

# ELECTRIC VEHICLES

Personal vehicles have been evolving and new technologies are hitting the market at rapid pace. With new technology comes new terminology – let's break it down. Electric vehicles (or EVs) are vehicles that are fully or partially powered by electricity.



### PLUG-IN HYBRID (PHEV) (1)

- Gas & Battery
- Plugged in to recharge
- Battery used until it runs out of charge, then acts as an internal combustion engine
- Zero direct tailpipe emissions if charged up to meet your daily commutes



#### DID YOU KNOW ....

39% of Calgarians live within 250m of a high-traffic roadway, and traffic-related air pollution directly causes negative health outcomes including severe respiratory symptoms. Since electric vehicles do not produce tailpipe emissions, more electric vehicles on the roads will help reduce trafficrelated air pollution.



Electric vehicles also reduce other forms of pollution, including noise and unpleasant smell.



# BATTERY ELECTRIC (BEV) 💮 🚔

- Battery only
- Plugged in to recharge
- Zero direct tailpipe emissions



Electric vehicle owners can save upwards of tens of thousands of dollars on fuel, maintenance, and repairs over their vehicle lifetime. Incentives and discounted financing rates are also available for lowcarbon vehicles from various insurance companies, banks and government programs like the <u>Federal Zero-Emissions</u> <u>Vehicle Incentives</u>.



Electric vehicles typically maintain at least 60% of their battery range in extreme cold. Their weight and low center of gravity provides better traction on slippery roads, and they provide instant cabin heating for occupants as well.

## WHY ELECTRIC VEHICLES, WHY NOW?

Electric vehicles emit zero direct tailpipe emissions.

Transportation accounts for 1/3 of Calgary's greenhouse gas emissions. Calgary's Climate Strategy aims to get more Calgarians walking, wheeling and cycling, or using zeroemissions transportation where car trips cannot be replaced in order to reduce these emissions.

The use of electric vehicles has been increasing in Calgary and across the country. Owning an electric vehicle has become much more affordable and desirable for Calgarians.

Many Calgarians recognize the benefits of electric vehicles for our environment, air quality, and quality of life. Making the switch is an action people are taking to make a personal difference in their community.

## CHARGING

There are 3 main types of electric vehicle chargers - let's review:



#### LEVEL 1

- Regular wall outlet
- Approximately 8 km per hour of charge Residential only
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#### LEVEL 2

- Can offer 30-90 km per hour of charge
- Residential and commercial



#### LEVEL 3 (DC FAST CHARGER)

- Can offer 96-400km per hour of charge
- Public and commercial only
- Calgary has over 220 public charging stations, with more being installed every year. There are several third-party apps and websites available to help locate public chargers near you, such as *PlugShare*.
- Looking to install an at-home charger? Check out this *guide from ENMAX* for installation advice and information on the right charger for your needs.



