

CHARGE YOUR ELECTRIC VEHICLE SUSTAINABLY WITH GREEN POWER

The simple choice for energy efficiency.

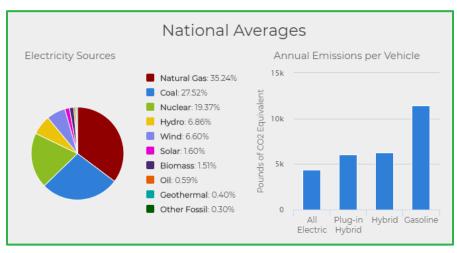


By the year 2030, there may be as many as 19 million plug-in electric vehicles (EVs) on the road in the United States, representing a market share of 10%. While there are environmental benefits just from substituting a battery for an internal combustion engine to power the vehicle, consumers should be aware of the added benefits from charging sustainably and using "green power." Green power is clean electricity produced from renewable sources such as solar, wind, geothermal, biogas, eligible biomass, and low-impact small hydroelectric sources. Using green power lowers electricity costs and greenhouse gas emissions, contributing to less overall pollution.

What to Know about Charging Vehicles with Green Power

- EVs operating on electricity have zero tailpipe emissions, but charging them can result in <u>power plant emissions</u>. On average, an EV has lower total emissions than a standard vehicle; however, if it is charged with electricity produced from renewable sources, those emissions are reduced or eliminated.
- Using green power to charge an EV helps support renewable energy development and reduces the carbon footprint
 associated with purchased electricity. When charging with green power, homeowners and businesses can be certain
 that their EV is producing the lowest overall emissions possible.
- Switching to green power requires some shopping to identify and compare options: 1) Check with your current
 electricity provider to determine whether green power is an option. 2) Purchase green power that has been third-party
 certified and verified to nationally-accepted standards for product quality and content.





Source: U.S. Department of Energy Alternative Fuels Data Center

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at energystar.gov.



¹ Edison Electric Institute and the Institute for Electric Innovation, *Electric Vehicle Sales Forecast and the Charging Infrastructure Required Through 2030*, November 2018



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Choose ENERGY STAR® Certified EV Chargers

EV chargers that earn the ENERGY STAR are independently certified to save energy, save money and contribute to climate protection. The two types of EV chargers that are currently eligible for the label - Level 1 and Level 2 - provide alternating-current (AC) electricity to the vehicle. **ENERGY STAR certified EV chargers use 40 percent less energy than a standard EV charger** in standby (when the EV charger is not actively charging a vehicle). Studies show that an EV charger is in standby mode for about 85 percent or more of the time. Use the **ENERGY STAR Product Finder** to identify the energy efficient charger that meets your needs.



EV Charger Type	Charging Rate
Level 1 (120 volt)	2 to 5 miles of range per
	1 hour of charging
Level 2 (240 volt)	10 to 20 miles of range per
	1 hour of charging

EV Driver & Green Power Purchaser Resources

- Find more information on the ENERGY STAR Certified EV Chargers webpage, including buying guidance.
- See EPA's Green Power Partnership webpage for more information, including how to locate green power suppliers.
- See the Alternative Fuels Data Center (AFDC) website for information about <u>charging station types</u>, <u>installing</u>
 <u>residential charging equipment</u>, how to locate <u>public charging stations</u>, and <u>financial incentives and programs</u> offered by utilities, governments, and other organizations.

Did you Know?

Great River Energy in Minnesota offers the ability to power an EV with 100% wind energy for the lifetime of the vehicle.

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