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## **Everything you ever wanted to know about electric cars – and more.**

Electric cars are kinda new (except not really, the first one ever was built in 1890); it took a while for them to catch on. As a result, you probably have a lot of questions. And you're not the only one. Here's the real scoop about electric cars so you can make a decision that's right for you.

### **BC has an expanding network of charging stations.**

The public charging network is pretty expansive and constantly growing across British Columbia—including more rural areas. Driving electric has never been easier.

Learn more about electric vehicle charging infrastructure in BC:

[Find charging stations](#)

[Future charging stations](#)

### **Electric vehicles reduce emissions.**

In BC, most of the electricity is generated from renewable power. Electric cars are so efficient that they produce fewer emissions than gas cars regardless of how the electricity is generated. Total lifetime emissions are far lower in an electric vehicle, and batteries are recycled right here in BC.

Learn more about the environmental impact of electric cars in BC:

[Electric Vehicles as Part of Canada's Climate Change Solution](#)

[BC recycling company, Retrievtech](#)

[Nissan battery recycling](#)

[UBC Life Cycle Analysis of Electric Vehicles](#)

## **Electric cars can go the distance.**

Most electric cars have a range of 300-600km per charge (For reference: most of us drive an average of 50km a day). They can also charge from any electrical outlet, so the likelihood of running out of power is slim. Especially with an ever-expanding charging network of highway fast chargers.

Learn more about charging and ranges:

[Daily driving statistics in Canada](#)

[Find charging stations](#)

[Future charging stations](#)

## **Electric vehicles save you money.**

Electric vehicles are cheaper to operate and to maintain than gas vehicles, as there are no belts or spark plugs to replace, and fewer hoses and fluids to maintain. Plus, the cost of electricity to drive an EV is far less than the cost of fuel for a gas vehicle.

Learn more about the cost of electric cars:

[Total Cost of Ownership](#)

[Buying and Owning an Electric Vehicle](#)

## **Electric vehicles are ready for winter driving.**

While cold weather can affect the range of electric cars, these vehicles are proven to be, well, tough as winter. Some big cold-weather perks: Electric engines don't struggle to turnover in the winter. They start in all conditions. And, you can preheat while plugged in without expensive idling.

Learn more about electric car performance in the cold:

[Electric Vehicle Owners in Cold Weather](#)

[Electric Cars in the Yukon](#)

## **Electric vehicles are going mainstream.**

BC's Zero-Emission Vehicles Act requires more new vehicles to be zero-emission, which means that the number of certified electric vehicle dealerships is growing and manufacturers are designing models for all different types of lifestyles, including trucks and SUVs. The future is very electric.

Learn more about electric car availability in BC:

[Electric Vehicle Models Available](#)

[CEVforBC Zero-Emission Vehicle Dealerships](#)

[New Electric Vehicles in 2020](#)

[ZEV Act in BC](#)

## Frequently Asked Questions

### **How far can an electric car go?**

Modern electric vehicles typically have a 300 to 600km range. Even better, fast charging stations are rarely more than 100km apart within a charging station network.

### **Are electric cars fast enough for highway driving?**

Absolutely! Electric motors are notorious for their high torque and instant power delivery. That means you'll be surprised by how much kick an electric motor has. You'll be pressed back in your seat, and you'll have no trouble passing on the highway. Promise.

### **Are plug-in-hybrids and fuel cell vehicles also electric vehicles?**

Yes, they are. Electric vehicles fall into three categories:

#### **Battery Electric Vehicles (BEV)**

These cars simply have electric motors and batteries, and recharge by plugging into a wall outlet or, ideally, a charging station.

#### **Plug-in Hybrid Electric Vehicles (PHEV)**

These cars have an electric motor and battery that can be recharged by plugging in AND they also have a gas engine that may be used to recharge the vehicle's battery or take over for the electric motor. Because PHEVs can be recharged by plugging in, most daily driving can be done without ever using the gas engine.

#### **Fuel Cell Electric Vehicle (FCEV)**

These cars have an electric motor and battery, but instead of plugging in, the battery is charged by converting hydrogen to electricity on-board. They are refueled at public hydrogen stations, similar to pumping gas.

Note that traditional hybrids (i.e. non plug-in) have an electric motor, but a very small battery that can only be recharged by the gas engine or regenerative braking systems. So, they aren't considered to be electric vehicles.

## **How long does it take to charge an electric car?**

It depends on the battery size of your car and what type of charging station you are using. Generally, there are three different ways you can charge an electric vehicle:

### **Level 3**

The fastest option. It's also called a Direct Current Fast Charger (DCFC), or in the case of Tesla, a Supercharger. Charging times depend on several factors, such as the size of your car battery and the capabilities of your car. On average, it would take about an hour to charge from completely empty to 100%.

EV etiquette is important at fast charging stations. We recommend you limit your charging time to 30 to 40 minutes to minimize the waiting time for others who need to charge.

### **Level 2**

These chargers are most often found and used at home, workplaces, malls and community centres—places where you leave your car for an extended period of time. They add 30-40km of range per hour.

### **Level 1**

The slowest charge typically uses the vehicle's "trickle charge" cable and a standard 110v wall outlet. At ~8km of range per hour, this method can be used to recover daily driving while at work or home.

## **Where can I find charging stations?**

All over BC. The best way to find public charging stations is by using apps like [PlugShare](#), [ChargeHub](#), and [BC Hydro EV](#). These apps let you filter for station types, see charging station status in real-time, and see user feedback.