**EV 101**

*What are electric vehicles?*

Electric vehicles (EVs) are a type of vehicle that uses an electric motor powered by electricity. They are an alternative to traditional gasoline vehicles, offering several benefits such as lower emissions and lower operating costs. EVs are powered by batteries, which are charged from the grid or other sources of electricity. When charged, an EV can run for a range of miles before needing to be recharged, depending on the model and battery capacity.

**What is a hybrid?**

Hybrid vehicles combine an internal combustion engine with an electric motor. They are designed to reduce fuel consumption and emissions, making them a popular choice for those looking to reduce their carbon footprint. Hybrids typically have a smaller battery and a smaller range compared to full-electric vehicles, but they offer the flexibility of using both electric and internal combustion power.

**Why buy an EV?**

There are several reasons why someone might choose to buy an electric vehicle. These include:

- Lower emissions:
  - EVs produce fewer greenhouse gases and air pollutants compared to traditional gasoline vehicles.
  - This can help reduce our impact on the environment and improve air quality.

- Lower operating costs:
  - Electric vehicles generally have lower operating costs than gasoline vehicles, as electricity is typically cheaper than gasoline.
  - Additionally, EVs may have lower maintenance costs due to fewer moving parts.

- Government incentives:
  - Many governments offer incentives, such as tax credits or rebates, to encourage the purchase of electric vehicles.

- Personal or business convenience:
  - For some people, the convenience of not having to refuel or the ability to charge at home can be a deciding factor.
  - Businesses may choose EVs for their fleet to reduce operating costs and improve their environmental image.

**FAQs:**

1. **What is the range of an EV?**
   - The range of an EV can vary widely depending on the model and battery capacity. Generally, EVs can travel between 100 to 300 miles on a full charge.

2. **How long does it take to charge an EV?**
   - Charging times vary depending on the type of charger and the battery capacity. Some EVs can be fully charged in under an hour, while others may take several hours.

3. **Are EVs more expensive to maintain?**
   - EVs may have lower maintenance costs than gasoline vehicles due to fewer moving parts. However, this may not always be the case, and the specific needs of an EV will depend on the model and how it is used.

4. **What about the charging infrastructure?**
   - The availability of charging stations is improving, with many public and private charging stations being installed across the country. This makes it easier for EV owners to charge their vehicles while on the go.

5. **Are EVs made just in the US?**
   - While EVs are manufactured in many countries, some models are made in the US. It's important to check the specific model and manufacturer to determine if it is made domestically.

6. **Are EVs better for the environment?**
   - Yes, EVs emit significantly fewer greenhouse gases and air pollutants compared to gasoline vehicles. This helps to reduce our impact on the environment and improve air quality.
Sources: Alternative Fuel Data Center and eGallon, U.S. Department of Energy