

RECHARGING THE ELECTRIC VEHICLE RACE

As the drive to abandon gas guzzlers heats up, legacy automakers are finding a new road to profits.



Coming late to the party isn't such a bad thing if you arrive in an electric vehicle.

Being a startup in the world of automakers may make it easier to jump on the EV bandwagon. Legacy companies must retrofit plants (General Motors and Ford), redesign popular models (Ferrari, Toyota, Volkswagen, Kia, Mazda, Subaru), and/or completely reinvent their platform to be all-electric ASAP (Jaguar, Volvo, Mercedes-Benz, Audi, Lamborghini).

Startups, on the other hand, have been growing up alongside the climate awareness that was accelerated by the pandemic. As such, these companies aren't reinventing the wheel so much as pairing it with the latest eco-friendly technology. They can focus on the try-fail-move-forward-faster approach that drives innovation. Cases in point: Canoo, Fisker, Foxconn, Lucid and Rivian are either planning to build, already building or adding to their fairly new plants.

Amped Up: Legacy auto makers must retrofit plants and redesign popular models to be all-electric ASAP.

Furthermore, recent comers have no C-suite heartstrings (or purse strings) invested in petroleum-fueled products: Their "baby" has always been electric, so no need to "sell" shareholders or one another on making a change. Plus, their reasonable IPO prices are attracting savvy investors. Tesla stock has been dubbed overvalued, and lists of "cheap" EV stocks are being offered. For now, the more established all-EV makers are leading the way in sales over mature brands: Of the top 10 bestselling electric vehicles for the first seven months of 2021, four are made by Tesla.

Is all of this to say that startups have the

WHO LEADS THE CHARGE IN MOVING TOWARD ELECTRIC MOBILITY?

The Power of Semantics

"When carmakers talk about electrified vehicles, they're counting hybrids, plug-in hybrids, EVs and in some cases hydrogen fuel-cell vehicles. And when a single model has several different electrified variants (for example, the Toyota Prius's hybrid and plug-in models), carmakers will count each of those separately toward their electrification goals."

—*Car and Driver* (March 26, 2021)

Pick 6 (map): Top markets for sales of plug-in electrified passenger cars, 2020.

+33% from 2019

105,709

NORWAY



UNITED STATES

328,000

+4% from 2019

THE BIG NUMBERS

700m

The Road Ahead

Number of EVs expected to be on the road by 2050 (Source: Wood Mackenzie Energy Research & Consultancy)

100,000

Special Delivery

Number of electric vans that Amazon has ordered for delivery from Rivian by 2024



ISTOCK, ABOVE, PRAETORIA/PHOTO; BELOW, AZATVALEEV

advantage over legacies? Not by a long shot. As in any type of evolution, those who adapt will win the day and, as it turns out, maybe even save the whole darn planet.

Well-established companies have many things startups lack, including industry relationships, ample capital and huge R&D teams. Many carmakers are following the lead of Big Pharma, which partnered with frenemies in 2020 in pursuit of vaccines and therapeutics to fight the pandemic. Joining corporate forces against a global catastrophe is not only good business, it's great PR. A Harris Poll showed that more people had a favorable

opinion of drugmakers (62%, up from 32%) after their COVID-19 collaborations.

Earlier this year, Japan's Honda—the world's largest engine maker—announced a partnership with GM to build Honda EV crossovers (including one under Honda's upscale Acura badge), with GM supplying its Ultium battery platform. Honda also shifted its former head of R&D, Toshihiro Mibe, into the role of CEO to accelerate the revolution. Other new dance partners include German Volkswagen AG and Ford, and the French PSA Group (aka Peugeot S.A.) and Italy's Fiat Chrysler, which are now called Stellantis.

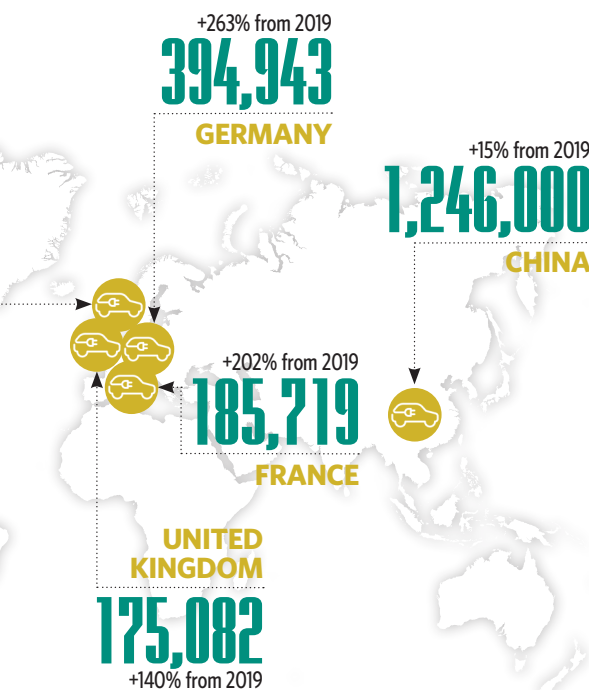
Representatives of Ford, GM and Stellantis—half of each of the three pairs—were literally standing behind President Biden in August as he stated the goal of having EVs compose at least 50% of U.S. car sales by 2030.

The world is rushing to install the charging stations needed to spark real consumer change. Meanwhile, GM is using gas-guzzler sales to fuel innovation. "When you look at our internal combustion business, we are in a place where we can be investing more in electric and autonomous vehicles," GM's Mary T. Barra, the industry's first female CEO, told *The New York Times*. "We think we can grow as we make this transition."

Tesla is taking a different route, offering free installation and maintenance of its Superchargers on commercial property as a lure for well-heeled consumers and a means of sparking proprietary plug-in sites.

Still, as scientists have long said, the time is now. As of July 2021, China was cornering the global supply chain for electric vehicles and their batteries, and the European Commission had announced an outright ban of the internal combustion engine by 2035. Automakers had best put the pedal to the metal if they hope to stay in the race. **IQ**

Motor Trending: Japan's Honda is partnering with American icon GM to build Honda EV crossovers.



EXECUTIVE MINDSETS

A true idle threat:
"At the national scale, idling in the United States consumes more than 6 billion gallons, adding up to more than \$15 billion each year."

—Panelist Patricia Weikersheimer at the 2020 Sustainable Fleet Technology Virtual Conference

A driving force:
"Women popularized EVs in the first place, and are still playing key roles as both EV purchasers and leaders within the movement."

—Plug In America Co-founder Chelsea Sexton