

FACT VS. FICTION ELECTRIC VEHICLES AND CHARGING



Fiction: EV chargers are hard to locate

Fact: There are more than 100,000 public charging ports in the U.S. and more than 1,700 in Oregon, with more coming each year. Mobile apps, such as Plugshare, help drivers locate EV charging stations in all 50 states. EVs also have built-in navigation systems that allow users to see available chargers near them.

Fiction: Emissions from EV production plants make them worse for the environment

Fact: Over their lifetime, EVs produce fewer greenhouse gas emissions (GHGs) than internal combustion engine vehicles, even when accounting for battery and vehicle manufacturing. In addition, Oregon utilities, on average, generate electricity primarily through renewable resources and are adding more renewables each year, which will further reduce the carbon footprint of EVs.

Fiction: The power grid does not have the capacity to handle the increased EV demand

Fact: The U.S. can add millions of EVs to the grid without needing to build additional power plants. The electric industry has successfully managed increasing loads for decades. Oregon electric utilities are planning for new load from EVs and are upgrading local distribution systems to manage it.

Fiction: EVs cannot handle daily travel demands

Fact: On average, the daily travel demand for a typical household is approximately 50 miles per day. EVs have sufficient range to meet this need. Additionally, almost all new models of EVs are able to travel more than 100 miles on a single charge. Additional long-range EVs continue entering the market.

Fiction: Charging takes too long

Fact: Charging time depends on the type of charger used. Level 2 chargers can fully charge an EV from empty in 4-12 hours. Direct Current (DC) fast chargers can charge an EV in as little as 20 minutes to an hour.

Fiction: EVs are more expensive than internal combustion vehicles

Fact: Upfront costs for EVs continue to drop and numerous Federal and State incentives help offset increased costs. Overall, the total cost of ownership of EVs is less than internal combustion vehicles because they cost less to fuel and maintain. EVs have reduced fuel costs as charging is inexpensive and sometimes free. In addition to the fuel savings, EVs also require less maintenance because they do not possess many of the components of a gas-powered vehicle (e.g., engine oil, spark plugs, transmission fluid, air filter).