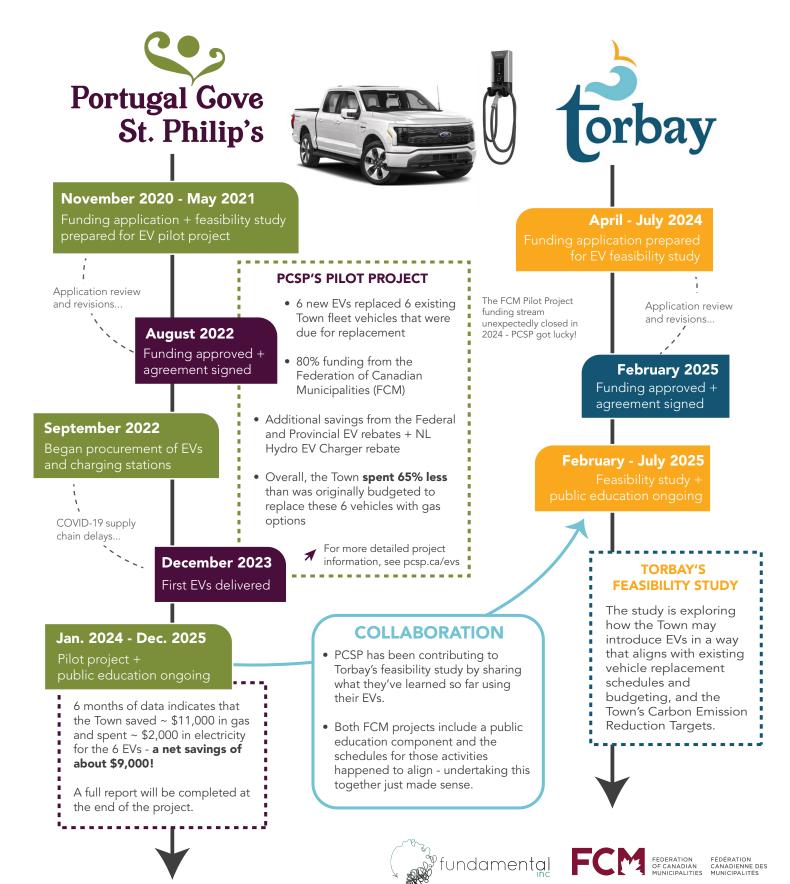
## **MUNICIPAL ELECTRIC VEHICLES**

The Town of Portugal Cove-St. Philip's and the Town of Torbay are at different stages of electrifying their fleet vehicles. By working together to share experiences and resources, both Towns can make practical, economical, and environmentally responsible procurement decisions.



## **ELECTRIC VEHICLE (EV) FACTS**

A lot of research has been done as part of the feasibility studies for both the Town of Portugal Cove-St. Philip's and the Town of Torbay fleet electrification projects. Here are some of the key points we've learned:



**New EV Battery** Warranty

> **8-10** years 160,000 km



**Town Light-Medium Duty** Vehicle Replacement Policy

> 5-9 years ~160,000 km

very unlikely that the Town would be on the hook for the cost of a battery replacement

**Out-of-Warranty EV Battery** Replacements are Rare



2.5% of all EV models made since 2011



Less than 1% of all EV models made since 2016

Source: Recurrent Auto 2023-2024 study of 20,000 EVs



**GAS CAR** 

**Cold weather** impacts EV battery range (it impacts the range of gas/diesel vehicles too)

- Town vehicles don't usually drive over 100 km/day
- EVs on the market today have 400 km ranges or more
- Average efficiency loss in cold is 20-25%\*

EVs have a **lower total carbon** 

footprint over their lifecycle



EV battery technology and recycling

techniques continue to improve

Emissions due to manufacturing

EV owners spend an average of 40-50% less on maintenance







No engine oil

No exhaust system

No spark plugs

plus the **breaks** typically last longer on EVs because of the regenerative breaking system

Sources: evbuyersguide.caa.ca; takechargenl.ca/evs

**Electric engine = ONE** moving part Gas/Diesel engine = HUNDREDS of moving parts **Hybrid/Plug-in-Hybrid** = **BOTH** types of engines

Towns only buy vehicles from local dealerships - if the

dealership sells EVs, they must be able to service them

less maintenance savings than 100% Electric

Source: 2023 review of 122 different scientific papers

> EVs have a lower total cost of ownership

Emissions due to driving

**52% more** 2024 Ford F-150 XLT SuperCrew (Gas) than the EV

2024 Ford F-150 Lightning XLT (EV) VS. Vehicle cost (incl. retail price, rebates, & depreciation)

Fuel cost (electricity vs. gas used in 200,000 km)

Taxes, insurance & other

For more information & resources, visit pcsp.ca/evs or torbay.ca/evs

FVs are

83x less likely

to catch fire than

gas vehicles

If an EV does catch fire, it is harder to put out because of the battery chemistry. Town Fire Departments are aware of EV fire suppression guidelines.

Source: evfiresafe.com



chance of a gas vehicle catching fire

chance of a EV catching fire

Maintenance & repairs

cleanenergycanada.org/countering-common-myths-about-electric-vehicles/