



SUBJECT: Electric Mobility Strategy Development

TO: Environment, Infrastructure & Community Services Cttee.

FROM: Environment and Energy

Report Number: EICS-13-21

Wards Affected: all

File Numbers: 210-01

Date to Committee: July 8, 2021

Date to Council: July 13, 2021

Recommendation:

Authorize the Mayor and Clerk to enter into an agreement with BurlingtonGreen to complete a community based Electric Mobility Strategy in partnership with the City of Burlington to the satisfaction of the Executive Director of Legal Services; and

Authorize the Mayor and City Clerk to enter into the necessary agreement, along with any other related documents or bylaws, with an external funding source should the funding be approved, to complete an Electric Mobility Strategy for Burlington, subject to the satisfaction of the Executive Director of Legal Services & Corporation Counsel (as previously outlined in Environment, Infrastructure and Community Services report EICS-13-21 at the June 10, 2021 meeting).

PURPOSE:

Vision to Focus Alignment:

- Support sustainable infrastructure and a resilient environment

The purpose of this report is to obtain council approval to work with the BurlingtonGreen organization to develop a community based Electric Mobility Strategy for Burlington.

Background and Discussion:

In April 2019, Burlington City Council declared a climate emergency for the purposes of deepening our commitment to protecting our economy, environment and community from climate change and that Council and staff apply a climate lens to the plans and actions of the City of Burlington including the Council strategic workplan and future budgets.

Our climate is changing. The world has already warmed by 1°C above preindustrial levels due to human activities. Canada is warming at a faster rate with overland temperatures increasing an average of 1.7°C between 1948 and 2016 and about 2.3°C for northern Canada with the majority being due to human activities. The City of Burlington is not immune to the impacts of climate change and has already experienced many examples of what is predicted to become more common.

The City has shown leadership with respect to plans to reduce greenhouse gas emissions – also known as climate mitigation - with commitments approved in July 2019 for corporate emissions (net carbon neutral by 2040) and April 2020 for community emissions (net carbon neutral by 2050).

It is recognized that our transportation system, which has prioritized the use of single occupancy vehicles over other modes need to be restructured to provide residents with more transportation options that prioritize active, public and shared transportation modes. Shifting the modal split and supporting sustainable transportation options remains a priority in the community. An Integrated Mobility Plan is underway in the community where a climate lens will be employed, recognizing that planning for sustainable transportation options helps to achieve a healthy, livable and sustainable community. In addition, area specific plans are being developed for Major Transit Station Areas in Burlington which are guided by policies requiring the identification of practices related to sustainable building, site and neighbourhood design measures, among others.

There is recognition that the movement from Internal Combustion Engine (ICE) vehicles towards Electric Vehicles (EVs) is also a critical component of the actions needed to reduce emissions from our transportation system. Therefore, the development of an Electric Mobility Strategy is required to achieve success in reducing emissions and achieve the carbon reduction targets.

Electric Mobility Strategy

Implementation of an Electric Mobility Strategy is a priority action area identified in the Climate Action Plan, approved by Council in April 2020. The strategy to be developed will focus on actions to support plug-in light duty EVs that use electricity (from an external charging source) to fuel the movement of the vehicle either in whole or in part. Specifically, this means light-duty plug-in hybrid electric vehicles (PHEV) and battery

electric vehicles (BEV). The strategy will also take a look at opportunities to support the adoption of electric bikes in the community as a viable and sustainable form of active transportation. Heavy duty vehicles, included buses, are out of scope.

The study process will include researching best practices at the municipal level, EV trends and market research, policy analyses, electrical and charging capacity (current and future), and stakeholder and community engagement.

Although the city fleet will be considered, the focus of this strategy will be on increasing electric mobility in the community. A separate green fleet strategy update that will include electric vehicle opportunities for electrifying equipment and fleets is scheduled to be completed for city operations. Conversion of the Burlington transit fleet to electric buses is also out of scope as Burlington Transit has retained CUTRIC to complete a feasibility study for electric buses.

BurlingtonGreen

It is proposed that the City of Burlington partner with BurlingtonGreen (BG) on this initiative. They have experience researching environmental issues and developing and delivering a wide variety of programs, events and services. The organization is well known for collaborating with community, residents, businesses, organizations, advocates and governments on a variety of initiatives and programs to protect and improve the health of the environment.

The Electric Mobility Strategy directly relates to one of BG's signature programs, **Make the Switch**, focusing on empowering people to adopt more sustainable transportation options to reduce the carbon footprint of this sector. Make the Switch is already an established brand in Burlington and supports the goals of the community Climate Action Plan (CAP) to transition off of fossil fuels. BurlingtonGreen is also an active member of the CAP community stakeholder advisory team and the Bay Area Climate Change Council.

Strategy/process

Initial discussions have taken place with BurlingtonGreen and city staff on this project, along with the Clean Air Partnership, to develop a terms of reference. Further engagement of staff and stakeholders, such as Burlington Hydro, will take place as the project progresses.

Options Considered

The development of an Electric Mobility Strategy is needed to reduce greenhouse gas emissions from the transportation sector in Burlington. An Integrated Mobility Plan is also underway to support sustainable and active modes of transportation, and public transit, which will also support the goals of the Climate Action Plan.

Financial Matters:

Funding for this initiative was reported on in report EICS-07-21.

Total Financial Impact

A budget of \$50,000 is proposed for this project, as recommended by external sources based on other similar municipal studies.

Source of Funding

The following is a breakdown of the funding sources for this project. Note that the \$15,000 contribution from the city's Green Initiatives Reserve Fund was approved by council in report EICS-07-21. Staff and BurlingtonGreen are currently reviewing three different options to provide matching funding for this project, including the Ministry of Energy, Northern Development and Mines; Natural Resources Canada; and The Atmospheric Fund.

Enbridge Gas Inc. – contribution in 2021 to support the Climate Action Plan	\$10,000
City of Burlington Green Initiatives Reserve Fund (approved)	\$15,000
External Source of Funding	\$25,000
TOTAL	\$50,000

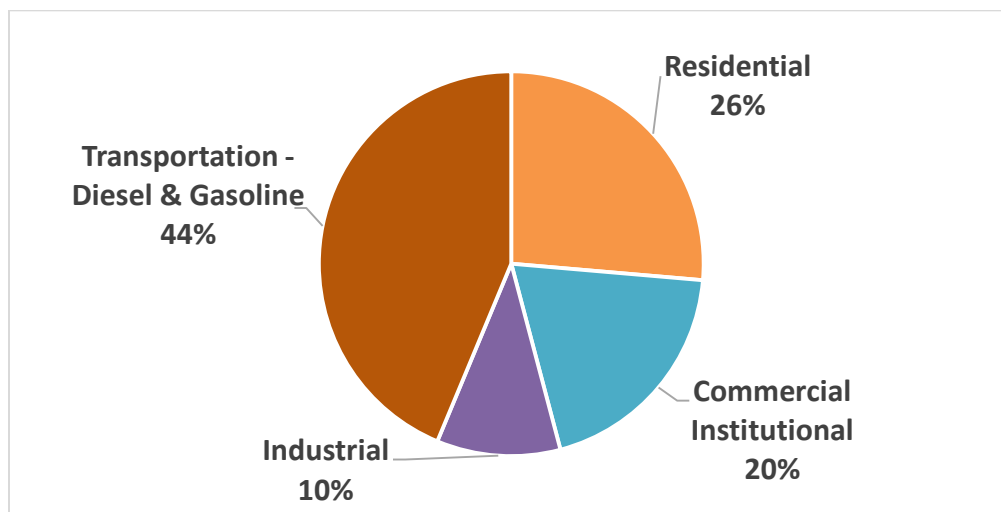
Other Resource Impacts

None

Climate Implications

As reported in report EICS-07-21, the transportation sector represents over 40% of the community's greenhouse gas emissions. Emissions are calculated using local fuel sales data.

Emissions By Sector – Percentage (2020 data)



Engagement Matters:

A community and stakeholder strategy will be developed for this project in partnership with BurlingtonGreen.

Conclusion:

The development of an Electric Mobility Strategy will support the implementation of the Climate Action Plan to reduce the carbon footprint of our local transportation sector, working towards the goal of being a net carbon neutral community.

Respectfully submitted,

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Report Approval:

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.