Electric Cars

Electric cars are cars that use electricity for power. While conventional cars use gasoline or diesel for fuel, electric cars have an electric motor which is powered by batteries or a fuel cell.

There are several different kinds of electric cars. Plug-in hybrids have both a gasoline or diesel engine and an electric motor. The battery of plug-in hybrids is recharged when the car is plugged into an outlet, just like you would plug in any appliance. Battery electric vehicles do not use any fuel, running solely on electricity. Hydrogen fuel cell vehicles power an electric motor by converting hydrogen gas into electricity. Conventional hybrid cars use both gas or diesel and an electric motor for power, alternating between the two depending on the moment-to-moment needs of the car (accelerating, decelerating, idling, etc.). They are not considered to be electric cars, since they cannot be plugged in.

Electric cars tend to emit less pollution than the most efficient conventional cars. How much less pollution depends on the type of electric car and where its energy comes from. When you plug in a battery electric car into a clean electricity grid, its greenhouse gas emissions are comparable to what would be emitted by a conventional vehicle getting over a hundred miles per gallon. Electric cars that are charged using renewable electricity like solar or wind power are practically emission-free.

The purchase price of electric cars is typically higher than the purchase price of conventional vehicles. Both the federal government and some states offer tax credits for purchasing electric vehicles. Additionally, it costs significantly less over the life of an electric car to recharge its battery than it does to be constantly putting gas or diesel into a conventional car, so over the five to ten years that a person might typically own a vehicle, the total cost of ownership for electric cars can be between $700 and $1,000 a year less than that for conventional vehicles.