



IS AN ELECTRIC VEHICLE RIGHT FOR YOU?

Consider the following questions if you are thinking of purchasing an electric vehicle (EV) but aren't sure if one suits your lifestyle or budget.

① What are your typical daily driving patterns? (Consider all that apply to your situation.)

- ☐ I commute 40 miles or fewer each day.
- ☐ I commute more than 40 miles each day.
- ☐ I frequently take long trips.
- ☐ I rarely take long trips.

TO CONSIDER

- The average person drives 40 miles each day commuting to work and running errands. If that aligns with your daily mileage, consider a battery electric vehicle (BEV). Charging overnight should keep it ready for your commute, and today, most new BEVs cover over 200 miles. However, to ensure your needs are met, assume your range will be somewhat less.
- Even if you frequently take long trips or have a few longer daily drives, you may consider a BEV as a second vehicle.
- If you average more miles per day and/or take frequent long trips, a plug-in hybrid electric vehicle (PHEV) may better meet your needs. PHEVs use a combination of an electric motor and gasoline engine to provide about 12-50 electric miles and the ability to keep driving on gasoline after the battery is depleted. They do need to be plugged in to charge but can operate in gas-only mode when necessary.

② How will you charge the vehicle?

- ☐ I have access to a 120-volt outlet in an area where I can charge the car (or am willing to add one in a convenient location) and can charge overnight.
- ☐ I have access to a 240-volt outlet in an area where I can charge the car (or am willing to add one in a convenient location).
- ☐ My workplace offers access to a charging station.
- ☐ Areas where I shop or spend time (public buildings, malls, etc.) offer access to a charging station.

TO CONSIDER

- BEVs operate solely on electric power and must be charged by plugging in. The battery in PHEVs must also be charged, but the vehicle can operate on gas if the charge runs out.
- A 120-volt outlet in your garage or driveway may handle overnight charging if you are driving only about 40 miles per day and have a full 8 hours to plug in. If you drive more and charge less, you may not get a sufficient charge.
- If you want quicker charging, you will need a 240-volt outlet and compatible charging station, which start at a few hundred dollars.

③ Do you plan to buy new, buy used or lease the vehicle?

- ☐ I plan to purchase a new vehicle.
- ☐ I plan to purchase a used vehicle.
- ☐ I plan to lease a vehicle.

TO CONSIDER

- The purchase price for EVs may be somewhat higher than similar gasoline vehicles; however, this additional price is offset by lower operating and maintenance costs.
- The used EV market is continuing to grow, and you may be able to get a good deal on an older model.
- For some vehicles and situations, leases for EVs can be less than \$200 per month.
- You may receive a federal tax credit for BEVs and PHEVs.



④ Have you calculated the savings you will receive from having an EV?

- ☐ Yes, I know how many miles I drive per year and how much I spend on maintenance.
- ☐ No, but I am curious if I will save money using electricity rather than gas.
- ☐ No, but I am concerned that EVs cost more to maintain.

TO CONSIDER

- The purchase price of EVs does not tell the entire story. When purchasing any vehicle, operating and maintenance costs should be incorporated into the car's total cost of ownership, and these costs are generally lower for EVs than gas-powered cars. Start with what your current vehicle costs in operation and maintenance; then compare it to alternatives.
- Energy costs to operate BEVs typically run \$590 a year, while PHEVs cost about \$720 a year.
- Maintenance costs will be far less in BEVs thanks to fewer moving parts and a simpler design. PHEVs have both electric and combustion components, but they may still have lower maintenance costs than conventional vehicles because some components, such as brakes, experience less wear.
- Also, don't forget the federal tax credit of up to \$7,500 may be available. The exact amount depends on the vehicle, manufacturer and your tax liability. In addition, you may qualify for other rebates and perks from your state, city or cooperative, such as lower electric rates for charging overnight, free parking or access to special commuter lanes.

This article was provided by Advanced Energy, a nonprofit energy consulting firm.

For more information, visit www.advancedenergy.org.

**FOR MORE INFORMATION, VISIT
TOUCHSTONEENERGY.COM**