

City of Mississauga

Memorandum



Date: August 19, 2024

To: Chair and Members of Environmental Action Committee

From: Dianne Zimmerman, Manager of Environment Team

Meeting date: September 3, 2024

Subject: 2024 Progress Update on the Peel Zero Emission Vehicle (ZEV) Strategy

Executive Summary

- The Peel ZEV Strategy, approved in 2022, provides a 5-year strategic action plan for members of the Peel Climate Change Partnership (PCCP) to support the adoption of zero emissions vehicles (ZEVs) throughout the community.
- The Strategy focuses on five key action pathways including: (1) Expanding Access to Public Electric Vehicle (EV) Charging Stations, (2) Enhancing ZEV Education and Awareness, (3) Enhancing Private Investments into ZEVs and Charging Infrastructure, (4) Embedding ZEV Infrastructure Considerations in the Planning Process, and (5) Advocating, Implementing, and Reporting Collectively.
- As of August 2024, 11 out of 16 of the recommended actions have been completed or are currently underway in the City of Mississauga.
- The City has been particularly successful in its implementation of actions aligned with Expanding Access to Public EV Charging Stations and Enhancing ZEV Education and Awareness. Highlights in these areas include the installation of 30 new public EV charging stations, as well as hosting Plug N' Drive's Mobile Electric Vehicle Education Trailers (MEETs) to facilitate test drives and community education.
- City staff are committed to moving forward with the actions outlined in the ZEV Strategy and will continue to coordinate with regional partners on the implementation of the ZEV Strategy.

Background

The Peel Climate Change Partnership (PCCP) leverages resources and expertise from six member organizations: the Region of Peel, Town of Caledon, City of Brampton, City of Mississauga, Toronto and Region Conservation Authority and Credit Valley Conservation. Developed by the PCCP and endorsed by City of Mississauga Council in 2022, the Peel ZEV Strategy provides a 5-year strategic action plan to support the adoption of zero emissions vehicles (ZEVs) throughout the community. By working together to implement a region-wide



strategy, the Strategy aims to efficiently support residents and businesses to reduce GHG emissions and improve air quality.




The Strategy focuses on five action pathways that reflect PCCP Members' role in enhancing ZEV adoption throughout the region by:

1. Expanding Access to Public EV Charging Stations: Actions in this section focus on supporting sufficient and equitable access to charging stations, and enhancing awareness of their locations.
2. Enhancing ZEV Education and Awareness: Actions in this section aim to increase ZEV knowledge amongst Peel residents, businesses, and PCCP members.
3. Enhancing Private Investments into ZEVs and Charging Infrastructure: Actions in this section focus on municipal programs to support businesses and residents in purchasing ZEVs and charging infrastructure.
4. Embedding ZEV Infrastructure Considerations in the Planning Process: Actions in this section focus on enhancing municipal policies and development standards for charging infrastructure, as well as coordinating with local electric utilities on planning, programming, and innovation.
5. Advocating, Implementing and Reporting Collectively: Actions in this section focus on continued partnerships to implement the Peel ZEV strategy, and advocating on the PCCP Members' needs to achieve Federal ZEV sales targets.

Present Status

The City of Mississauga has made significant progress on implementing actions outlined in the Strategy since it was adopted in 2022. As of August 2024, 11 out of 16 of the recommended actions have been completed or are currently underway. Some recent highlights include:

Action Pathway	Highlights for Mississauga
Expanding Access to Public EV Charging Stations 	<ul style="list-style-type: none"> • EV charging stations have been installed at the following locations: Streetsville, Sheridan, Central Library and Burnhamthorpe Community Center, with a total of 30 connections. • Digital signage has been implemented at Burnhamthorpe Community Center.
Enhancing ZEV Education and Awareness 	<ul style="list-style-type: none"> • Signage has been added to electric ice resurfacers and MiWay hybrid buses to communicate electrification. • The City hosted an EV Mobile Electric Vehicle Education Trailer (MEET) with Plug'n Drive in October 2022 and June 2024 to support test drives and community education. • A Community EV Day was held on June 22, 2024 to provide education and test drives for residents.

<p>Enhancing Private Investments into ZEVs and Charging Infrastructure</p> 	<ul style="list-style-type: none"> • Mississauga has streamlined the application process for EV charger installations to encourage private companies to invest in the installation of charging stations in the City. • In 2023, Tesla opened one of Canada's largest charging sites at Applewood Village Plaza. • The 2024 Community EV Day highlighted a recent partnership project with <i>Bird</i> and <i>Lime</i> to make electric scooters and bikes accessible in Mississauga.
<p>Embedding ZEV Infrastructure Considerations in the Planning Process</p> 	<ul style="list-style-type: none"> • The City has updated the zoning bylaw to embed ZEV considerations. • Green Development Standards have been updated and approved with ZEV-ready requirements.
<p>Advocating, Implementing and Reporting Collectively</p> 	<ul style="list-style-type: none"> • The City is continually collaborating with PCCP members to coordinate plans, share best practices and lessons learned, and jointly pursue ZEV-related opportunities. • City staff have spoken at local and regional EV events and conferences, including the EV Expo, to represent the City as a municipal leader in the ZEV space.

Conclusion

Climate change has unanimously been declared as one of the most pressing crises of our time, which is why all Peel municipalities have developed climate change action plans and are taking action to reduce GHG emissions. The creation and implementation of the Peel ZEV Strategy is directly aligned with the development of the City's Climate Change Action Plan. Currently, the transportation sector accounts for 35% of the Region's community GHG emissions. While each municipality is unique, there is a clear need for a unified effort to reduce emissions from the transportation sector.

The electrification of transportation is one of the most impactful ways to tackle climate change and reduce air pollution, and the City of Mississauga has a key role to play in supporting the adoption of ZEVs through both education and awareness and the provision of public infrastructure.

The City is committed to meeting the goals outlined in the Peel ZEV Strategy to increase the use of light-duty ZEVs across our community and to support residents and businesses in reducing GHG emissions and air pollution.

Appendix A: Peel ZEV Strategy Actions Status Update

Environmental Action Committee	2024/08/19	4
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#	Sub-Action	Status for Mississauga
Expanding Access to Public EV Charging Stations Actions		
1.0 Expand Access to Public EV Charging Stations		
1.1	Enable the installation of public charging stations at municipal-owned facilities and conservation authority lands	Continuous improvement
1.2	Develop a methodology to guide charging infrastructure distribution throughout the community using an equity lens	Underway
1.3	Install and explore standardizing wayfinding signage for ZEV charging stations	Underway
Enhancing ZEV Education and Awareness Actions		
2.0 Educate and Raise Awareness on the Benefits of ZEVs		
2.1	Brand ZEV fleet vehicles owned by PCCP members	Underway
2.2	Work with auto industry, not-for-profits, and utilities to provide ZEV test drives, raise awareness and ensure ZEV availability across the community	Continuous improvement
2.3	Educate municipal staff, residents and businesses about federal mandates and targets, incentive programs, ZEV charging and parking locations and the benefits of ZEVS (health, cost, environment, etc.)	Continuous improvement
Enhancing Private Investment in ZEVs and Charging Infrastructure Actions		
3.0 Encourage Businesses to Electrify Fleets and Install Charging Infrastructure		
3.1	Explore financial and non-financial incentives for ZEV charging stations and fleet for the commercial/industrial sector	Not started
4.0 Encourage Residents to Purchase ZEVs		
4.1	Evaluate ZEV charging infrastructure as an eligible measure in home energy retrofit programs	Not started
Embedding ZEV Infrastructure Considerations in the Planning Process Actions		
5.0 Require EV Ready Parking		
5.1	Include ZEV ready parking requirements for new developments	Complete
5.2	Amend municipal by-laws to enforce violations for improper parking in designated EV charging station spaces on municipal properties	Underway

Environmental Action Committee	2024/08/19	5
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5.3	Explore municipal on-street ZEV charging infrastructure requirements in high density areas (e.g. at select mixed-use developments, business improvement areas and tourist locations)	Not started
6.0 Ensure ZEVs are Factored in Long-Term Planning		
6.1	Include language to encourage ZEV uptake and charging infrastructure deployment in municipal plans and policies	Continuous improvement
6.2	Provide ZEV mapping and charging infrastructure guidance documents to municipal planners to encourage ZEV ready development	Not started
6.3	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 vehicle-to-grid technologies	Continuous improvement
Advocating, Implementing and Reporting Collectively Actions		
7.0 Form a PCCP Member Working Group to Implement and Report on ZEV Strategy		
7.1	Work together to implement ZEV Strategy actions and monitor and report progress on implementation	Continuous improvement
8.0 Advocate to Enable ZEV Advancement		
8.1	<p>Advocate for:</p> <ul style="list-style-type: none"> • building code updates; • municipal authority to require EV charging readiness; (e.g. fast-charging infrastructure requirements, MURB charging infrastructure requirements) • appropriate policies and regulations; • vehicle availability; and, • utility rates and incentives, and a low emissions electricity grid to support ZEV uptake; (e.g. incentives for low-income earners) 	Not started



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