

What is a plug-in car?

A plug-in car uses clean, affordable, domestic electricity for some or all of its energy. An all-electric vehicle (EV) stores all its energy in batteries. A plug-in hybrid (PHEV) is like a conventional hybrid, but with two important differences: larger battery capacity, and the ability to plug in to the electrical grid to recharge the batteries instead of being dependent on gasoline.

Why would I want to plug a car in?

Three words: Cheaper. Cleaner. Domestic.

Cheaper: Electricity is much cheaper than gasoline and electric cars require next to no maintenance. (No oil changes, no muffler, no catalytic converter, etc. etc.)

Cleaner: Even on today's mainly coal-fired electrical grid, driving on electricity is cleaner than driving on gasoline.

Domestic: Electricity is made in the USA. By driving an EV, you don't have to give your money to oil companies, the politicians they support, and the foreign tyrants who control the oil supply.

Bonus: Plug-in cars are quiet, convenient, and fun to drive!

Sounds great! Can I get one?

Carmakers currently offer electric cars and plug-in hybrids. The Plug-in Vehicle Tracker is an excellent resource www.pluginamerica.org/vehicles to help you locate the right vehicle to meet your needs. Plug In America is working with automakers and policymakers to ensure that affordable plug-in vehicles continue to come to the market.

Plug-in Vehicle Tracker:

What's Coming and When

Virtually every major automaker and several smaller companies have developed plug-in vehicles. Plug In America is tracking their progress. Our online Plug-in Vehicle Tracker is updated monthly and includes highway-capable cars, trucks as well as two- and three-wheeled vehicles.

EVAOSC02162013

Plug-in car resources

Electric Vehicle Association
Of Southern California
www.evaosc.org



Coda 2012

Plug In America
www.pluginamerica.org
pluginamerica.org/vehicles

Electric Auto Association
www.electriconline.org



Chevrolet Volt 2012

Who Killed the Electric Car?
Must-see documentary
available now on DVD
www.whokilledtheelectriccar.com

Revenge of the Electric Car
Documentary available now on DVD
www.revengeoftheelectriccar.com

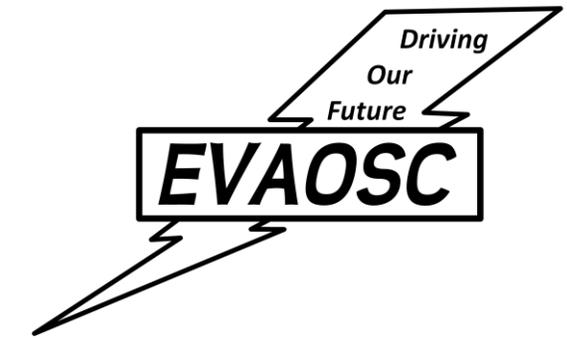
CalCars Plug-In Hybrid Project
www.calcars.org www.eaa-phev.org

Plug-In Hybrids: The Cars that will
Recharge America
Book by Sherry Boschert
www.sherryboschert.com



Transit Connect 2012

Plug In America and the Electric
Vehicle Association of Southern
California drive change. We accelerate the
shift to plug-in vehicles powered by clean,
affordable, domestic electricity to reduce our
nation's dependence on petroleum and improve
the global environment.
www.evaosc.org www.pluginamerica.org



Electric Vehicle Association Of Southern California

Why Plug-in Cars?



Nissan Leaf 2012

No Gas Required
Zero Emissions
No Noise
No Kidding!



Tesla Model S

**Nissan Leaf
All-electric**



All-Electric Range: 100 miles
Top Speed: 90 mph
Weight: 3354 pounds
Motor: 80 kW (110 hp peak)
Batteries: 24 kWh Lithium-Ion
Charger: 120 to 240 volts;

**Tesla Motors
Roadster
All-electric**



All-Electric Range: 220 miles
Top Speed: 125 mph
Weight: 2723 pounds
Motor: 185 kW (248 hp peak)
Batteries: 53 kWh Lithium-Ion
Charger: 120 to 240 volts;

**Chevrolet Volt
Plug-In Hybrid**



All-Electric Range: 35 miles
Total Range: 330 miles
Top Speed: 100 mph
Weight: 3520 pounds
Motor: 111 kW (149 hp peak)
Batteries: 16 kWh Lithium-Ion
Charger: 120 to 240 volts; conductive
I.C. Engine: 1.4 Liter Gas/E85: (33 MPG)

• Aren't electric vehicles inefficient?

EVs are the most efficient cars on the road. Compare the gas & electric RAV4:
Gas: 21(city)/26(hwy) MPG, 8 tons of greenhouse gas emissions per year
Electric: 125/100 MPG (equivalent), 3.9 tons GGE per year

http://www.fueleconomy.gov/feg/bymodel/2002_Toyota_RAV4.shtml

• How does a plug make hybrids better?

Plugging in a PHEV is like filling up with 60 cent per gallon gasoline. And you still have a gas tank for longer trips.

• How many miles can a battery electric car (EV) go between charges?

Most new EVs will have 100 miles range. Most cars travel under 40 miles a day. An EV begins each day with a full charge.

• How many miles can a plug-in hybrid (PHEV) go on electricity?

PHEV's have an all-electric range of 10-40 miles, depending on the

battery size and type. The 2012 Chevy Volt has an all-electric range of 35 miles. After that, the gasoline powered generator kicks in to power the electric motor and batteries extending the total range to over 330 miles.

• How long to recharge the batteries of electric cars and plug-in hybrids?

A few hours overnight will charge to full.

Leaf plug-in Electric: 120 volt 18 Hr., 240 volt 8 Hr.

Volt plug-in Hybrid: 120 volt 10 Hr., 240 volt 4 Hr.

• Can I charge a plug-in car with solar or wind power?

Yes. Putting solar panels on your home or business makes even more sense with a plug-in car. That investment pays off faster, and the car becomes truly zero-emission. The cleaner the power, the cleaner the car.

• Isn't hydrogen the solution?

No. Electricity is less expensive and more efficient. Hydrogen powered cars are 4X less efficient than EVs when the hydrogen is

produced from electricity and 1.4X less efficient when made from natural gas. Billions of dollars will be required for new fueling infrastructure. For plug-in cars, the infrastructure is largely in place - the electric grid.

• Where do you charge?

Usually overnight in one's garage using a standard 120 volt outlet. There are also public charging stations for electric vehicles at work, in parking garages and shopping centers. Smartphone Apps like www.recargo.com show public charging station locations and availability.

• Is it expensive to charge?

Less than \$1.55 to fill up a plug-in-hybrid; \$2-4 for an all-electric car.

• What about the pollution created making the electricity? Aren't you just moving all the pollution?

No. Emissions from plug-in cars are lower even on the 50%-coal U.S. grid.