



Electric Vehicles 101: Why **Going Electric** May be **Cheaper** than You Think

Electric vehicles (EVs) are now available in more vehicle classes and price points than ever before. Here are some advantages of going electric and tips to help figure out if an EV is now right for you.

LOWER OPERATING COSTS

- On average, **running an EV is about half the cost** of running a gas-powered vehicle. Compare at [Energy.gov/eGallon](https://www.energy.gov/eGallon).
- Most EVs have **lower maintenance costs** because they have fewer and simpler components and don't require oil changes.
- When combined with a home solar system, EV "fuel" costs could be zero.

LOWER POLLUTION

- EVs produce **no particulate or smog-causing tailpipe emissions**, which are a significant contributing factor in causing asthma and other air pollution-related illnesses.
- EVs have **lower carbon emissions** than gasoline powered vehicles over their service life, even in states with coal-intensive electricity.

UNIQUE FEATURES

- EV engines are **quiet**.
- Many EVs provide **instant power** and superior acceleration compared to most gas-powered vehicles, making them fun to drive.
- Charging at home is **convenient**.

HOW TO SAVE EVEN MORE \$\$

Check out incentives for vehicle purchases and leases.

- Most EVs qualify for [federal tax credits](#) between \$2,500 and \$7,500.
- Additional **city and state tax credits, rebates, or vouchers** are available in many states, sometimes even for used EVs.



Shop EV charging plans and discounts on EV chargers.

- Some utilities offer **lower electricity rates** during off-peak hours or plans optimized for EV charging
- Utility and state incentives offer **discounts and tax rebates on charging equipment**, some of which can cut the total cost in half.

What to Consider When Deciding if **Going Electric** is Right For You



WHERE WILL YOU CHARGE?



Home Charging:

- Most EV owners will recharge overnight at home using either a standard plug (120-volts) or a specialty 240-volt charger.
- **Charging overnight at home**, when electric rates may be lowest, **saves EV owners the most money**.
- Before incentives, a 240-volt charger typically costs \$500 to \$700 and may require an electrician. Parts and labor for installation is typically \$1,200 to \$2,000.

Public Charging: There are currently about **22,000 public EV charging ports** in the U.S., and that number is expected to more than triple by 2023.

Consider where you park your car at night. Make sure it's within 25 feet of an outlet, or identify nearby public or workplace chargers.

HOW FAR DO YOU DRIVE EACH DAY?

- Most people drive fewer than 50 miles per day, and the range of many electric vehicles is over 200 miles.
- In addition, **plug-in hybrid vehicles** run on both electricity and gasoline, providing flexibility to cover even longer distances or travel to areas with limited public chargers.
- **Extreme cold and heat** affect an EV's range. EV buyers in colder climates should strongly consider getting a car with a range about double their daily driving needs.
- Consider buying one EV for daily trips and commuting, and keeping a traditional car for longer trips and holiday travel.

POPULAR EVs AND THEIR RANGE

VEHICLE MAKE/ MODEL	EPA-RATED DRIVING RANGE ON SINGLE CHARGE (MILES)
Tesla Model 3	240-310
Hyundai Kona EV	258
Kia Niro EV	239
Chevrolet Bolt	238
Nissan Leaf Plus	226
Audi E-Tron	204
Volkswagen eGolf	125
Hyundai Ioniq PHEV	32 electric (520 total)
Chrysler Pacifica Hybrid	29 electric (630 total)
Toyota Prius Prime	25 electric (640 total)