BATTERY ELECTRIC VEHICLE
Owner's Guide

Battery electric vehicles are reshaping the way we move, bringing a new sense of calm, confidence, and connection to every drive. As you begin your journey into BEV ownership, Lexus is here to ensure it feels intuitive, effortless, and uniquely tailored to you.

This guide has been created to support you at every step, helping you understand your vehicle, make informed choices, and get the very most out of your electrified Lexus experience.

WELCOME

Welcome to Lexus Battery Electric Vehicle (BEV) Ownership. Lexus's electrified journey began in 2005 when we became the first luxury automotive brand to introduce a hybrid vehicle with the groundbreaking RX 400h. Since then, our lineup has continued to evolve and expand to meet the diverse needs of Guests across Canada with hybrid, plug-in hybrid and battery electric options.

This guide is designed to answer your questions and provide the information you need to get the most out of your Lexus BEV, ensuring your ownership experience feels effortless, intuitive, and uniquely yours.

Let's get started.

*To learn more about the Lexus electrified world, scan the QR code below:

BATTERY ELECTRIC VEHICLE OWNERSHIP ESSENTIALS:

What is charging?

At the most basic level, charging is the process of returning energy to the battery of a BEV. There are a couple different ways to return energy to a battery, such as through the process of regenerative braking and plug-in charging.

Regenerative braking is the process by which kinetic energy involved in slowing down the vehicle is converted to electricity to top up your battery.

Plug-in charging is the process by which the BEV uses an external power source to transfer energy back to the battery.

Electric Charging Levels

LEVEL 1 (HOME)

- Uses the standard 120V home outlet, but is also the slowest mode of EV charging, since AC (Alternating Current) must be converted to DC (Direct Current).
- Best for plug-in hybrids or topping up your EV charge overnight.
- Starting in 2026, Lexus BEVs will come equipped with a dual-voltage charging cable to facilitate Level 1 EV charging.

LEVEL 2 (HOME AND PUBLIC)

- 240V outlets (like NEMA 14-50 outlets) are designed to power high-power appliances like dryers and ovens. They enable much faster charging at home or in public, and can be used with a dual-voltage charging cable.
- The vehicle's onboard charger will convert AC to DC.

DIRECT CURRENT FAST CHARGING (DCFC) (PUBLIC)

- DC Fast Charging power charges batteries directly without conversion.
- Requires specialized equipment and manufacturer-specific plugs, available at Public Charging Stations only.
- Charging speed varies with weather and other conditions, but is significantly faster than Level 1 and 2.

Did you know? BEVs will only accept the power it can handle. Each BEV has a maximum charging speed, regardless of how powerful the EV charging station is. Some stations may advertise a high power output (e.g., 350 kW), but that full speed may only be achievable on specific vehicles with more than 400V battery systems, when properly preconditioned or in ideal ambient temperatures. Be mindful of selecting stations, DC fast charging stations at different outputs can vary in cost. Be sure to check before charging.

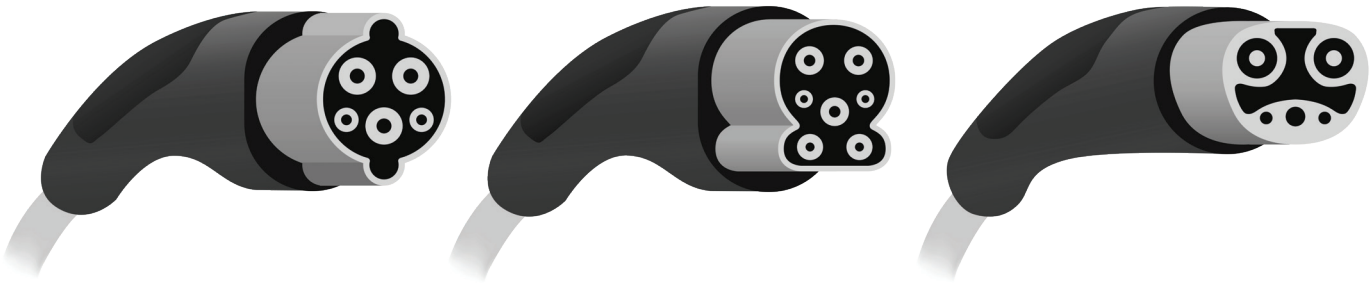
Charging Connectors

There are different charging connectors that serve different functions when it comes to recharging your BEV. You can find compatible public electric vehicle charging stations via the Lexus App.

SAE J1772: This connection type is primarily used for Alternate Current (AC) charging, which is utilized for Level 1 and Level 2 charging. This connection type can transmit up to 240 volts to a battery. AC energy is transmitted from the power grid and into your vehicle's battery. Applicable to 2023-2025 Lexus RZ.

CCS1: Combined Charging System (CCS), is primarily used for Direct Current (DC) charging, this connection is used only for Level 3 (Direct Current Fast Charging) and can transmit up to 480 volts to a battery. AC voltage from an external power source, like the grid, is converted into DC voltage, and transmitted into your vehicle's battery. Applicable to 2023-2025 Lexus RZ.

NACS: Lexus has adapted the North American Charging System (NACS) for battery electric vehicles starting in 2026. Additionally, guests owning or leasing 2023-2025 Lexus RZ with the Combined Charging System (CCS) have been offered access to an adaptor to enable NACS charging starting in 2025.



LEVEL 1 & 2
SAE J1772

DC FAST-CHARGING
CCS1

NACS
NORTH AMERICAN
CHARGING SYSTEM

For illustrative purposes only. Connectors not shown to scale.

Lexus Genuine Accessories come with the added confidence of Lexus' Accessory Warranty. To ensure the best performance and peace of mind, choose Lexus Genuine Adaptors. For more details on home chargers and compatible adaptors by vehicle, refer to this guide here: www.lexus.ca/chargingoptions

Prepare Your Home for BEV Charging

1. Understand Home Charging Levels

- Level 1 Charging (120V): Plugs into a standard outlet; slow charging at ~3–8 km/hr [0.5-1.7kW/hr]. Best suited for occasional use or low daily mileage.
- Level 2 Charging (240V): Requires a dedicated 240V circuit; charges at ~25–50 km/hr [4-11kW/hr]. This is the most common and practical option for daily home charging.

2. Assess Electrical Capacity

- With a licensed electrician, assess if you have ample electrical service in your neighborhood – check if an upgrade to the transformer is required.
- Consider futureproofing with a higher amperage circuit (e.g., 50A+) for future EV upgrades.
- Review your panel's capacity with your licensed electrician (commonly 100A, 150A, or 200A).
- If your panel is near capacity, discuss potential upgrades during planning.

3. Hire a Licensed Electrician for Level 2 Charger Installation

- Before installation, explore any federal, provincial, or utility rebates that may reduce the cost of equipment or labour.
- Hire an experienced, licensed electrician with EV chargers. They will:
  - Assess if you have ample electrical service in your neighborhood
  - Assess your home's electrical system
  - Add a dedicated breaker, if needed
  - Install and test the charger
  - Ensure compliance with local building and safety codes
  - Help manage permits and inspections
  - Tip: Keep proper documentation for insurance or future resale.

For condo/apartment owners: Always consult your property manager first. Review shared space policies and explore the pros and cons of portable vs. fixed chargers.

4. Choose the Right Installation Location

- Install in a garage or sheltered area when possible. Consider proximity to your EV's charge port.
- Shorter runs to the main panel reduce materials and labour costs.
- Tip: If your charger is inside and the cable runs outside, consider a cable protector to avoid damage and reduce tripping risks.

5. Select the Right Equipment

- Look for safety-certified chargers (e.g., CSA, UL). Avoid uncertified devices that could pose electrical hazards.
- Verify compatibility with your specific BEV model.
- Consider a Home Flex EV Charger by ChargePoint for scheduling, energy usage monitoring, and remote control.
- For outdoor setups, choose weather-resistant models (rated NEMA 3R or better).

6. Maintenance & Troubleshooting

- Keep your charger clean and dry; regularly inspect the cable for wear.
- Know your charger's warning indicators and how to perform a reset or disconnect safely.
- Follow the manufacturer's maintenance guidelines.
- Tip: Many utility providers offer off-peak electricity rates. Schedule your charging to save on energy costs.

Resources: *This document is intended for general guidance only and does not substitute expert advice. Always consult a licensed electrician, or visit your local municipality or utility provider's EV support page.*

OPTIMIZING YOUR RANGE, BATTERY & CHARGING

RANGE

Electric Vehicle Range Explained

Electric vehicle range is determined by a third-party to the manufacturer, Natural Resources Canada (NRCan). NRCan uses a mix of highway driving and city driving conditions on a dynamometer to develop a rating for a vehicle's range.

While NRCan provides a range rating, NRCan estimated range often exceeds the range that you can expect as testing takes place under in a controlled environment depicting ideal driving conditions.

Understanding What Impacts My Driving Range

There are a number of factors that can impact your range, such as:

- Driving speed and habits (i.e. heavy acceleration, high speed driving)
- Elevation changes or road conditions (i.e. driving through rolling hills vs. flat terrain)
- Temperature and weather
- Usage of electrical components
- Load on the vehicle (i.e. number of passengers, cargo, and towing)
- Charging habits

BATTERY

Battery State of Health

Batteries in BEVs naturally degrade over time, shown as a gradual loss of capacity. While this decline is inevitable, good charging habits can help maintain your battery state of health and maximize performance.

How to Maintain your Battery State of Health?

Battery state of health can be attributed to a number of factors such as: charging habits, driving habits and even temperature. Consider these charging habits to ensure your battery health is maintained:

- **Keep your charge between 10%–80%:** This helps preserve battery health. It's best to refrain from charging to 100%, unless you need the range to make your trip. Consult your Owner's Manual for adjusting charge limits.

- **Limit fast charging (DCFC) use:** Excessive DCFC use generates heat and strains the battery. To protect your battery state of health, 2026 model year and beyond are limited to 5 DCFC charges per 24 hour span. Older models may have different limits; always consult your owner's manual. Before using a DC Fast Charger, ensure your battery is pre-conditioned.

- **Use the right public chargers:** Lexus BEVs are compatible with J1772 (Level 2), CCS1 (DCFC), and NACS connectors. BEVs made in 2026 and later are compatible with NACS connectors but earlier models will need to utilize an adaptor.

Preserving Battery Health When Away

Consider the following to preserve your battery when not using your BEV for long stretches of time.

- Charge the traction battery monthly to prevent voltage decline due to self-discharging.
- Don't leave the charging lid open or cable connected; it will drain the 12-volt battery.
- The cooling fan may run, which is normal.

Did you know? Your Lexus will use a small amount of energy even while parked. If you're planning to be away for some time, charging to 50% or more before you leave will help ensure the battery stays above 10% until you return. And just before you head out, remember to unplug.

Charging Networks

It's easier than ever to recharge your BEV in public. Within Canada, there are over 5,000 public charging stations, to find a charging station closest to you, utilize the Lexus App.

Your Lexus battery electric vehicle is compatible with any network that has a J1772 (Level 2), CCS 1 (DC Fast Charging) or NACS connector, including ChargePoint, Flo, EV Connect. Lexus BEVs manufactured in 2026 and later are compatible with the Tesla Supercharger Network while earlier models require a NACS adaptor.

You can find compatible public electric vehicle charging stations via the Lexus App..

Paying for Charging: Plug & Charge

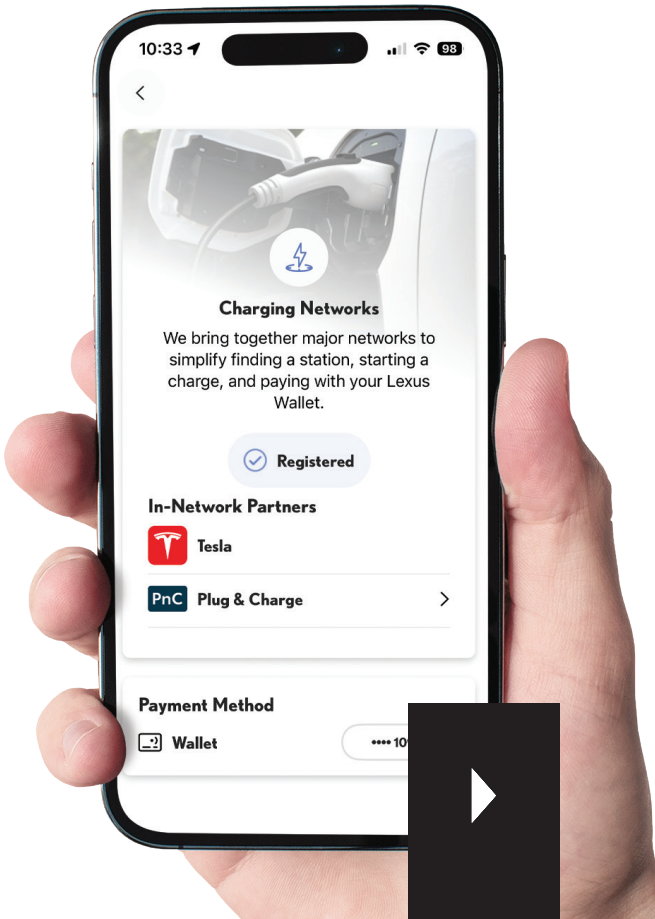
Paying to charge your vehicle on a public charging network has never been easier.

Instead of downloading an app or making an account for each charging network, you can utilize Plug & Charge directly through your Lexus App.

Plug & Charge enables encrypted communication between an EV and a charging station, eliminating the need for key fobs, apps, or logins. Once the vehicle's credentials and payment information are set up in the Lexus app, drivers can plug in to start charging. The charging station recognizes the vehicle directly, handles and processes all payment automatically. The billing details linked to the registered Lexus App account and the associated vehicle are authenticated and charged each time the vehicle is plugged in.

Plug & Charge is only available for 2026 BEV models and beyond and is currently restricted for use in the originating country. Services and feature availability may vary based on location and device.

An active and enrolled Remote Connect subscription is required to access this service.



LIVING THE BATTERY ELECTRIC VEHICLE LIFESTYLE (TIPS & TRICKS)

Public Charging Etiquette

Good charging habits help keep stations accessible, safe, and efficient for everyone. Keep these etiquette tips in mind when using public chargers:

- Aiming to maintain a charge between 10% (low battery light) and 80% will optimize battery life. DC Fast charging speed typically reduces after the battery level reaches 80% to optimize battery health
- Move your BEV as soon as possible
- Only use an BEV charging spot if you are charging
- Don't unplug someone else who is charging
- Return the charger connector to its proper place and keep cables tidy
- Use the charger speed that most matches the vehicle charging limits
- Report public charging stations issues to the station operator or via the appropriate app

Route Planning

Planning ahead is key to a smooth BEV journey. With some preparation, you can avoid range anxiety, minimize downtime, and make the most of your charging stops. Here are a few tips to keep in mind:

Account for your range: Plan routes within your BEV's range, allowing a buffer for terrain, weather, and detours.

Consider charging time: Factor in how long your BEV takes to recharge, using fast chargers when possible to reduce delays.

Plan charging stops ahead of time: Identify compatible stations along your route and confirm availability before you travel.

Keep alternatives in mind: Have backup stations in case your primary option is busy or out of service.

Choose convenient charging locations: Prioritize chargers near amenities or at your destination (like hotels or workplaces) so you can use the downtime effectively.

Use multiple charging networks: Familiarize yourself with different apps and providers to expand your options.

Plan for round trips: Make sure you'll have enough charge or access to stations for the return journey.

Create a route to your destination that shows when and where you need to charge using Apple Maps*. Routing logic considers current vehicle state of charge (SoC), BEV characteristics, road and temperature conditions to provide the best route.

* Apple Maps EV Route planning requires an active connected services subscription.

Did you know? Lexus recently introduced access to Apple Maps EV Routing via Apple CarPlay. Available for all 2023 and newer Lexus BEVs, Apple Maps can now access real-time vehicle information to efficiently navigate iPhone users to compatible chargers on the way to their destinations, taking into account factors like battery performance and elevation changes.

Cold Weather

Canadians are no strangers to winter conditions. When temperatures drop, the lithium-ion batteries that power your Lexus battery electric vehicle may experience reduced driving range and longer charging times. This is a typical characteristic of battery electric vehicles. However, with a few simple steps, you can optimize cold weather driving with confidence.

Before You Drive

Keep the Vehicle and Battery Warm

- Park your vehicle indoors, such as in a garage, to help maintain a warmer temperature.
- Using the remote functions, warm your vehicle cabin while it's still plugged in. This will minimize battery usage before starting your drive. Use Remote Connect* on the Lexus App or the Multimedia system to schedule cabin temperature.

*Available on select models only. Requires an active DCM with paid or trial Remote Connect subscription. Services are dependent upon connection to a compatible wireless network provided by a third-party wireless service provider. Lexus is not responsible for cellular network discontinuance and will not provide compensation for reduced service availability.

Clear your vehicle

- Remove snow from the roof and hood to reduce drag and ensure visibility.

While Driving

Improve your Cabin Heating Efficiency

- Lexus BEVs use a heat pump system to reduce energy use and extend range. This system can absorb heat from outside air and uses it to warm the vehicle.
- Use AUTO mode on your climate control to prioritize direct heating, such as seat heaters, over heated air.
- Use S-Flow mode to heat front seats only when rear seats are empty.

Use ECO Drive Mode

- ECO Drive Mode reduces torque, restrains heating and cooling functions, and optimizes energy use.

Adjust your Driving Habits

- Brake gently and early to maximize the regeneration when slowing.
- In traffic, release the brake pedal smoothly to start moving, to reduce accelerator use.
- Maintain steady speeds when possible for optimal energy use.
- Accelerate and brake smoothly to avoid slipping on icy roads and reduce energy waste.

After You Drive

Charge after driving

- Charge the battery immediately after driving while the battery is still warm.

Regenerative Braking

Lexus Regenerative Braking Boost

To accentuate your regenerative braking, Lexus vehicles have an advanced Regenerative Braking Boost. Utilizing its electric motors, Regenerative Braking Boost Mode allows the convenience of accelerating and decelerating with just one pedal. Press down on the pedal to accelerate and let go to decelerate.

To engage Boost Mode, simply hit the button on under your infotainment system, close to the vents.

When you're not depressing the accelerator, the vehicle will continually slow down to 8 km/h. For your safety, it is necessary to apply the brake pedal to come to a complete stop. It may also be necessary to apply the brake pedal when needing to slow down more quickly.

If you'd like to turn off Boost Mode, simply hit the Boost Mode button again, and the indicator will turn off on the Multi-Information Display (MID.)

Maintenance for BEVs vs. Traditional Vehicles

Lexus battery electric vehicles follow the same maintenance schedule as conventional vehicles: every 6 months or 8,000 KM (whichever comes first). Click the link to look up the maintenance schedule or your vehicle:
https://www.lexus.ca/en/maintain-your-lexus/maintenance-schedule/

Tire Care and Rotation

To ensure optimal handling, braking efficiency, and tire longevity for your battery electric vehicle, selecting tires that meet or exceed the manufacturer's load & speed rating is critical for expected tire wear, performance and handling.

Regular tire rotation, as per the maintenance schedule will ensure even and consistent wear on your tires. Refer to your Owner's Manual for maintenance instructions.
https://www.lexus.ca/en/know-your-lexus/manuals/

Multimedia Software Updates

Enabling software updates for your vehicle will ensure that your vehicle is up to date with the latest improvements and enhancements. Learn more about Software Updates for your vehicle here:
https://www.lexus.ca/en/know-your-lexus/multimedia-system-update/

Battery Electric Vehicle Driving Tips

Now that you're becoming an expert with your battery electric vehicle, here are some extra tips to help improve your driving experience.

- **Maintain safe spacing and smooth driving:** Keep a safe distance, accelerate gently, and decelerate smoothly to reduce energy use and wear on your tires.
- **Drive at moderate, steady speeds:** Higher speeds drain the battery faster; use cruise control on highways to maintain efficiency.
- **Use regenerative braking:** Ease off the accelerator to recover energy while slowing down an efficient way to extend range.
- **Plan charging with a buffer:** Aim to reach public chargers with about 20% battery remaining to account for delays or detours. Bring your Level 1 charger, just in case.
- **Keep tires in top condition:** Use the specified tire size and maintain proper inflation to lower rolling resistance and maximize range.
- **Manage climate control wisely:** Set moderate temperatures and use cabin air recirculation, use seat and steering wheel heaters in the cold, and rely on energy-saving settings to conserve battery.
- **Travel light and reduce drag:** Avoid unnecessary weight and use rear-mounted storage instead of rooftop cargo to improve efficiency.
- **Be mindful of towing:** Trailers or heavy loads can significantly reduce range. Plan ahead if towing is necessary.

Pre-conditioning and Fast Charging

Pre-conditioning optimizes your BEV's battery (2026 and beyond) and cabin temperature before driving. By warming the battery especially in cold weather you warm the battery to an optimal temperature to improve charging speed, preserve long-term battery health, and enjoy a more comfortable ride. Certain Lexus BEVs are equipped with a battery pre-conditioning function as standard. For 2026 BEVs and beyond, using the native vehicle navigation to find a charging station automatically pre-conditions the vehicle prior to charging.

Towing with a Battery Electric Vehicle

Certain Lexus battery electric vehicles have towing capabilities. Just like with gas vehicles, towing will affect your range the weight and aerodynamic flow of your trailer, boat, or bike rack will have an impact no matter what vehicle you are driving. Be sure to plan charging stops ahead of time for a smooth, stress-free trip.

SAFETY AND EMERGENCY PREPAREDNESS

What if you Run Out of Charge?

Just like watching the fuel gauge in a gasoline vehicle, you need to watch the amount of charge in your electric vehicle. If you do run out of charge, Roadside Assistance can provide towing to your home, or the nearest public charging station.

Lexus Warranty Roadside Assistance

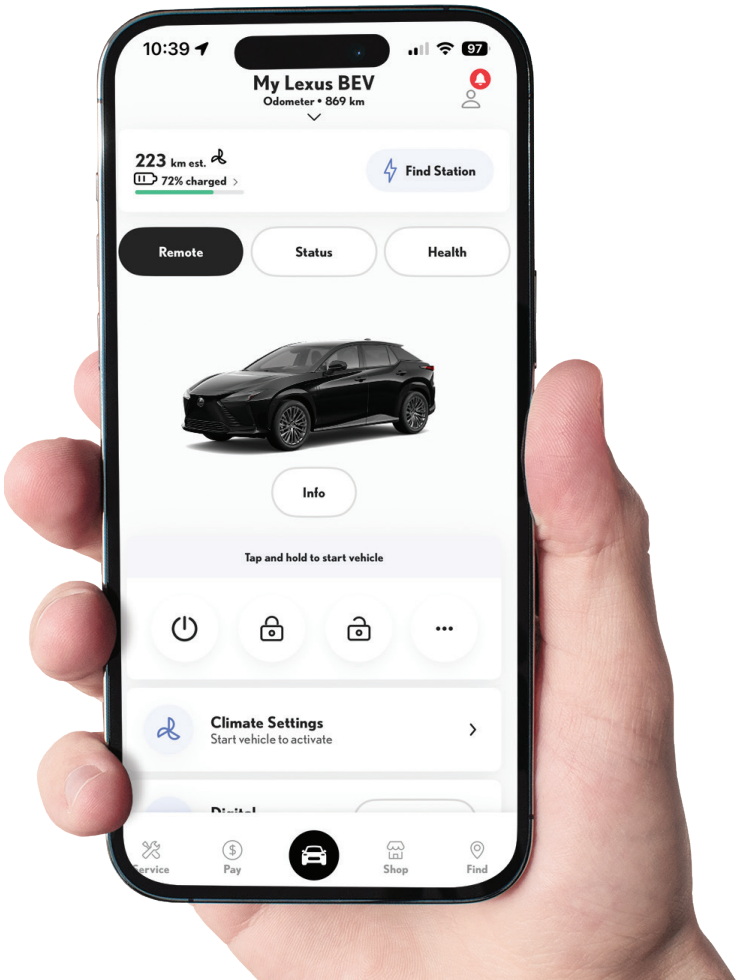
Roadside Assistance is included with your new car warranty for three years, for unlimited kilometers. Refer to the Owner's Manual for additional information about necessary towing precautions.

The Lexus App

The Lexus app offers a suite of features that enhance your BEV experience such as: monitoring your battery level and range, set up your charging payment method, finding charging stations (including filtering by level type,) and start/stop charging.

Learn more here: https://www.lexus.ca/en/know-your-lexus/connected-services/interface/

Note: A Lexus Remote Connect trial or subscription is required for full access to the below features.



Looking for Lexus resources? **Start Here.**

Information on Lexus Electrified Vehicles

Maintenance for your BEV

Owner's Manual

Multimedia Systems Update

The Lexus App

European vehicle shown. Canadian vehicles may vary.

Last edited on February 24, 2026