

Electric Vehicle Questions & Answers

What is a plug-in electric vehicle?

A plug-in electric vehicle (PEV) is a vehicle that uses electricity as its primary fuel or uses electricity in collaboration with a conventional engine to improve efficiency.

How far can a plug-in electric vehicle travel on a charge?

Pure battery electric vehicles (BEVs) vary by model, but most can go approximately 70 to 100 miles on one charge. Plug-in hybrid electric vehicles (PHEVs) typically have smaller batteries and a shorter all-electric range, approximately 10 to 50 miles, but have a backup gasoline engine to increase range.

How long will the battery last?

The battery is designed to last the practical life of the vehicle, and most manufacturers provide an 8 to 10 year warranty. There may be some electric mile range loss as time goes on, however, because of driving habits, weather and other factors.



Are plug-in electric vehicles safe to drive?

PEVs are actually some of the safest cars on the road according to the National Highway Traffic Safety Administration (NHTSA) tests. Although driving any motor vehicle brings some risk, PEVs meet and often exceed the same strict safety standards as other cars on the road. In July 2014, crash tests on PEVs showed that the integrity of the batteries held up with no major issues after serious collisions. The NHTSA also found that PEVs do not present a greater risk of post-crash fire than gasoline-powered vehicles.

Are the charge connectors safe?

Charge connectors are very safe. Each charging station and connector is required to have controls so that no electricity will flow until it is plugged into a vehicle with a safe connection. Connectors also have safeguards to protect you in inclement weather.

How much will I save by fueling at the plug ?

If you drove 12,000 miles in a year, an all-electric vehicle could save you over \$1,300 a year in fuel savings alone!



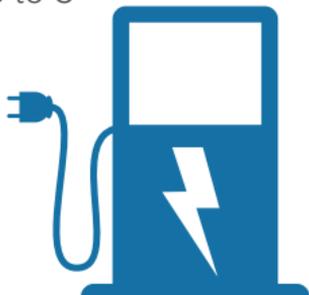
Electric Vehicle Questions & Answers

How do I charge a plug-in electric vehicle?

You can charge your vehicle at home or at a station located at work or in a public parking lot. There are currently three levels of charging.

AC Level 1 Charging: This uses a standard 120-volt outlet and a special extension cord supplied with the vehicle. Using level 1 charging usually provides 3 to 5 electric miles per hour of charge.

AC Level 2 Charging: This is 3 to 5 times faster than level 1 charging and requires a charging station to be installed on a 240-volt circuit. Typical charging rates are 10 to 20 electric miles per hour.



DC Fast Charging: These chargers provide fast, and convenient charging with the ability to charge a vehicle's battery to 80 percent capacity in 30 minutes or less.

To find a public charging station near you, visit:
<http://www.afdc.energy.gov/locator/stations>

How much do charging stations cost to install at home?

Level 1 charging can often be done with no additional installation costs if a suitable 120-volt outlet is available. Installation of level 2 stations can range from \$700 for homes with power readily available to \$1,500 and above if extensive wiring or upgrades are required.

Are plug-in electric vehicles environmentally friendly?

PEVs have no tailpipe emissions when operating in all-electric mode, helping to clear the air in densely populated areas. Multiple reports have also found benefits in air quality compared to conventional vehicles, even when accounting for power plant emissions. NC drivers can choose to offset their vehicle charging with blocks of green energy from www.NCGreenPower.org.

