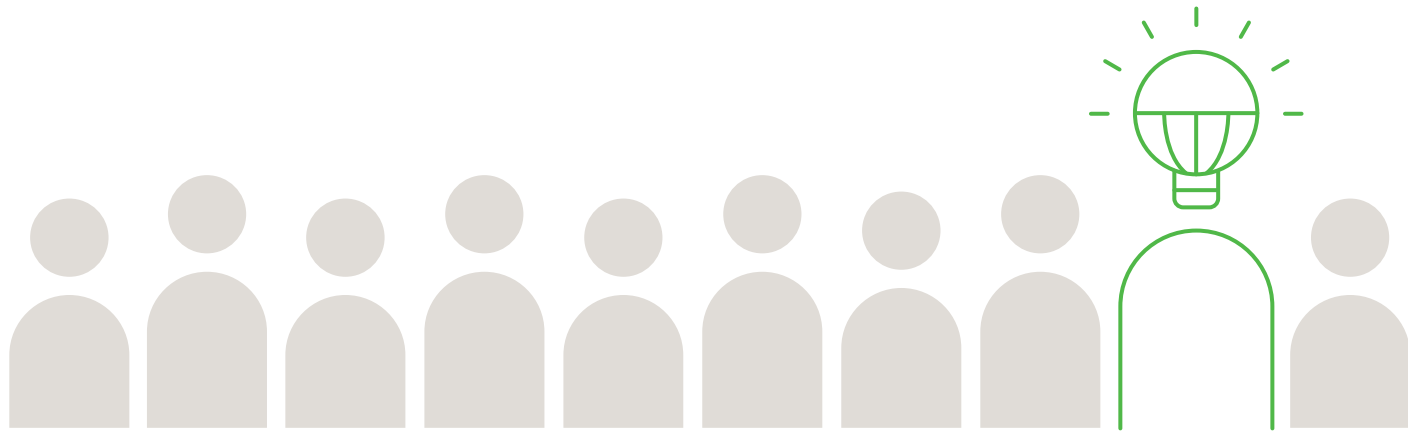


EV truths and myths

Power Smart for Schools



Let's explore electric vehicles (EV)

Make truth and myth signs to share your answer.



Truth or myth?

In B.C., one person can drive an electric vehicle in High-Occupancy Vehicle (HOV) lanes.



Truth

EVs can use the HOV lanes in B.C. if they display an EV decal.



Truth or myth?

EVs are only cleaner than gas vehicles if electricity sources are 100% renewable.



Myth

EVs produce fewer GHG emissions than gas-powered vehicles even if the electricity is generated using fossil fuels. Here, BC Hydro uses the power of falling water to create clean, renewable electricity.



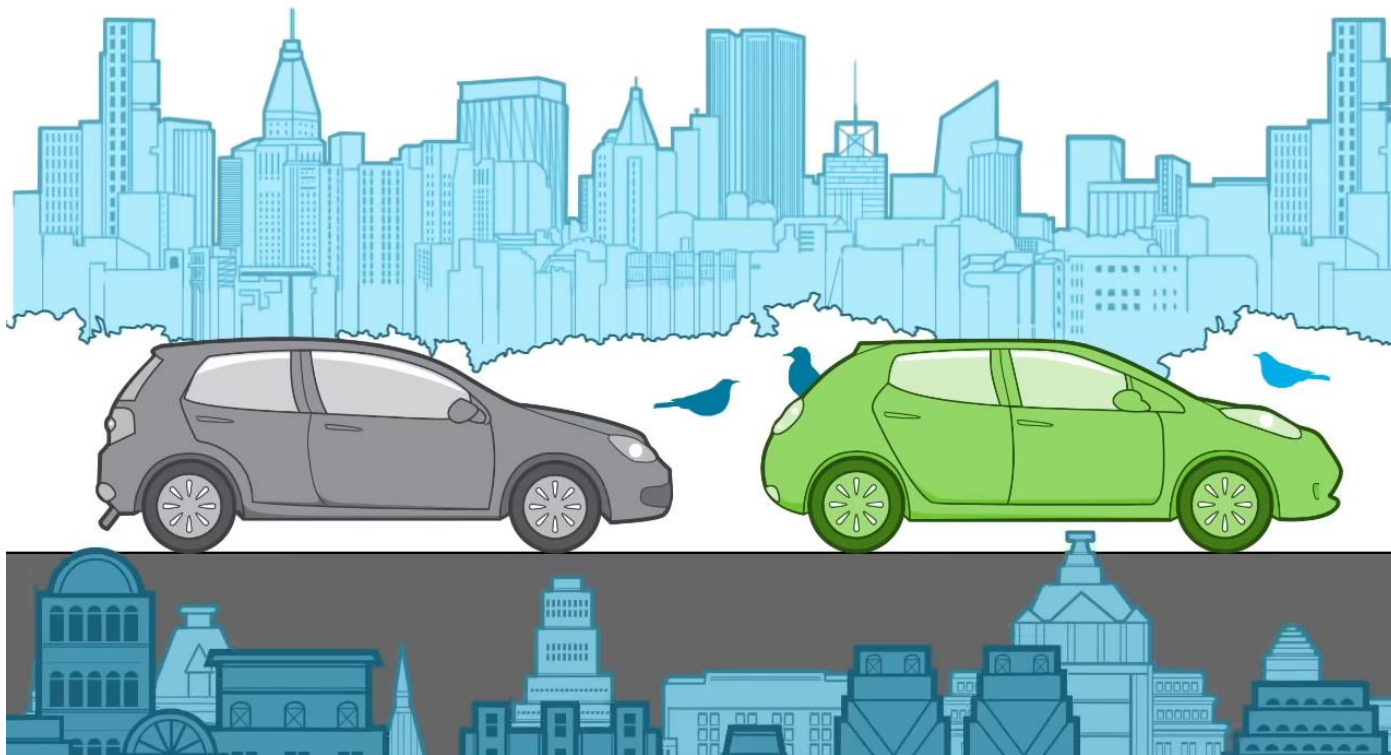
Truth or myth?

Life-cycle emissions for EVs are higher than for conventional gas-powered cars.



Myth

Let's watch this video to learn why this is a myth!



<https://www.youtube.com/watch?v=K9m9WDxmSN8>

Truth or myth?

Each year 8 million deaths worldwide are linked to air pollution.



Truth

Reducing pollution and improving air quality is a major driver of EV adoption worldwide.



Truth or myth?

Although better environmentally, not everyone can afford an electric car.



Truth

However, if you are buying a new car, this can be different. Over the lifetime of the car, Evs can be cheaper than comparable gas cars. Check out BC Hydro's online calculator [here](#).

Compare electric to gas-powered vehicles

Thinking of going green? Use our calculator to see what you could save on fuel.

Start here



Truth or myth?

EVs require daily and extensive charging.



Myth

Depending on how far you commute, how you drive, and what kind of EV, you may only charge every 2-4 days. Most Canadians drive 60km or less per day.



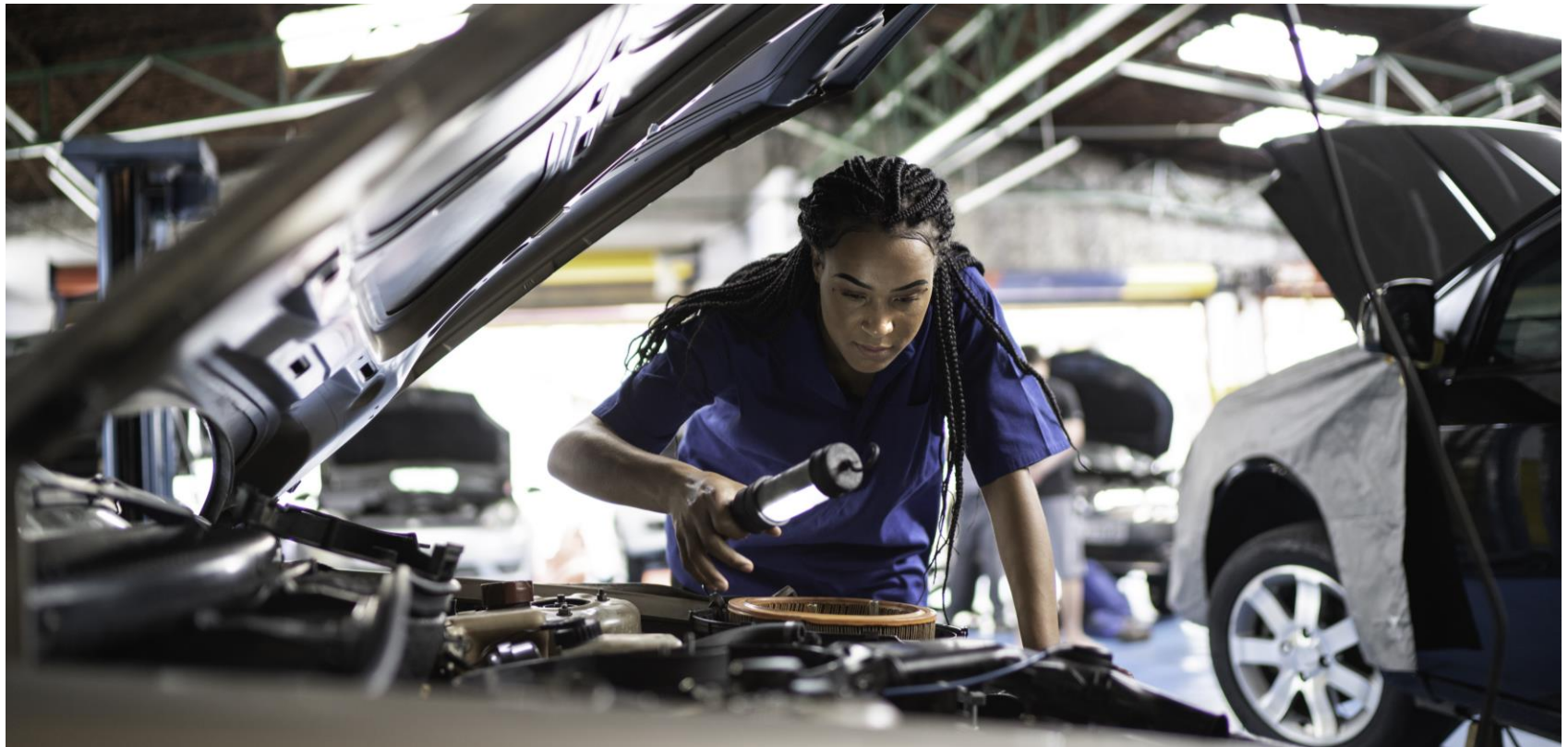
A few details about range

Different EVs have various ranges on a full battery charge.

Vehicle (2019 model or newer)	Approximate range
Tesla Model 3	460 km
Hyundai Kona EV	400 km
Smart EQ for Two	95 km
Nissan Leaf	220 km

Truth or myth?

Electric cars need less maintenance.



Truth

EVs: no oil changes, no transmissions or exhaust systems and electric motors are more durable than gas engines, have only one moving part, meaning fewer break downs.



Truth or myth?

Electric car batteries need to be replaced during the car's lifetime.



Myth

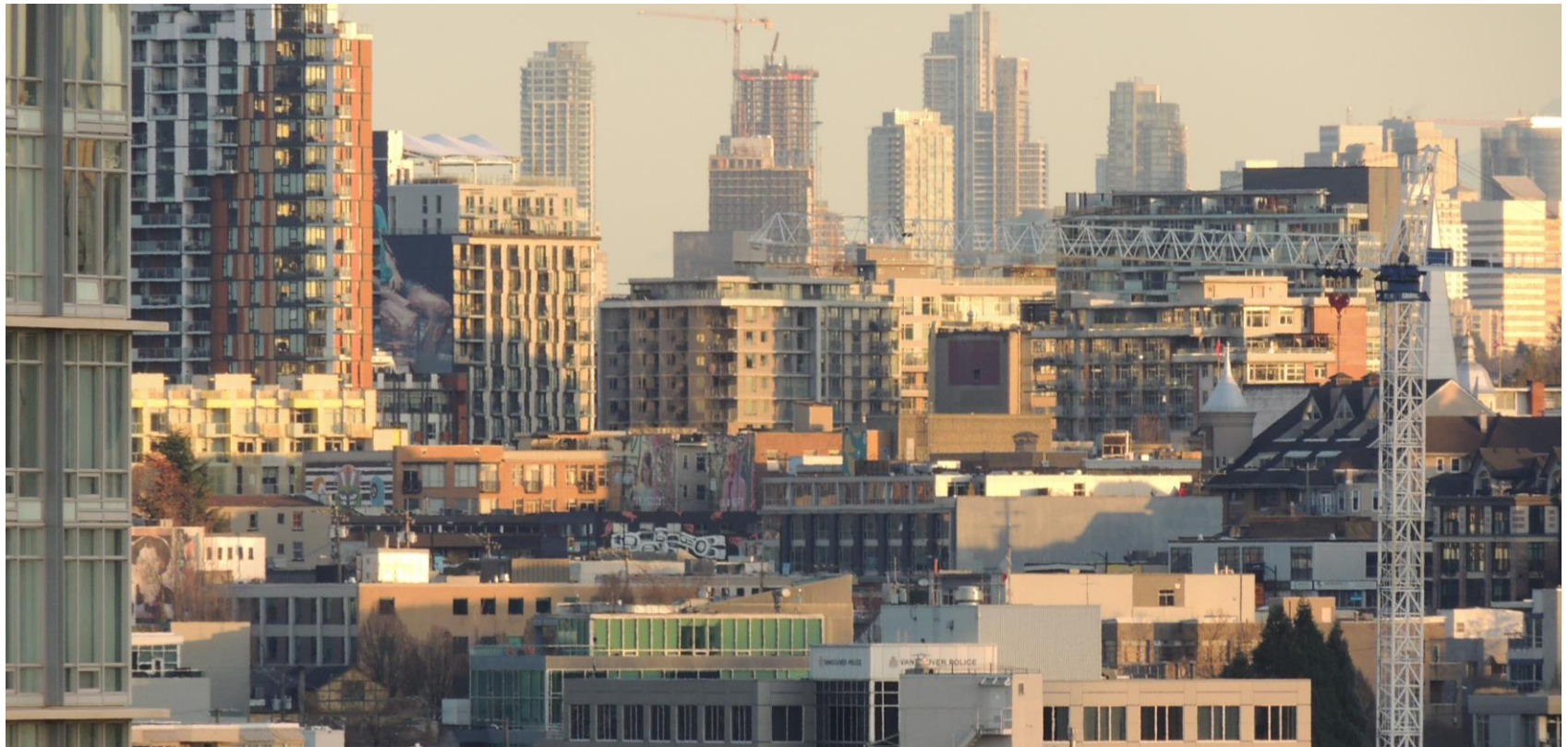
EV Batteries are designed to last as long as the car lasts and are under warranty for 8 years.

However, batteries can degrade over time reducing driving range.



Truth or myth?

EV charging is not possible in apartment buildings.



Myth

Charging stations can be installed in apartment buildings and there are possible government rebates to help offset costs. However, there can be challenges including getting approval from the building owner and creating an arrangement for EV drivers to pay for the electricity.



Truth or myth?

Every new car sold in 2040 will be zero-emission in B.C.



Truth

BC Zero Emission Vehicles (ZEV) Act mandates that by 2040, 100% of *new* vehicles sold in B.C. must be electric.



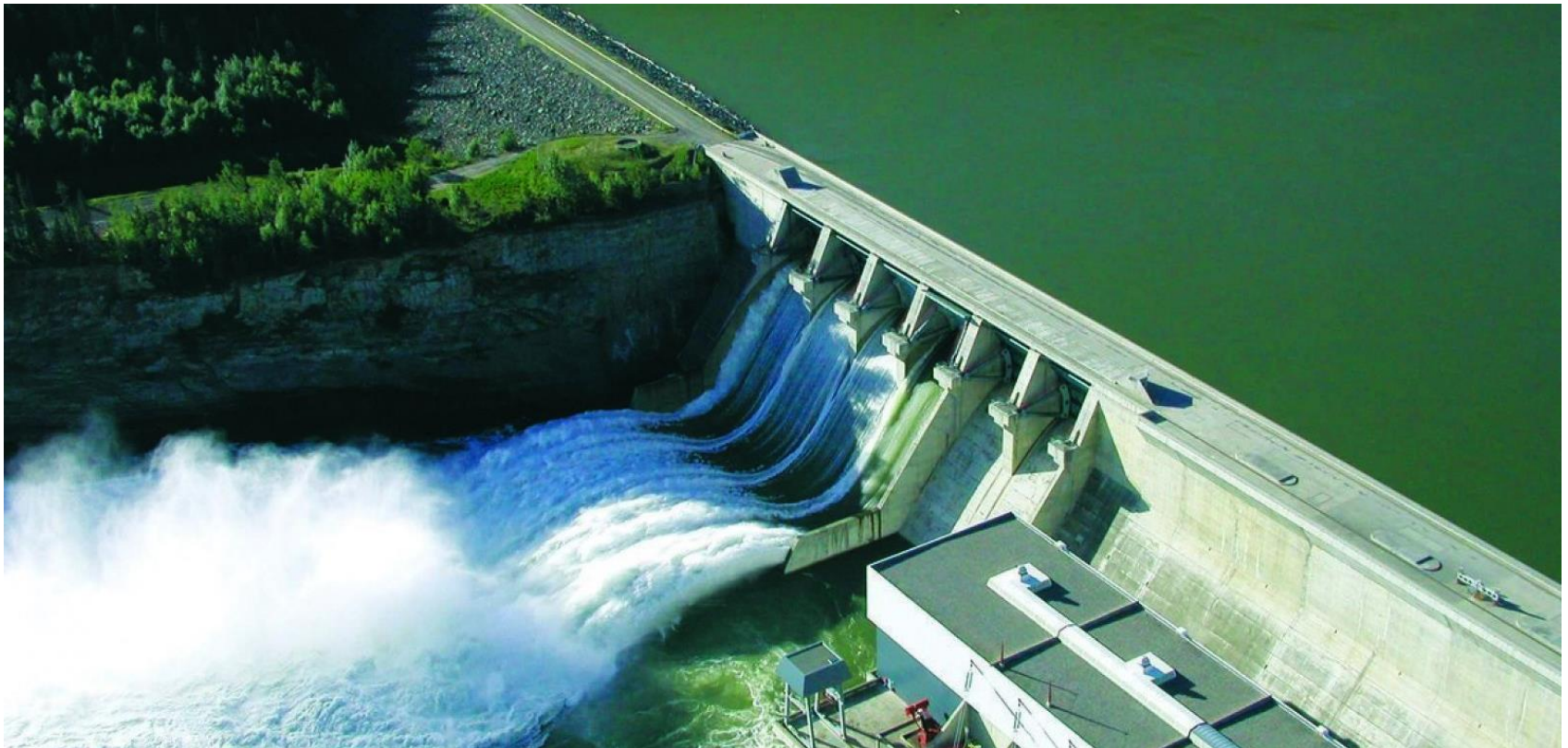
Truth or myth?

Electricity generation in B.C. accounts for 10% of GHG emissions.



Myth

Only 1% of B.C. GHG emissions come from electricity generation.



Hear from EV owners

BC Hydro interviews EV owners about their experiences.



<https://www.youtube.com/watch?v=IGLyBIOy114>

Let's discuss

What are the advantages and disadvantages of EV ownership?



