Electric vehicle myth busters:







According to experts, **electric vehicles (EVs)** will make up at least a third – or even half – of all light vehicles sold yearly in the United States by 2030. This is quite the jump from 2024 where EVs made up 8.7% of sales. EV adoption is gaining momentum. That said, there are many common misconceptions in the marketplace about EVs. We want to help break down the misconceptions for you. If you have EV questions, this report is for you.

Do electric vehicles (EVs) cost more to maintain than internal combustion engine (ICE) vehicles?

According to AAA, owning a new, compact EV is only slightly more expensive – about \$600 annually – than owning a gas-powered counterpart. While the overall annual cost may be more, EVs cost less to own in individual categories such as fuel and maintenance. On the fuel side of things, the electricity required to drive 15,000 miles per year in a compact EV costs an average of \$546, while the amount of gas required to drive the same distance costs \$1,255 (or 130%) more.

When it comes to maintenance, EVs do not require as much maintenance as gas-powered vehicles since they don't need oil changes or air filter replacements. If maintained according to the automakers' recommendations, EVs may cost \$330 less annually (on average) than a gas-powered vehicle.

What are the main types of EVs, and what are some examples?

The four main types of EVs are:



BEV (Battery Electric Vehicle)

This is an EV that runs entirely off of a battery and needs to be recharged from an external power source. They are propelled by one or more electric motors powered by rechargeable battery packs. Almost all BEVs can travel at least 100 miles on a charge, and many new vehicles coming on the market offer an all-electric range of 200 to 300 miles or more. Examples of BEVs currently available include:

- Sedan: Tesla Model
- SUV: Hyundai Kona Electric
- Pickup: <u>2025 Rivian R1T</u>
- Sports car: <u>2022 Porsche Taycan</u> <u>Cross Turismo / Sport Turismo</u>



PHEV (Plug-In Hybrid Electric Vehicle)

Plug-in hybrid electric vehicles use batteries to power an electric motor, as well as another fuel, such as gasoline or diesel, to power an internal combustion engine or other propulsion source. PHEVs can charge their batteries through charging equipment and regenerative braking. Using electricity from the grid to run the vehicle some or all of the time reduces operating costs and fuel use, relative to conventional vehicles. PHEVs may also produce lower levels of emissions, depending on the electricity source and how often the vehicle is operated in all-electric mode.

- Sedan: <u>2025 Volvo S90</u>
- SUV: 2026 Kia Sportage
- Large vehicle: <u>2025 Jeep Grand</u>
 <u>Cherokee L</u>



4

Sports car: 2025 McLaren Artura

HEV (Hybrid Electric Vehicle)

Hybrid electric vehicles (HEVs) are powered by a combination of an internal combustion engine with electric motors running off a battery pack for greater efficiency. The batteries of an HEV cannot be recharged from an external source.

- Sedan: <u>2025 Honda Accord</u>
- SUV: 2022 Lexus RX
- Pickup: 2022 Ford Maverick
- Sports car: 2015 Ferrari LaFerrari

FCEV (Fuel Cell Electric Vehicle)

Fuel cell electric vehicles use a highly efficient electrochemical process to convert hydrogen into electricity, which powers an electric motor. FCEVs on the market today are not designed for recharging their battery from an external source. Rather, they are fueled with compressed hydrogen gas that is stored in a tank on the vehicle.

- Sedan: <u>2025 Toyota Mirai</u>
- SUV: <u>2023 Hyundai Nexo</u>
- Commercial vehicle: <u>Peugeot</u>
 <u>e-Expert Hydrogen Van</u>



Can EVs be charged at home?

The short answer is yes, an EV can be charged at home. EVs can be charged with the 120-volt portable charging cord that's standard or optional with all new EVs. Another option is to install a Level 2 charging station that operates at 240 volts, which is the same voltage used by electric stoves and clothes dryers. Charging at home is the most cost effective way to charge your electric vehicles.

For organizations with EVs in the United States, WEX offers WEX EV At-Home. **WEX EV At-Home** is an innovative, cutting-edge solution that automates reporting and reimbursement. For any organization with EVs where employees bring their vehicles home to charge overnight, WEX EV At-Home is a great solution. that employees bring to their personal residence to charge overnight, the most cost effective way to charge. When coupled with WEX's other commercial fleet innovations, including WEX En Route, businesses can seamlessly integrate mixed fleets of electric and traditionally fueled vehicles, supporting a balance of innovation, operational reliability, and efficiency at any stage of a company's transition to EVs.

"There are few EV solutions that simplify charging for commercial drivers and allow fleet managers access to line item charging detail, vehicle performance, and unified billing regardless of brand — and even fewer regardless of charging location," said Jay Collins, WEX's General Manager, Energy Transition. "That WEX's EV solutions accomplish this – while also integrating with metrics from traditional fuel vehicles across a single credit line, invoice, and backend software portal – is illustrative of WEX's leadership and technical expertise in the commercial mixed fleet space. WEX's continued innovation signifies a true commercial mixed fleet experience – offering fleet managers the ability to easily add EVs without sacrificing their needs for security, control and unified reporting all in one place."



How does public charging work?

There are two types of public charging: Level 2 stations and DC fast-chargers. Level 2 chargers are similar to at-home chargers; they tend to be slower, making them best for overnight or long-stay parking. DC fast chargers are much quicker and are found along major travel routes. They're used more like gas stations for gasoline-fueled vehicles.

<u>WEX EV En Route makes it easy to find chargers</u> and offers access to a broad and rapidly growing network of public charging stations in the U.S. <u>Through WEX's DriverDash app and RFID card</u>, WEX En Route leverages WEX's proprietary closed loop payments network to increase the security of each transaction and to transmit charging behavior, driver identification information, and vehicle mileage to the fleet manager.

WEX's DriverDash app and RFID are accepted across the U.S. at ChargePoint-branded EV chargers and at ChargePoint's roaming partner brands, including AmpUp, Blink, EVConnect, EVgo, and FLO.



What does it cost to charge and run an EV?

Cost varies by when and where you charge. Home electricity rates can vary a lot, from 16 to 35 cents per kilowatt-hour (kWh). The U.S. average is now about 16 cents per kWh, and you get roughly three miles for each kWh in an electric car or small SUV and two miles in a large, heavy electric truck. Charging at home at the average price means you spend about \$5.30 to go 100 miles in the smaller EV, and \$8.00 in an electric truck. When compared to current gasoline and diesel fuel prices, EVs are very economical.

At public fast-charging stations, rates usually vary from 25 to 50 cents per kWh. So, the same 100 miles will now cost \$8.00 (for a car or small SUV) to \$25.00 (for a truck). Many EV makers, however, provide a certain number of free fast-charging hours during the first two or three years of ownership, making road-trip recharging entirely free for that time.



How do I transition to EVs?

Making the move from internal combustion vehicles to a mixed-energy fleet that includes electric vehicles can be challenging. The WEX suite of EV solutions helps you decide what vehicles to replace and, as you add EVs to your fleet, allows you to **pay for charging and fuel** with one credit line and receive integrated reporting and invoicing.

- Use EV Fleet Converter to understand the feasibility, costs, and benefits of electrifying your fleet.
 Watch our EV Fleet Converter video
- Enjoy acceptance at a broad and growing network of charging stations
- Find available stations with our WEX Connect mobile app
- Initiate secure, touchless charges with a WEX RFID or the DriverDash app
- Work with <u>Sawatch</u>, a WEX company, to develop long term goals for EV adoption
- Approve at-home charging sessions and save time and money with direct driver reimbursement for the least expensive paid transportation energy of any kind*

*Price per gallon equivalent. Charging costs based on national average residential electricity rates and may vary.



Learn more and get your fleet operations ready for a mixed fleet that makes the most sense for your business.

WEX is a leading, global fintech solutions provider, simplifying payments and back-end business processes in the fleet management, benefits management, and corporate payments areas. To learn more, please **visit the company's About WEX page.**

Apply for a fleet card today!

Resources:

AAA Car and Driver U.S. Department of Transportation U.S. Energy Information Administration

