

Date: May 16, 2022

To: Chair and Members of General Committee

From: Jodi Robillos, Commissioner of Community Services

Originator's files:

Meeting date:
June 15, 2022

Subject

Zero Emission Vehicle Strategy

Recommendation

That the Corporate Report dated May 16, 2022 from the Commissioner of Community Services entitled "Zero Emission Vehicle Strategy" and Appendix 1 attached, be approved.

Executive Summary

- Transportation accounts for 33% of the City of Mississauga's community greenhouse gas (GHG) emissions.
- The Government of Canada has set a mandatory 100% sales target for all new light-duty cars and passenger trucks to be zero-emission by 2035, with interim targets beginning as early as 2026 (e.g. at least 20% by 2026 and 60% by 2030).
- 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; improve business and resident knowledge; 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.
- Supporting the transition to ZEVs is essential to meet community GHG emissions reduction targets.

Background

Transportation accounts for 33% of the City of Mississauga's community greenhouse gas (GHG) emissions. Zero Emission Vehicles are defined as a vehicle that has the potential to produce no tailpipe emissions (e.g. battery-electric, plug-in hybrid electric, hydrogen fuel cell). According to the Intergovernmental Panel on Climate Change, ZEVs powered by low carbon

electricity offer the largest potential to reduce land-based transportation emissions on a life cycle basis ([IPCC, 2022](#)). Ontario currently has one of the cleanest electricity systems in North America; an electric vehicle produces only 3% of emissions of gasoline-fueled car when charging occurs during off-peak hours (IESO, 2021). Supporting the transition to ZEVs is essential to achieving corporate and community GHG emissions reduction targets.

ZEV sales are set to accelerate rapidly over the next decade, but support is needed to meet the Government of Canada's mandatory 100% sales target for all new light-duty cars and passenger trucks to be zero-emission by 2035 – with interim targets set for at least 20% sales by 2026 and at least 60% sales by 2030 ([Canada, 2022](#)).

Present Status

In 2021, approximately 5% of vehicles sold in Canada was a ZEV, up from 1% in 2017. ZEV sales in Ontario were lower than the national average, accounting for about 3% of market share last year ([Global News, 2022](#)).

Recent momentum towards the ZEV transition is promising. The Government of Canada announced \$1.7 billion to extend the Incentives for Zero-Emission Vehicles (iZEV) Program to 2025, offering rebates of up to \$5,000 for the purchase of ZEV ([Canada, 2022](#)). The Provincial Government set a goal to build at least 400,000 electric and hybrid vehicles in Ontario by 2030 ([Ontario, 2021](#)). In addition, major auto manufacturers have pledged \$100's of billions towards achieving an electrified future – including those present in the Greater Toronto Area like Ford, General Motors, and Stellantis (brand maker for 14 brands such as Chrysler, Dodge, Ram and Fiat). 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.

Despite these significant commitments and uptick in ZEVs across the Region, achieving the Federal government's first target of at least 20% by 2026 of new vehicle sales being ZEVs will be challenging.

Comments

Peel Zero Emission Vehicle Strategy Development

The Peel ZEV 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. The PCCP works together to address climate change in the Region. By working together to implement a region-wide strategy, we are aiming to efficiently support residents and businesses to reduce GHG emissions and air pollution.

Strategy development included several background research studies examining expected ZEV uptake and associated electricity grid impact within the region as well as region-specific health, climate change and socioeconomic impacts. Community surveys were conducted with both

residents and businesses and a best practice scan was completed to evaluate potential actions proposed in similar municipal plans in Ontario and more broadly.

Peel Zero Emission Vehicle Strategy Summary

This Strategy focuses on light-duty vehicles – cars, trucks and vans – owned by the general public and businesses, and the charging infrastructure to support these vehicles. Municipal fleet and transit vehicles have been excluded from the scope of this Strategy, as each partner has addressed corporately-managed vehicles through existing plans and commitments.

Endorsed through the Peel Climate Change Partnership Steering Committee, the Peel ZEV Strategy aims to expedite the uptake of zero emission 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.

To support these objectives, the strategy includes 16 actions within five focus areas that reflect PCCP Members' role in enhancing ZEV uptake in the community.

- Expanding Access to Public EV Charging Stations
- Enhancing ZEV Education and Awareness
- Enhancing Private Investments into ZEVs and Charging Infrastructure
- Embedding ZEV Infrastructure Considerations in the Planning Process
- Advocating, Implementing and Reporting Collectively.

In collaboration with PCCP Members, the City of Mississauga will be a key implementation stakeholder across all focus areas. Progress on ZEV Strategy implementation will be reported to local Councils annually through each municipalities' community climate change action plan updates.

Policy, Plan and Strategy Alignment

The strategy aligns with many existing municipal and conservation authority plans, policies and strategies that enable climate action and clean transportation across the Region. For the City of Mississauga, the ZEV Strategy will compliment actions in the Transportation Master Plan, The Parking Master Plan and Implementation Strategy, The Smart City Master Plan and the Climate Change Action Plan (CCAP).

Development of the ZEV strategy is in direct response to CCAP Action 18-3: Develop a zero emissions vehicle strategy to accelerate the adoption of zero emission vehicles.

Strategic Plan

The ZEV Strategy supports three pillars of the City's Strategic Plan:

- **Belong:** the ZEV supports the strategic goal to ensure the City Thrives on its Cultural Diversity.
- **Prosper:** the ZEV supports the strategic goal to Create Partnerships for Innovation.
- **Green:** the ZEV supports the strategic goals to Lead and Encourage Environmentally Responsible Approaches; Conserve, Enhance and Connect Natural Environments; and Promote a Green Culture.

Engagement and Consultation

The Strategy was developed in consultation with the public, PCCP staff, and external agencies such as the Federal and Provincial government, local electric utilities, and ZEV focused not-for-profit organizations and societies. An online and telephone survey was conducted to better understand Peel Region residents and business' attitudes towards ZEVs, their appetite for using ZEVs, and to determine potential steps by municipalities to accelerate the transition to ZEVs. A total of 541 Region of Peel residents and 33 companies with facilities located in Peel were surveyed.

For a detailed review of the development process see Appendix 1.

For a list of consulted stakeholders see Appendix 2.

Next Steps

Staff intend to form a working group comprised of municipal, conservation authority and other stakeholders as required to oversee and track progress on ZEV Strategy implementation. Five priority actions were identified within the strategy.

In 2022, Environment staff will support the development of a working group with the PCCP Member organizations and begin work on priority actions, which include:

- Work together to implement ZEV Strategy actions and monitor and report progress on implementation.
- Continue to enable the installation of public charging stations at municipal-owned facilities and conservation authority lands.
- Include language to encourage ZEV uptake and charging infrastructure deployment in municipal plans and policies.
- Enhance ZEV education and support events such as pop-up ZEV test drives.
- Evaluate ZEV charging infrastructure as an eligible measure in home energy retrofit programs.

Financial Impact

Implementation and funding of ZEV Strategy actions will be subject to the annual budget process.

Conclusion

The Peel Zero Emission Vehicle Strategy outlines actions Peel Climate Change Partnership members can take to accelerate ZEV uptake in the community. Working together to implement these actions will contribute significantly to the achievement of community GHG emissions reduction targets and will support the transition to a low carbon transportation system.

Attachments

Appendix 1: Peel Zero Emission Vehicle Strategy

Appendix 2: Stakeholder Consultations



Jodi Robillos, Commissioner of Community Services

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