

5 factors to keep in mind when purchasing an electric vehicle

The decision to purchase an electric vehicle (EV) instead of a conventional car that runs on gasoline is getting easier to make every year. Between operational cost savings and the fact you can install a personal, at-home charging station, owning an EV means no more trips to the mechanic or gas station. As you get closer to making that choice, here is a list of items to keep in mind when searching for the right EV for you.

1. **Not all EVs are created equal.** There are three types of EVs: hybrid electric (HEV), plug-in hybrid (PHEV) and battery electric (BEV). HEVs have a gas-powered internal combustion engine along with an electric motor but do not plug in for charging. A PHEV has two ranges: electric and gasoline. Once the electric charge runs out, the vehicle seamlessly switches energy sources. On average, they can travel between 10 and 50 miles on electricity before needing to be plugged in, while their gas tanks extend total range to between 300 and 600 miles. Lastly, BEVs run exclusively on electricity from the grid and do not produce any exhaust from the burning of fuel.
2. **You'll save money up front and over time.** Through federal and state tax incentives, along with time-of-use rates provided by your electric co-op to save money on charging your EV's battery overnight, and not having to even get oil changes again, you'll realize a variety of savings. Your co-op even provides rebates for installing a charger at home.
3. **Ranges have improved.** Range anxiety is real, but with BEVs now typically equipped with ranges of more than 100 miles – plus Tesla, Chevy and Nissan all having cracked the 200-mile range – you're not likely to be left stranded. Future models are even promising ranges of around 300 miles. Typical U.S. drivers travel less than 60 miles on weekdays, so owners of most 2017 model EVs could go multiple days without recharging.
4. **Public charging stations are easy to access.** There are three types of charging stations with varying charging times. Level 1s, on average, fully charge in about eight hours; Level 2s take anywhere from two- to-six hours; and DC fast chargers can fully charge an EV in about 30 minutes. There are nearly 270 public charging stations across Minnesota, most of them Level 2 but about 30 fast chargers as well. Infrastructure continues to build out into non-metro parts of the state, including an all-new electric corridor that makes it easy to travel up through Minnesota's North Shore and back with an EV.
5. **EV 'fuel' is getting greener.** Electric motors are already 80 to 95 percent efficient, so they use significantly less energy than vehicles with a traditional drive train. But the fuel used in those EVs is being generated by a growing number of renewable energy resources. Utilities, including **Kandiyohi Power Cooperative** are incorporating more wind and solar energy in their portfolios to reduce greenhouse gas emissions. EV owners can even be rest assured that their vehicle is being fueled solely by wind energy if they enroll in **Kandiyohi Power Cooperative** Revolt program. Find out more by visiting mnrevolt.com.