



A Market Exists for Plug-In Hybrid Electric Vehicles

What is a Plug-In Hybrid Electric Vehicle?

A plug-in hybrid electric vehicle is a conventional hybrid car, such as a Toyota Prius, with a more powerful battery and a simple electric plug. Although the plug-in looks and feels like a “regular” car, its battery can be plugged in and charged at any outlet at home or in a parking garage. When charged up, the vehicle can travel from 20 to 60 miles on battery power alone for local trips, and in regular hybrid mode for long distance driving. It’s like having an electric car with an insurance policy – you fill up at home from a standard 120 volt outlet, at an equivalent cost of under \$1/gallon, and if your battery runs out your car operates as a regular fuel-efficient hybrid.

What are the benefits of a Plug-In Hybrid Vehicle?

The PHEV uses high performance batteries charged by a cleaner, cheaper, domestically produced energy source: electricity. This results in significant benefits for both the individual consumer and for the nation.

The consumer, charging the car with a standard extension cord, has dramatic fuel savings, reduced vehicle maintenance costs, and more free time (fewer trips to the gas station). The nation benefits because fueling with electricity reduces our dependence on imported oil, reduces greenhouse gas emissions, improves our air quality and reduces our trade deficit.

In essence, a PHEV provides all the benefits of an electric vehicle without the range limitation.

What is the electric range of a Plug-In Hybrid Electric Vehicle?

Electric range depends on the size of the battery in the vehicle. Demonstration PHEVs currently have all-electric ranges between 25 and 60 miles. After that, as discussed above, PHEVs operate in conventional hybrid mode with unlimited gasoline range.

How much more will a PHEV cost versus a comparably sized conventional hybrid?

The Electric Power Research Institute (EPRI) estimates that, with mass production, the cost of a PHEV battery will add \$2-3,000 to the cost of a conventional hybrid. EPRI projects that after factoring in the lower costs of fuel and maintenance mass-produced PHEVs should provide better overall economics than the equivalent gasoline powered car.

Aren't you just moving the pollution from the car's tailpipe to the coal powered electrical plant?

No. Emissions of most pollutants and greenhouse gases are lowered by a shift to plug-in vehicles regardless of how the electricity is produced. Further, as grid electricity continues to get cleaner, incorporating renewable energy like solar and wind, the environmental benefits of PHEVs only increase. A PHEV gets cleaner as the grid does. Further, if you have photovoltaics (solar panels) on your home, you can generate the energy to power your vehicle yourself.

Where can I get a Plug-In Hybrid Electric Vehicle?

Unfortunately, you can't. Despite public demand for PHEVs, automakers are not making them available for commercial sale. While some small companies and non-profits are converting conventional hybrids, such as the Toyota Prius, in small numbers as demonstration vehicles, mass manufacturing is not yet occurring.

What can I do?

Tell the automakers that you want to be able to purchase one of these cars! Join Plug-In Partners, a national grass-roots non-profit campaign working to demonstrate to the automakers that a huge market already exists for PHEVs. Cities, counties, businesses, nonprofits, government agencies, and individuals across the country are joining Plug-In Partners to get these cars on the road.

Visit www.pluginpartners.org to declare your willingness to consider a PHEV when they are made available for sale.

For More Information on Plug-In Hybrid Vehicles:

Plug-In Partners www.pluginpartners.org
CalCars Plug-In Hybrid Project www.calcars.org