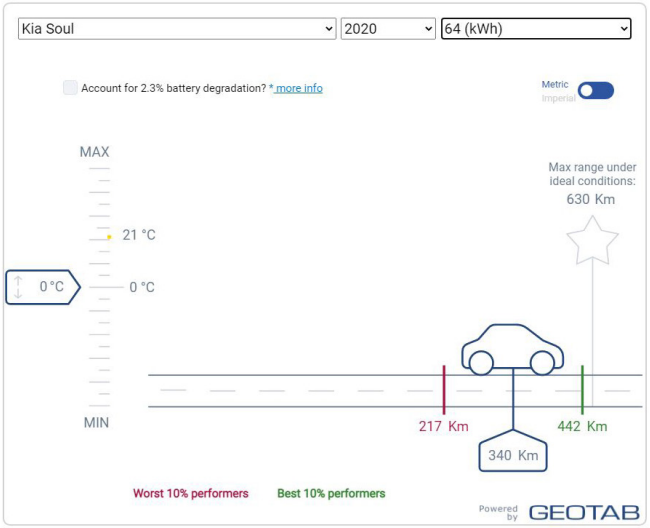
Electric vehicles are **ready for all seasons**

Don't let a cold snap or a trip to Mount Washington put you off, electric vehicles are tough and stand up in extremely cold (or hot) weather

Click here to watch the Emotive video YouTube

EV battery impacts in extreme weather

Electric vehicles are proven to be as tough as winter and are ready for driving in freezing cold (and smokin' hot) temperatures. Temperature extremes do affect battery range, so it's good to be aware of how that may impact your trip. For EVs, the temperature 'sweet spot' is about 21°C, where vehicles actually achieve about 115% of their rated range on average. At -15°C, an EV may drop to about 54% of its rated range, so a car rated for 402 km will get an average of 217 km.



While the performance of EV batteries is affected by extreme temperatures, the 'auxiliary load' is a major culprit for reducing range. Auxiliary load contributes to heating and cooling both the vehicle cabin (think: blasting the heat or air conditioning) and also the battery, which is a built-in thermal management system to help optimize battery performance.

Geotab, a leading analytics firm specializing in electric vehicles, analyzed 5.2 million trips taken by 4,200 EVs to better understand the real world impacts of temperature on EV ranges. Check out their Temperature Range Tool for EV Range to find out the specific impact for your model... then get planning your weekend getaway to your favorite BC ski hill!

Get the most out of your EV's range

We are fortunate to live in the mildest climate in Canada, where we rarely experience the extreme temperatures that can affect electric vehicle range. For those living elsewhere, the increasing battery size and range available in new EVs means that a loss of range due to temperature extremes is less of an issue than in the past and should be more than sufficient for average daily driving needs.

While an EV's range may be affected by extreme temperatures, there are also benefits to driving an EV in cold weather. There is no more shivering in your car waiting for the engine and cabin to warm up – EVs produce immediate heat and they also don't struggle to 'turn over'. In addition, you can preheat EVs without idling and emitting toxic fumes and emissions. EVs can get you going quicker than gas-powered vehicles in the winter!

When you're packing up for a cold mountain road trip, follow these tips to go the distance with your EV:

- Get warm efficiently – use the seat and steering wheel warmers to get you toasty, rather than trying to blast the cabin heat
- While plugged in, pre-heat or cool your vehicle before your trip to reduce the auxiliary load once you're on the road
- Keep your vehicle plugged in even when you're not charging on extremely cold or hot days, as this will allow the EV's internal system to maintain battery temperature controls