

Types of Electric Cars

There are three kinds of electric cars: plug-in hybrids, battery-electric cars, and fuel cell vehicles.

Plug-in hybrids offer the advantages of much lower emissions and lower operating costs than conventional vehicles. The battery is typically used for local travel, and is recharged at an outlet. The gasoline-powered engine is then used for power on longer trips. The disadvantages of plug-in hybrids are that drivers require parking that has access to an electrical outlet. Plug-in hybrids usually don't have space for more than 5 passengers. They are also intended as passenger vehicles, rather than work vehicles, and don't have the capability to tow.

Battery-electric cars operate on electric power only. They, too, are recharged by plugging the motor into an electrical outlet. Because there is no fuel-powered engine to back up the electric motor, as there is with plug-in hybrids, drivers must be careful not to exceed the battery range of their vehicle before recharging. Battery-electric vehicles do not have tailpipe emissions, and are ideal for drivers that primarily take short-distance trips.

Fuel cell vehicles use an electric motor that is powered by hydrogen gas. They have extremely long driving ranges and are quickly refueled; however, to date, hydrogen refueling stations are not available in most areas.



Conventional hybrid cars use both gas or diesel and an electric motor assist for power. They have the advantages of both lower emissions, and the driving range and convenience of conventional vehicles. However because their power comes from the gas or diesel engine, non-plug-in electric vehicles are not considered to be electric cars.