

ELECTRIC VEHICLES (EV) QUICK FACTS



- + EVS ARE ENVIRONMENTALLY FRIENDLY**
EVs have no direct tailpipe emissions. Electricity is moving toward less emissions with the additions of hydro, solar and wind power, making EVs an increasingly “greener” choice.
- + NEVER GO TO THE GAS STATION AGAIN**
Electric vehicles do not require gasoline and can be charged at home with a standard 120V outlet or a 240V level 2 charger can be installed for faster, more efficient charging.
- + EV PERFORMANCE BENEFITS**
Electric motors provide quiet, smooth operation, stronger acceleration and require less maintenance than gasoline-powered internal combustion engines.
- + EV DRIVING RANGE & RECHARGE TIME**
Depending on the vehicle, an EV’s range can be 80 to 330+ miles on a full charge. The average American’s daily round-trip commute is less than 30 miles. Fully recharging the battery pack can take 4-8 hours. A “fast charge” to 80% capacity can take 30 minutes.*

*Source: Idaho National Laboratory, “Plugged In: How Americans Charge Their Electric Vehicles,” https://afdc.energy.gov/fuels/electricity_charging_home.html

EV CHARGING

Charging your electric vehicle requires plugging into a charger connected to the electric grid. There are three major categories of chargers, based on the amount of power the charger can provide: Level 1, Level 2 or Direct Current Fast-Charge (DCFC).

TYPE	ELECTRIC SOURCE	ELECTRIC DEMAND	EV CHARGING RATE
Level 1	120 Volts AC	1.4-1.9 kW	5-7 miles added per hour of charge
Level 2	240 Volts AC	3.6-19.2 kW	10-60 miles added per hour of charge
DCFC	480 Volt AC, 3-phase	50-400 kW	80% capacity can take 30 minutes

Be sure to consult with your local cooperative or public power district before purchasing a high-amperage charging system, as some high-power systems may require significant electrical upgrades to your home.

WHERE TO CHARGE

Charge where you park! Most EV charging occurs at home and at work.

80% | **HOME**
(Primary)

15% | **WORK**
(Secondary)

5% | **PUBLIC**
(Secondary)





WHY PURCHASE AN EV?

- + Lower cost of operation
- + Less noise and quiet to drive
- + Convenience of charging at home
- + No more gas stations or oil changes
- + Electricity is a domestic energy source
- + Environmental benefits including no tailpipe emissions
- + Electric motors deliver high torque at low speeds which makes them fun to drive!

EV & EV CHARGER COST INCENTIVES

FEDERAL TAX INCENTIVES

- + Up to \$7,500 for EV purchase (including BEV and PHEVs)
- + For brand and model information visit:
www.fueleconomy.gov/feg/taxevb.shtml

STATE TAX INCENTIVES

- + Contact your state's energy office for information or go to
<https://afdc.energy.gov/laws/state>

EV CHARGING INCENTIVES

- + Contact your local electric cooperative or public power district for details. Be sure to consult with your power provider before purchasing a high-amperage charging system, as some high-power systems may require significant electrical upgrades to your home.

LEARN MORE

- + <https://tristate.chooseev.com>
- + <http://electricdrive.org>
- + <https://afdc.energy.gov/laws>

ELECTRIC TRUCKS AND SUVS

Electric trucks and sport utility vehicles are on the horizon. The power and torque of an EV is attractive for hauling or towing, as well as additional storage capabilities.

- + Rivian R1T truck and R1S sport utility
www.rivian.com
- + Tesla Cybertruck (2023)
www.tesla.com/cybertruck
- + Ford Lightning (2022/23)
www.ford.com/trucks/f150/f150-lightning/2022/
- + GMC Hummer (2022/23)
www.gmc.com/electric/hummer-ev

