

Driving an EV in Extreme Cold: Winter Factsheet

Winter Tips for EV Drivers

Preconditioning (Warm Up Before You Drive)

- Precondition 20–30 minutes before driving to warm the battery and cabin, improving range, regenerative braking performance, and comfort.
- Activate via the mobile app or by setting a departure time in the vehicle.
- Precondition while plugged in, use the charger power instead of the battery.

Charging in Cold Weather

- Cold batteries charge more slowly, especially at fast chargers.
- Charging soon after driving is more efficient because the battery is still warm.
- Preconditioning before charging also improves charging performance in very cold conditions.

Public Charging Planning

- Check charging apps in advance to confirm availability and avoid out-of-service stations.
- Expect longer charging times and possible wait times in winter.
- Plan ahead, especially in cold weather, and keep extra charge for delays.



What to Know

- Electric vehicles operate reliably in extreme cold. However, winter conditions can temporarily affect driving range (an issue common to all cars) and charging speed. A few simple habits can significantly improve winter performance, comfort, and convenience.

Why Winter Affects Driving Range and Charging Speed

- Cold temperatures temporarily reduce available battery energy
- Cabin heating increases energy use



Tires & Winter Safety

- Use winter tires with proper load ratings, especially for heavier EVs.
- Check tire pressure regularly in cold weather to maintain traction, braking, and range.

Visibility & Exterior Care

- LED headlights may ice over, so clear them regularly.
- Keep lights, cameras, and sensors free of snow and ice.
- Use A/C to reduce fogging and never pour hot water on frozen glass.

Winter Maintenance

- Service brakes periodically to prevent corrosion.
- Check underbody panels for packed snow or debris.
- Test the 12-volt battery annually, ideally before winter.



Key Takeaway

Winter conditions affect all vehicles, including EVs. Preconditioning, smart charging, proper tires, and basic maintenance help ensure safe, comfortable, and reliable driving, even in extreme cold.

Learn More

- [Saskatoon.ca/ev](https://saskatoon.ca/ev)
- [Saskatoon.ca/MurbEv](https://saskatoon.ca/murb-ev)
- [Saskatoon.ca/CityEV](https://saskatoon.ca/cityev)