that will transform how we get around.

Q: WHEN DOES GM WANT TO ACHIEVE ZERO, ZERO, ZERO?

A: This transformation won't happen overnight, but the pace of change is accelerating. Cadillac is at spear head of this transformation.

Q: WHY IS CADILLAC GOING ELECTRIC?

A: This is our contribution to creating a world with zero emissions. While other conventional manufacturers make EV products to capture the growing market, Cadillac is committed to become an all-electric brand and help achieve this vision. Cadillac has a history of looking towards the future by pushing the boundaries of innovation and luxury.

Q: WILL THE CAR BE ELIGIBLE FOR FEDERAL OR STATE INCENTIVES?

A: There are numerous state incentives that *LYRIQ* would be eligible for and Cadillac continues to advocate for extension of federal incentives.

Q: WHERE CAN I TEST DRIVE AND SEE THE CAR?

A: At this time Cadillac have not announced the start of production date but stay tuned to Cadillac.com as *LYRIQ* will make its appearance soon.

Q: WHAT TYPE OF CHARGING CORD COMES STANDARD WITH THE VEHICLE?

A: Cadillac plans to offer a dual cord-set that is capable of charging either Level 1 (120v) or Level 2 (240v).

Q: HOW FAST CAN THE VEHICLE CHARGE ?

A: Ultium-powered EVs are designed for Level 2 and DC fast charging. Most will have 400-volt battery packs and up to 200kW fast-charging capability. Our platform has the capability to charge over 100 miles of range in ten minutes on a DC Fast charge.

Q: CAN YOU TELL ME MORE ABOUT LYRIQ ?

A: Cadillac *LYRIQ* will be the first in the lineup of fully electric Cadillac vehicles powered by the new Ultium battery technology. At this time, Cadillac has not announced any further details, but we will be happy to reach out to you when we hear more from Cadillac.

Q: WHAT SIZE VEHICLE IS THIS GOING TO BE?

A: LYRIQ is a properly-sized crossover, only electric.

Q: WHAT IS THE PRICE? WHEN CAN I BUY IT OR PUT A PRE-ORDER?

A: At this time Cadillac has not announced any further details, but we will be happy to reach out to you when we hear more from Cadillac.

Q: WHAT ARE THE SPEEDS ON THE ONBOARD AC / DC CHARGERS ?

A: At this time Cadillac has not announced any further details, but we will be happy to reach out to you when we hear more from Cadillac.

EV CHEAT SHEET



BEV vs PHEV vs Hybrid

BEV - is a battery electric vehicle powered purely by a high voltage battery. There is no gasoline engine and therefore zero tail pipe emissions. Many BEVs offer ranges 200 miles or greater on a full charge.

PHEV- is a Plug-in hybrid vehicle that run exclusively on battery power for short distances and then runs off the gasoline engine after electric battery is depleted. The small battery packed can be recharged by plugging-in to an electrical outlet.

Hybrid - is a vehicle that gets its energy simultaneously from a gasoline engine and an electric motor. The engine and the motor work together to power the car; helping to increase fuel economy ratings. The engine also uses gasoline to help recharge the vehicle's battery, which powers the electric motor.

Cadillac is pursuing a BEV portfolio

EV CHARGING

Charging speeds are measured in KWs

- Speeds can range from 1.9w to 350kw+
- Level 1 is slowest (1.9kw)
- Level 2 is faster (4w 19kw)
- DC Fast charge is fastest (24kw to 350kw+)

In 2008, There were only 430 public charging stations in the US.

As of 2019, there were over 70,000 public charging stations in the US.





KEY DRIVER BENEFITS & OWNER STATS

EV drivers benefit from

- Zero tail pipe emissions, Nearly instant torque
- Reduced maintenance, no more detours to gas station
- HOV access and preferred parking (in some cases) Current EV Owners on average
- Drive 39 miles per day
- Complete 75% of their charging at home
- Have never run out of charge

EV GLOSSARY OF TERMS

EV Term	Definition
Kilowatt	Measure of power delivery, in reference to charging speed
Kilowatt Hour	Measure of energy consumption, often related to battery size
Volt	Measure of pressure in a circuit
Amp	Measure of electrical current movement
State of Charge	Battery charge level represented as a percentage
Lithium Ion	Current standard in electric vehicle batteries
EVSE	Electric vehicle supply equipment such as home chargers
BEV	Battery Electric Vehicle fully powered by high voltage battery
AC	Alternating current, household / residential standard
DC	Direct current often in public or commercial application
Level 1	AC charging at the slowest speed
Level 2	AC charging at a faster speed
DCFC	Direct Current Fast Charge at the fastest speeds
Regenerative Braking	Energy recovery that helps charge battery when car is slowing down
One Pedal Driving	Conventional acceleration combined with higher deceleration

CADILLAC LYRIQ

WATCH THE SHOW CAR DEBUT AUGUST 6, 2020 ON MEDIA.CADILLAC.COM



