



In 2025, there are over **65 electric vehicle models** available in Canada, with many more on the way. The market continues to grow year by year. The recently announced Emission Reduction Plan is providing a historic investment of over **\$3 billion** in additional zero emission vehicle (ZEV) related funding to help Canada achieve its ambitious sale targets and further reduce emissions from the sector.

This includes

- **\$400 million** in additional funding for ZEV charging stations, in support of the Government's objective of adding 50,000 ZEV chargers to Canada's network.
- Canada's Infrastructure Bank will also invest \$500 million in large-scale ZEV charging and refueling infrastructure that is revenue generating and in the public interest.

## Are Electric Vehicles Safe? Busting Common Myths

Myth	Fact
EV batteries are dangerous and can explode or catch fire	EVs are designed with safety in mind and undergo rigorous testing

- While battery fires do occur, they are statistically less frequent than gasoline car fires, and manufacturers are constantly improving battery safety.

Myth	Fact
EVs are more prone to fires than gasoline cars.	EVs are not inherently more prone to fires than traditional vehicles.

- Research from EV FireSafe indicates that passenger electric vehicles have a 0.0012% chance of catching fire. In comparison, there is a 0.1% chance for petrol or diesel-powered cars. Therefore, EVs are approximately **100 times less** likely to ignite. Moreover, EVs are designed with robust safety features, such as battery management systems and thermal management systems, which monitor temperature, voltage, and current to prevent overheating and fires.
- EV FireSafe, funded by Australia's Department of Defence, has managed to verify fewer than 500 electric car battery fires. Ever. Out of 20m EVs worldwide. That's 80-odd times rarer than an ICE car fire.
- The Swedish Civil Contingencies Agency (MSB) reported 23 fires in 611,000 EVs during 2022, or 0.004 per cent in a year, which makes it **20 times less likely** to happen than ICE car fires, which burned 3,400 times in 4.4 million cars, or 0.08 per cent.

Compare all that to an average of 500 to 600 gas-powered car fires in the US, every day.

Click here: <https://www.drive.com.au/caradvice/how-many-electric-cars-have-caught-fire-australia/>



Myth	Fact
Electric vehicle batteries are unreliable and need to be replaced every few years.	Electric vehicle battery replacements due to failures are uncommon.

- Unlike starter batteries used in gasoline vehicles, electric vehicle drivetrain batteries are designed to last the lifetime of the vehicle and recent data shows they have very low failure rates.
- A recent study of about 15,000 vehicles from the earliest models through model year 2023 showed that electric vehicle battery replacements due to failure have been rare, at an average of 2.5%, outside of major recalls.
- Vehicle and battery technologies have improved since 2010, when modern EVs first entered the market, and since model year 2016 they have had less than a 0.5% failure rate. The majority of these batteries would have been covered as part of the manufacturer's warranty.

Myth	Fact
EV batteries can spontaneously combust.	Electric vehicle batteries are designed with multiple layers of protection to prevent thermal runaway and combustion.

- Modern EVs use advanced lithium-ion batteries with built-in management systems that monitor and regulate temperature, voltage, and current.
- In the rare event of a thermal issue, these systems can take corrective action to prevent a fire. While battery fires can occur, they are exceedingly rare. Oftentimes, fires are the result of external factors like collisions or manufacturing defects.

Myth	Fact
EVs are not safe for pedestrians because they are too quiet.	They are generally just as safe as other vehicles.

- EVs have a pedestrian warning system that emits a sound at low speeds to alert pedestrians.

