# Is an EV Right for Me?



Electric vehicle owners say EVs are responsive, require minimal maintenance and are fun to drive. Should an EV be YOUR next vehicle? Let's address some common concerns.



### **BEFORE BUYING**

- Contact the trusted energy advisors at your local electric cooperative.
  - Do they offer incentives for purchasing an EV or an EV charger?
  - Are there discounted (off-peak) rates or programs for charging at certain times of the day?
  - Can my home handle the installation of a 240V outlet? A local, licensed electrician can install one.
- What will be the primary use of this vehicle?
- Ask the dealership if tax credits are available for the vehicle you're interested in.

# I HAVE A LONG COMMUTE

Unless your round-trip commute is more than 200 miles a day, you should be able to do most, if not all, of your charging overnight at home.

Public charging infrastructure is growing. Use **CHARGE.coop** or a charging app to find the nearest public charging station.

### **CHARGING TAKES TOO LONG**

- EVs can plug into a standard 120v outlet (Level 1), but the charging rate is slow (3 to 5 miles per hour).
- Level 2 chargers need a dedicated 240v outlet and charge 10 to 55 miles per hour.
- Public **DC Fast Chargers** (below) charge most EVs up to 80 percent within 30 minutes.



# **DID YOU KNOW?**

About 80 percent of charging occurs at home.

### I LIKE TO GO ON ROAD TRIPS

- EVs can take you between 110 and 350+ miles on a full charge.
- chargEV<sup>™</sup> affiliates are installing chargers near points of interest: Parks, trails, hotels, golf courses, restaurants, shopping, etc.
  - Stretch your legs or try some local fare while your vehicle charges.
- Fast chargers can charge most EVs up to 80% in less than an hour.

### **ELECTRIC VEHICLES ARE EXPENSIVE**

- Prices for EVs are becoming more competitive. Many EVs have a starting price under \$40,000.
- · No oil changes.
- Save money on fuel. According to the Electric Power Research Institute (EPRI), home charging is the most economical. At the U.S. average residential electricity price of 14 cents/kWh, charging a car is equivalent to buying gas at \$1.19/gal.
- Public charging costs vary by region and network provider. Charging on-the-go usually costs more than charging at home, though both are less than gasoline.

# Average cost to drive 30, 100 & 200 miles using electricity compared to gasoline. Gasoline prices vary by region and season.<sup>1</sup>

MILES DRIVEN	GASOLINE COST		PUBLIC CHARGING	ELECTRICITY COST PUBLIC CHARGING DC FAST
30	\$4.55	\$1.42	\$2.70	\$3.10
100	\$15.16	\$4.75	\$9.00	\$10.33
200	\$30.32	\$9.49	\$18.00	\$20.67

<sup>1</sup> These calculations assume: average U.S. light-duty vehicle efficiency of 25 mpg and a regular unleaded gasoline price of \$3.79/gallon (U.S. Energy Information Administration Mar. 2022 forecast); avg. electric vehicle efficiency of 3 miles/kWh; avg. U.S. residential electricity rate of \$0.1424/kWh (U.S. EIA, Mar. 2022); avg. fees of \$0.27/kWh and \$0.31/kWh for public Level 2 and DC fast charging, respectively.

### WILL AN EV WORK IN THE WINTER?

- Yes! Like vehicles that use fossil fuels, an EV's range can be affected by multiple factors:
  - · Wind resistance.
  - Running the air conditioner or heater.
  - Some EVs are programmed to run the fan while parked when the interior of the vehicle reaches a certain temperature. Factor this into your remaining range.
  - Frequent, hard acceleration.
- EVs gain some charge in stop-and-go traffic via regenerative braking, which briefly charges the battery when you apply the brake.



# DID YOU KNOW? EVs drive about 3 miles per 1 kilowatt-hour (kWh)



# I NEED ALL-WHEEL DRIVE

- The following EVs have 2022 models with AWD options:
  - Audi e-tron
  - Jaguar i-PACE
  - Volkswagen ID.4
  - Ford Mustang Mach-E
  - Polestar 2
  - All Tesla models
  - Volvo XC40 Recharge
- · Electric trucks are on their way!
  - Cybertruck (Tesla)
  - Ford F-150 Lightning
  - GMC Hummer
  - Rivian R1T