



# Green Cars Update

## Plug Into the Latest Trends

by Jim Motavalli

**T**hrough August in the U.S., automakers sold 36,380 battery electric and plug-in hybrid cars (PHEV), compared to 16,514 by the same time last year. Sales are booming, although it's not reflected in fairly flat sales of green cars overall. The reason is that hybrid sales are being lost as consumers go fully electric.

Americans are moving up from fuel-efficient gas/electric hybrids as their confidence grows in what batteries can do on their own, but they're not yet making the vital eco-switch of giving up their gas-guzzling SUVs in favor of full electrics. Rather, gas-burning SUV sales keep growing to the point where they dominate the overall auto market.

To get up to speed on the terminology, a hybrid (think Toyota Prius) is powered by a small gas engine and uses an electric motor as a supplement; a PHEV (like the Chevrolet Volt) has an all-electric range of 15 to 50 miles, and then activates its gas engine for an additional 300 miles or more; a battery electric relies exclusively on electric power and runs out of "gas" when the battery power is depleted, but it also recaptures energy during braking to extend its range.

Sam Abuelsamid, a senior analyst at Navigant Research, says, "There is absolutely a shift happening from hybrids to battery electrics and plug-in hybrids. Our forecast is for [sales of] hybrids to be relatively flat over the next decade, with electric growth mainly coming from plug-in hybrids."

With more consumers looking to buy a car with a plug, there are a number of options now available in an increasingly crowded field. Currently, there are 20 PHEV on the market, as well as 17 battery electrics—though not all of the latter models are available in all states.

Meantime, the SUV itself is plugging in. Eric Evarts, editor of *GreenCarReports.com*, says, "Electric cars' market share may look small now, but no fewer than 15 automakers are planning to introduce electric SUVs for 2019. SUVs are really what American car buyers want."

At the same time, regulatory changes mean electric cars will be available in more states, says Evarts. Projections call for rapid expansion of fast-charging networks like Tesla's Superchargers to become more widespread for all kinds of electric cars in the next three to five years.

Battery cars are best suited for people that drive locally and have a place to put a 240-volt charger. For those that make the occasional long trip, a plug-in hybrid is the better choice.

Here are some models worth considering. All of them are eligible for federal tax credits, as well as some state incentives, though they're lower for plug-in hybrids. All prices are 2018 manufacturer's list, before rebates.

## Plug-In Hybrids: Batteries Plus a Backup

**Toyota Prius Prime (\$27,300).** This updated version of the popular Prius offers 25 miles of electric-only range, an Environmental Protection Agency (EPA) combined energy/fuel efficiency rating of 133 miles per gallon equivalent (MPGe), 54 mpg on gas only and 640 miles between either fill-ups or charges.

### Chrysler Pacifica Hybrid (\$39,995).

The only available hybrid minivan, the Pacifica's all-electric range is 33 miles, and the gas-only rating is 32 mpg, an MPGe rating of 84, with a combined range of 570 miles.

### Hyundai Ioniq Plug-In Hybrid

**(\$24,950).** It offers a battery-power range of 29 miles. On gas only, it delivers 52 mpg, with 119 MPGe.

### Volvo XC90 T8 Plug-In Hybrid

**(\$64,950).** This luxury model offers an electric range of 18 miles, with a 62 MPGe and 27 mpg on gasoline.

Other models to consider: Honda Clarity, Chevrolet Volt, Cadillac CT6, BMW X5 xDrive40e and Kia Niro.

## Zero-Emission EV Contenders Available in 50 States

Brad Berman, owner of *PlugInCars.com*, says he doesn't even notice that his car is electric anymore. "It really moves and I drive it just like any car, except that I never have to go to the gas station. When I pull into my driveway, it takes about five seconds to plug it in."

**Chevrolet Bolt (\$37,495).** The Bolt beat Tesla to market with an electric car that offered more than 200 miles of range at a price below \$40,000.

**Tesla Model 3 (\$49,000).** The Model 3 is fast, stylish and ultra-modern—with most controls located on the central screen. It delivers a range of 220 miles.

**Jaguar I-Pace (\$69,500).** At a recent media launch event, the I-Pace electric crossover proved highly capable both on and off the road. Its range is 240 miles.

Others to consider include the Hyundai Kona EV, VW e-Golf, Kia Soul EV, Nissan Leaf (especially the Leaf e-Plus) and Tesla Model S.

*Jim Motavalli, of Fairfield, CT, is an author, freelance journalist and speaker specializing in clean automotive and other environmental topics. Connect at [JimMotavalli.com](http://JimMotavalli.com).*