

---

**For Information**

---

**REPORT TITLE: Peel Zero Emission Vehicle Strategy**

**FROM:** Gary Kent, CPA, CGA, ICD.D, Chief Financial Officer and Commissioner of Corporate Services

---

**OBJECTIVE**

To provide information on the Peel Zero Emission Vehicle Strategy and the Region of Peel's ongoing collaboration with members of the Peel Climate Change Partnership.

**REPORT HIGHLIGHTS**

- Transportation accounts for 35 per cent of the Region of Peel's community greenhouse gas (GHG) emissions.
  - The Peel Climate Change Partnership has developed and endorsed the Peel Zero Emission Vehicle (ZEV) Strategy with the following objectives:
    - Reduce GHG emissions and air pollution from the transportation sector;
    - Improve business and resident knowledge on the benefits and costs of ZEVs;
    - Increase ZEV driving experiences, availability, and ownership;
    - Enhance planning processes and access to charging infrastructure; and,
    - Promote local job creation and economic development.
  - The Strategy contains 16 actions Peel municipalities and conservation authorities can take to accelerate light-duty ZEV uptake in the community that are aligned with the Region's Official Plan, Long Range Transportation Plan, Climate Change Master Plan, and Electric Vehicle Charging Station Management Policy.
  - The Region's continued collaboration with members of the Peel Climate Change Partnership to support the transition to ZEVs will contribute significantly to the achievement of community GHG emissions reduction targets.
- 

**DISCUSSION**

**1. Background**

Transportation accounts for 35 per cent of the Region of Peel's community greenhouse gas (GHG) emissions. Driving a zero emission vehicle<sup>i</sup> (ZEV) powered by low carbon electricity is one of the most impactful ways to reduce land-based transportation emissions on a life cycle basis.<sup>ii</sup> Ontario currently has one of the cleanest electricity systems in North America; a gasoline-fueled car can produce more than 35 times the emissions of an electric vehicle. Supporting the community's transition to ZEVs is essential to achieving corporate and community GHG emissions reduction targets.

In 2021, approximately one in 20 vehicles sold in Canada was a ZEV, up from one in 100 in 2017. While ZEV sales in Ontario were lower than the national average, accounting for

## Peel Zero Emission Vehicle Strategy

about three per cent of market share last year<sup>iii</sup>, as of February 2022, more than 8,000 ZEVs were registered in the Region of Peel; an increase of 40 per cent compared to just 10 months prior.

The Government of Canada recently announced \$1.7 billion to extend the Incentives for Zero-Emission Vehicles (iZEV) Program to 2025, offering rebates of up to \$5,000 per ZEV.<sup>iv</sup> The provincial government set a goal to build at least 400,000 electric and hybrid vehicles in Ontario by 2030.<sup>v</sup> Major auto manufacturers have pledged \$100s of billions towards achieving an electrified future – including those present in the Greater Toronto Area like Ford, General Motors, and Stellantis. The momentum of the ZEV transition is clearly gaining and a Peel strategy that supports collaboration of community partners to accelerate this transition is timely.

## 2. Peel Zero Emission Vehicle Strategy

### a. Development

The Peel ZEV Strategy (the ‘Strategy’) was developed in collaboration through the Peel Climate Change Partnership (PCCP), represented by the Town of Caledon, City of Brampton, City of Mississauga, Region of Peel, Credit Valley Conservation, and Toronto and Region Conservation Authority (See Appendix I for full Peel ZEV Strategy).

The Strategy was developed through feedback and consultations with Peel residents and businesses, staff from PCCP member organizations, and external agencies such as local electric utilities, ZEV-focused not-for-profits and societies and the federal and provincial governments (See Appendix II).

### b. Summary

Recently endorsed by the Peel Climate Change Partnership Steering Committee, the Peel ZEV Strategy aims to accelerate the uptake of light-duty battery<sup>vi</sup> and plug-in hybrid<sup>vii</sup> electric vehicles for Peel residents and businesses over the next five years.

The Peel ZEV Strategy objectives are to:

- Reduce GHG emissions and air pollution from the transportation sector;
- Improve business and resident knowledge on the benefits and costs of ZEVs;
- Increase ZEV driving experiences, availability and ownership;
- Enhance planning processes and access to charging infrastructure; and,
- Promote local job creation and economic development.

### c. Policy, Plan and Strategy Alignment

The Peel ZEV Strategy aligns with many existing municipal plans, policies and strategies that enable climate action and clean transportation across the Region. Sector research and related strategies recognize passenger vehicles will continue to be a significant mode within the Region’s diversifying transportation system, and significant reductions in GHG emissions and air pollution are achievable through ZEV uptake.

Specifically for the Region, the Peel ZEV Strategy aligns with the Region’s Official Plan, Let’s Move Peel – the Long Range Transportation Plan, the Climate Change Master Plan and the Electric Vehicle Charging Station Management Policy. With a breadth of experience installing ZEV charging infrastructure and electrifying the fleet, the Region has valuable knowledge to share with the community to enable this impactful transformation. Implementing the Strategy will make a material contribution to reducing

## Peel Zero Emission Vehicle Strategy

GHG emissions within the community, a priority area for improvement in the 2021 Climate Change Master Plan Progress Report.

### d. Alignment with Active Regional ZEV Initiatives

In addition to the community focused actions of the Peel ZEV Strategy, the Region is preparing for the transition to electric vehicles through corporate actions. Within the 2018 to 2022 Term of Council, 81 electric vehicle charging connectors were installed to support public, staff and fleet electric vehicles. Currently, the Region’s fleet includes 21 full battery electric vehicles (BEVs) and 20 plug-in hybrid SUVs. Peel Regional Police currently operate one Ford Focus BEV and are piloting four Ford Mustang Mach-E BEVs. The Region is also planning pilot projects for electric TransHelp buses and waste refuse trucks.

A study is currently underway to understand charging infrastructure requirements, capital planning and costs across 17 sites to support the ongoing electrification of the Region and Peel Regional Police fleets between 2024 and 2032. Results are anticipated by the end of July 2022.

Findings from these initiatives will help inform the upcoming refresh of the Region’s Green Fleet Strategy and strengthen the Region’s commitment to making ZEVs the first choice for future fleet needs.

## 3. Working Together on Implementation

Collaboration amongst the PCCP, and other community partners, is needed to implement the Peel ZEV Strategy’s 16 actions (see Appendix I). The Region’s participation through coordinating education and awareness initiatives, co-planning community events, and developing advocacy positions are all applicable opportunities to efficiently elevate the impact of the PCCP’s collective efforts to realize more ZEVs on Peel’s roads.

Focus areas and actions that represent the Region’s opportunities to support the implementation of the ZEV Strategy are highlighted in the table below.

ZEV Strategy Focus Area	Actions
Expanding Access to Public EV Charging Stations	<b>1.1:</b> Enable the installation of public charging stations at municipal owned facilities and conservation authority lands
	<b>1.2:</b> Develop a methodology to guide charging infrastructure distribution throughout the community using an equity lens
Enhancing ZEV Education and Awareness	<b>2.2:</b> Work with auto industry, not-for-profits, and utilities to provide ZEV test drives, raise awareness and ensure ZEV availability across the community
	<b>2.3:</b> Educate municipal staff, residents and businesses about federal mandates and targets, incentive programs, ZEV charging and parking locations and the benefits of ZEVs
Embedding ZEV Infrastructure Considerations in the Planning Process	<b>6.1:</b> Include language to encourage ZEV uptake and charging infrastructure deployment in municipal plans and policies
	<b>6.2:</b> Provide ZEV mapping and charging infrastructure guidance documents to municipal planners to encourage ZEV ready development

## Peel Zero Emission Vehicle Strategy

	<b>6.3:</b> Work with electric utilities to inform planning for ZEV charging infrastructure readiness across the community, and explore opportunities for pilot projects focused on electricity demand management and bi-directional charging technologies
Advocating, Implementing and Reporting Collectively	<b>7.1:</b> Form a working group to implement ZEV strategy actions, and monitor and report progress on implementation
	<b>8.1:</b> Advocate for building code updates, municipal authority to require EV charging readiness, appropriate policies and regulations, vehicle availability, utility rates and incentives, and a low emissions electricity grid to support ZEV uptake

### 4. Next Steps

- Regional and local municipal staff will continue to work collaboratively with community stakeholders, as required, to oversee and track progress on ZEV Strategy implementation
- Initiate event planning with community partners to provide ZEV test drives and education for residents and businesses across the community in 2022/2023 (Action 2.2)
  - Examples of similar municipal led initiatives include E-Mission Durham<sup>viii</sup> and MEET Burlington<sup>ix</sup>

### FINANCIAL IMPLICATIONS

Existing funds of approximately \$35,000 are available under capital account 21-7201 for the Region's contribution to coordinate ZEV education and test drive events across the community over the Strategy's five-year timeframe. These events will be carried out in partnership with Peel's local municipalities and other community partners. Federal funding opportunities will also be explored.

Capital planning for expanding the Region's ZEV charging infrastructure will be guided by the Region's Electric Vehicle Charging Station Management Policy, where data-demonstrated demand must be evident to justify requests for future installations. Capital funding for expanding ZEV charging infrastructure on Regional sites will be included in future budget asks to Council, as appropriate, together with applications for matching federal funds.

### CONCLUSION

The Peel Zero Emission Vehicle Strategy outlines actions that Peel Climate Change Partnership members can take to accelerate zero emission vehicle uptake in the community. Working together to implement these actions will contribute significantly to the achievement of community greenhouse gas emissions reduction targets.

### APPENDICES

- Appendix I – Peel Zero Emission Vehicle Strategy
- Appendix II – Stakeholder Engagement

## Peel Zero Emission Vehicle Strategy

---

*Authored By: Adam Vaiya, Advisor, Office of Climate Change and Energy Management*

*G. Kent.*

---

Gary Kent, CPA, CGA, ICD.D, Chief Financial Officer and Commissioner of Corporate Services

---

<sup>i</sup> Zero Emission Vehicle (ZEV): A vehicle that has the potential to produce no tailpipe emissions (e.g. *battery-electric, plug-in hybrid electric, hydrogen fuel cell*)

<sup>ii</sup> Source: Intergovernmental Panel on Climate Change (2022) - [https://report.ipcc.ch/ar6wg3/pdf/IPCC\\_AR6\\_WGIII\\_HeadlineStatements.pdf](https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_HeadlineStatements.pdf)

<sup>iii</sup> <https://globalnews.ca/news/8776540/canada-electric-vehicle-popularity-federal-sales-target>

<sup>iv</sup> <https://tc.canada.ca/en/road-transportation/innovative-technologies/zero-emission-vehicles/questions-answers-dealerships>

<sup>v</sup> Ontario Boosting Electric Vehicle Charging Availability | Ontario Newsroom - <https://news.ontario.ca/en/release/1001255/ontario-boosting-electric-vehicle-charging-availability>

<sup>vi</sup> Battery Electric Vehicles (BEVs): Powered exclusively by electricity and must be plugged in to charge.

<sup>vii</sup> Plug-in Hybrid Vehicles (PHEVs): Can be fuelled with both gasoline and electricity and can be plugged into charge

<sup>viii</sup> E-Mission Durham - <https://www.durham.ca/en/e-mission/>

<sup>ix</sup> MEET Burlington - <https://www.plugndrive.ca/meet-burlington/>