

THE FUTURE IS ELECTRIC

WHY MAKING EV READY PARKING AT
THE TIME OF CONSTRUCTION MAKES
SENSE



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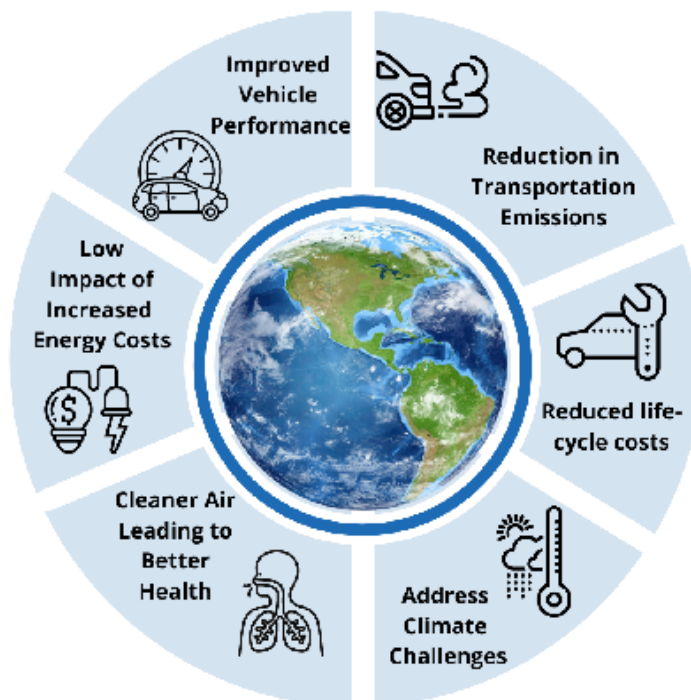
Human activities, with the burning of fossil fuels being the major contributor, have fundamentally increased the concentration of greenhouse gases in Earth's atmosphere, thereby impacting the Earth's carbon cycle and warming the planet.

Climate change impacts include:

Extreme Weather events- heat waves, flooding, wildfires, wind storms, drought

Our greenhouse gas emissions come from a variety of sectors, but transportation accounts for a significant and increasing portion of Ontario's GHG emissions.

Figure 1: Benefits of Adopting Electric Vehicles



Better Air Quality: The transportation sector is also one of the largest contributors to Ontario's air pollution burden of health. [Clearing the Air](#) found that air quality improvements from cleaner vehicles could prevent hundreds of premature deaths every year, and lead to billions of dollars in social benefits, including about \$10,000 in social benefits for every electric vehicle replacing a gas powered car.

Improved Health: With health care spending accounting for 37.5% of Ontario's total 2021 budget, investments in reducing Ontarian's health care costs are a necessary investment in the long term financial sustainability of Ontario's health care system.

Life Cycle Costs: EV drivers will save significantly on the life-cycle costs of their vehicles. The fuel cost to charge an EV at home in Ontario is equivalent to roughly \$0.20 per litre gasoline. Maintenance costs of EVs are about half that of gasoline vehicles. Despite EVs currently typically having higher upfront costs than comparable internal combustion vehicles (ICEVs), from a life cycle cost analysis EVs are already either cheaper or competitive with ICEVs. In addition, the purchase and lease costs of EVs are declining, and it is estimated that by mid 2020s, the upfront purchase price of EVs will be on par with ICEVs.

Improved Performance: EVs typically have superior handling. Additionally, EVs are quieter inside, which many drivers report makes for a more enjoyable environment for music and conversation.

There is little doubt that electric vehicles will be the future of the automobile industry. Every international automaker has plug-in hybrid (PHEV) and/or EV options. Some auto companies have set dates for when they will produce only PHEV and/or pure EVs. The government of Canada has set a mandatory target for 100% of all new light-duty car and passenger truck sales to be zero emission

by 2035, with a target for at least 50% zero emission vehicle sales by 2030.

Transitioning our vehicles from fossil fuels towards electric vehicles is a necessary action required to address our climate change challenges. One of the challenges for Ontarians to transition to EVs however is access to EV charging.

Municipalities have been working with the development community to increase the installation of EV Ready parking spots in new developments to try and reduce the need for costly and logistically challenging future EV charging retrofits. An EV Costing Study was undertaken to better understand the cost comparison of securing EV readiness at the time of construction to post construction retrofits.

The most cost-effective time to advance the EV charging readiness is at the time of construction and doing so presents substantial costs savings to property owners not only to avoid future costly EV readiness retrofits but also to ensure the resale value of parking spots.

As can be seen below there are significant costs savings to advancing EV charging readiness at the time of construction.

