

# The Plug-In Hybrid Car Hits Its Stride, Just in Time to Die

With Tesla fever running high, middle-ground vehicles are becoming irrelevant.

By Kyle Stock

(Bloomberg)

About 18 months ago, BMW started selling a plug-in hybrid version of its mid-sized sedan for the first time. The 530e is a more expensive, bulkier version of the German automaker's sports sedan. It goes about 30 miles on a charge and tops out at an Autobahn-friendly 146 miles per hour. It's the kind of hybrid that hyper-milers could have only imagined back when Toyota unveiled the original Prius two decades ago.

The BMW 530e is more opulent than a Tesla and arguably more pleasant to drive, but customers don't seem to care. Tesla's all-electric Model 3 started trickling to buyers in late 2017 and, in the past year, has outsold the BMW by about 15-to-1.

It's becoming increasingly clear that plug-in hybrid vehicles, those green chimeras that have long promised to carry creaky-old car companies into an energy-efficient future, will never grow past their current position as an automotive also-ran. The battery-electric car now appears poised to turn these hybrids into a historical blip.

"A full electric is a much more elegant solution," said Gil Tal, director of the Plug-in Hybrid and Electric Vehicle Research Center at the University of California, Davis. "It's very simple to build and very low maintenance." In retrospect, he contends, plug-in hybrids "are just the training wheels" in the industry's preparation for electric cars.

In the U.S., sales of fully electric vehicles have surged ahead of plug-in hybrids, outpacing them by almost 3-to-1 in the third quarter, according to new data published by Bloomberg NEF. In the next few months, purely battery-powered machines will overtake hybrids that don't plug in at all, a category that includes a wide range of vehicles such as the Prius.

General Motors said on Monday that it will scrap the Chevrolet Volt, a hybrid considered the future of the company when it hit the road in 2010. These days, the Volt struggles to keep pace with its sibling, the Bolt, an all-electric model Chevrolet unveiled in 2016.

Ironically, the market shift comes at a time when hybrids have finally become quite good, with a rash of new high-quality choices. On dozens of the world's most popular vehicles, an electric motor is now an option no different than a roof rack or a cold-weather package. American car buyers can get their hands on hybrid versions of the Honda Accord, Toyota RAV4, Nissan Rogue and the Chevrolet Malibu.

This year, however, U.S. consumers given that choice have bought the hybrid version only 5 percent of the time, according to analysis by Edmunds.com. The rest are either driving away in the old-fashioned, gasoline-burning vehicle or opting for fully battery-powered options such as a Tesla or Nissan Leaf. Some buyers who might have considered a plug-in hybrid in years past are likely biding their time for a parade of new all-electric vehicles to hit dealerships in the next few years.

"That's one of the big theses in the market right now," said Salim Morsy, an analyst at Bloomberg New Energy Finance. "If these vehicles were priced exactly the same, you would expect that people would buy them."

The auto executives who have spent two decades in pursuit of hybrid hype have had a tendency to overestimate the rationality of car buyers, and it's not difficult to see why. Crunch enough data on household income and commutes, and a Detroit CEO will see the logic in offering a plug-in hybrid that can go electric for about 30 miles—that's how far an average American car drives on a typical day. The problem is many of those would-be buyers want a pickup truck, a zany convertible SUV or an electron-powered spaceship ready for a three-hour road-trip.

"When we ask people if they are interested in a hybrid, everybody says, 'Oh yes,'" explained Autotrader analyst Michelle Krebs. "But then you look at how they shop and what they buy and you don't see that." As a share of all U.S. vehicle sales, hybrids have been swooning since 2013 when they briefly covered 3 percent of the market.

Another challenge for automakers is that hybrids are relatively complicated, with widely varying ranges. Some can travel only on electrons, while others never do. Electric vehicles, meanwhile, can be measured on two simple metrics: miles per charge and price.

"It's just a much more simple story," said Tal at UC Davis. His team's research has shown that people are far more ignorant about plug-in hybrids than fully electric vehicles. In general, he said, shoppers don't spend much time deciding

which car to buy—most effort goes into finding the best price for the model they've already set their mind on.

There's also some poor timing at play. Gas prices haven't been kind to those in the battery business this decade, and the incremental value of saving a few gallons has floundered. Charging infrastructure has proliferated, meanwhile, and the purchase of a full-fledged electric vehicle remains a social statement, a way for a driver to instantly self-identify as an early-adopter and a green citizen.

Morsy at BNEF calls it a "virtue-signal product," as in: *Gaze upon my shiny, expensive good-doing; watch it get to 60 miles per hour in 5 seconds.*

Porsche, which declined to answer questions for this piece, now sells two plug-in hybrids. Yet it is rushing to complete two all-electric Tesla alternatives with its forthcoming Taycan and Mission E. Audi is in a similar position, with a plug-enhanced version of its popular A3 sedan vehicle here now and 12 fully electric vehicles in the works, the first of which will hit dealerships in the spring.

Jaguar, which also declined to answer questions, skipped the hybrid game altogether. Instead, it went straight for the fully electric with its I-Pace SUV, beating most of its luxury rivals to market.

The death of the hybrid, while seemingly inevitable, may be a long and slow. A spike in gas prices in the next few years may even draw it out. "I can see them having a role until 2040," Tal said. "But the problem will always be [that] it's a more expensive solution having two drivetrains."