

SUBJECT: Electric Vehicle Charging Policy and fee options

TO: Committee of the Whole

FROM: Public Works
Transportation

Report Number: PWS-02-25

Wards Affected: All

Date to Committee: July 7, 2025

Date to Council: July 15, 2025

Recommendation

Approve Option 2 included in public works report PWS-02-25 to implement a \$2.00/hour fee for city owned Level 2 electric vehicle chargers for the first four hours of charging, increasing to \$5.00/hour for subsequent charging time, and a fee of \$10.00/hour for city owned Level 3 (fast) electric vehicle chargers; and

Report back by Q4 2025 with the necessary amendments to the Rates and Fees By-law as well as the Parking and Idling By-law for approval by City Council to implement the fees at a future date; and

Approve the EV chargers on city property corporate policy attached as Appendix A to public works report PWS-02-25.

Executive Summary

Purpose of report:

- To recommend a fee structure be implemented for the City's publicly available electric vehicle (EV) chargers and establish a corporate policy for electric vehicle charging.

Key findings:

- Since adopting its 2014 Community Energy Plan, Burlington has significantly expanded EV charging infrastructure through public and private investment, supporting its goal of becoming a net carbon neutral community by 2050.

- Staff found most Ontario municipalities charge \$1–\$3/hour for Level 2 EV charging, some increase rates after initial hours, and a few offer free charging with parking fees.
- To help manage the increasing inventory of City owned EV charging stations, staff have developed an Electric Vehicle Charging Policy to provide guidance on the operation, maintenance, monitoring and reporting of the chargers.

Implications:

- The City is facing rising costs for maintenance, repairs, and electricity as its electric vehicle charging infrastructure expands and utilization increases.

Recommendation Report

Background

In 2014, City Council approved a Community Energy Plan for Burlington that included an action to support electric mobility: Monitor the electric vehicle market and investigate the feasibility of electric vehicle charging stations at City facilities, including downtown parking lots. Supporting electric mobility was further strengthened in the 2020 Climate Action Plan where it was identified as a key program area to help achieve the target to be a net carbon neutral community by 2050.

Since the approval of the Community Energy Plan, the City, institutions and private businesses have actively invested in charging infrastructure to help support the adoption of electric vehicles in Burlington as summarized here:

- In 2015, two charging stations (four charging heads) were installed for public use in the City's parking garage.
- In 2018, the City was successful in obtaining funding from the provincial Workplace EV Charging Incentive Program for 10 charging stations (20 charging heads) in downtown parking lots and the Roads, Parks and Forestry Operations Centre (restricted to staff use during weekday working hours).
- In 2022, funding was approved by The Atmospheric Fund to support eight charging stations (16 charging heads) for community centre facilities.
- Also in 2022, Natural Resources Canada reconsidered a previously denied application, approving funding for 11 charging stations (22 charging heads) plus two Level 3 charging heads, the only Level 3 chargers in our inventory.
- The City now has 46 charging stations (88 charging heads) in operation on municipal property with 38 charging stations being available to the public either 24 hours per day or on evenings and weekends, depending on the parking lot.
- Four additional charging stations (eight charging heads) will be installed in 2025.
- From 2021 to 2024, City owned charging stations saw an increase in electrical utilization (kilowatt hours) by nearly 400%. In the same period the number of unique vehicles plugged into the City's chargers increased by 250% to 4,230.
- Institutions and private sector entities have also installed publicly available EV chargers. From 2022 to 2025, the total number of publicly available charging stations in Burlington, including City owned chargers, increased by 46%, from 114 to 166.

Industry Scan

Staff reviewed online data for municipal charging fees in 18 municipalities located in southwestern/central Ontario.

- Twelve municipalities (67%) charge an hourly charging fee, ranging from \$1.00 - \$3.00 per hour (for Level 2 chargers). Seven out of 12 (58%) charge in the range of \$1.50 - \$2.00 per hour.
- Five municipalities out of 18 have implemented a secondary charge, meaning a higher hourly rate is applied following a certain number of hours of either free or a lower hourly rate.
- Four municipalities offer free charging (but parking fees apply where applicable).

Operational and Lifecycle Costs

The cost of ownership of the City EV charging infrastructure has increased since the inception of the program. The annual cost is approximately \$80,000 to operate, which covers electricity, licensing fees (cloud plan), maintenance/repairs and replacements. This does not include staff time required to operate and maintain the stations.

The current asset value of the City's charging infrastructure is estimated at \$1,300,000. The cost of installing a new Level 2 charging station is budgeted at \$25,000. The costs for a Level 3 charging station are higher at \$50,000, although this could vary depending on the capacity of the Level 3 charger. The costs to repair stations range from \$1,000 to \$7,000 depending on the severity of the repair.

In 2022, the responsibility to install, operate, maintain and monitor the charging stations was consolidated under the Energy and Emissions staff team. As the EV charging inventory continues to grow, so has the time required to manage the inventory under the existing staff complement.

Downtown Economic Development

One of the impacts of offering free charging at the City's EV charging stations that is highlighted in the City's charging data is the disincentive to move a vehicle even after it's fully charged. Data from the City's downtown charging stations indicates that vehicles are left plugged in beyond the four-hour maximum time. There is a four-hour limit for charging in the Parking Bylaw but given the level of construction activity in the downtown as well as overall officer capacity, this is currently enforced on a complaint basis.

The City is currently undertaking the Downtown Parking Study. The study will highlight that increasing vehicle turnover is correlated with increasing patronage to downtown businesses and optimizing vehicle turnover will be a recommended objective of any future changes to the Parking and Idling Bylaw. Introducing an EV charging fee is anticipated to improve availability at the City's EV chargers by motivating drivers to move their vehicle and avoid unnecessary fees.

Achieving Climate Action Objectives

City Council has supported free EV charging at City owned chargers to incentivize EV ownership in Burlington, to help reduce emissions and work towards the target to be a net carbon neutral community by 2050. Staff have been tracking EV ownership data published by the Ministry of Transportation. Since 2019, ownership of battery electric vehicles (full electric) in Burlington has increased by almost 500%. Local EV test drive events with Plug'n Drive have also helped to promote the benefits of electric mobility.

Public Feedback/Opinion

Sustainability staff have been engaging the public to prioritize action areas for the new updated Climate Action Plan to be presented to City Council in Q3 2025. Support for City owned EV charging stations is low compared to other areas such as walking/cycling, transit, the Better Homes Burlington concierge service and sustainable new buildings. Providing free charging is seen to serve a small part of the population who can afford electric vehicles and, therefore, is not seen to be equitable.

To help manage the increasing inventory of City owned EV charging stations, staff have developed an EV Chargers on City Property corporate policy (refer to Appendix A) to provide guidance on the operation, maintenance, monitoring and reporting of the chargers. In addition, as reported in the 2023 report on Electric Mobility (EICS-16-23), staff have been assessing options to implement charging fees for the City's charging stations to help recover costs.

Analysis

EV Charging Fee Options

Three fee options are presented for consideration for City owned EV charging stations. As noted, several municipalities, institutions and businesses have begun to implement a staged charging model by charging a higher hourly rate after a four-hour period to motivate drivers to move their vehicles, generate parking turnover and improve availability of charging stations. Staff have incorporated this approach into Options 2 and 3.

Option 1 – Business as Usual – Continue to offer free charging at City owned chargers.

There is no change to the operation of City owned EV charging stations where no fees will be introduced.

Benefits: EV owners continue to enjoy free charging at destinations with City owned chargers.

Considerations: The City is currently not recovering any of the costs of owning and operating the EV charging network. Costs are continuing to grow annually. Free charging is

resulting in less parking turnover in downtown EV charging stalls. Free charging at City chargers may discourage nearby businesses to install charging stations for the public. There is a sentiment among some residents that providing 'free' EV charging is not equitable for those who drive traditional vehicles.

Option 2 – Charge an hourly fee for the City’s charging stations.

Introduce an hourly charging rate at City owned EV charging stations. The proposed rate for Level 2 chargers is \$2.00/hour for the first four hours and \$5.00/hour thereafter. The proposed rate for Level 3 chargers is \$10.00/hour.

Benefits: The revenue collected is projected to partially cover the cost of electricity required to charge vehicles. The supplementary higher rate after four hours of charging is meant to incentivize drivers to move their vehicles after charging. The private sector may also be more inclined to install charging stations on private property as they will no longer be competing with free charging.

Considerations: Introducing a fee may be unpopular with some EV drivers who have become accustomed to free charging. A communication campaign will be required to provide EV drivers adequate notice. The City’s EV chargers are capable of warning drivers of the increasing charge rate after four hours via email and/or text. In addition, a portion of the EV charging fee (10%) will be paid to ChargePoint to cover their administrative costs.

Option 3 – Free charging for the first four hours for Level 2 EV charging stations

Maintain free charging for the first four hours at City owned Level 2 EV charging stations. Introduce an hourly charging rate of \$5.00 after the fourth hour. Note: this option is not recommended for the Level 3 EV chargers due to their higher operating and replacement costs.

Benefits: This option provides an interim fee structure to transition the public to Option 2 in the future.

Considerations: Charging an hourly fee after the first four hours will help incentivize drivers to move their vehicles after charging, improving parking turnover and increasing the availability of chargers. This option provides some cost recovery for the City for EV charging operations.

Recommendation Details

Approve Option 2 included in the Electric Vehicle Charging Policy and Fee Options report PWS-02-05 to implement a \$2.00/hour fee for City owned Level 2 electric vehicle chargers for the first four hours of charging, increasing to \$5.00/hour for subsequent charging time;

Approve a fee of \$10.00/hour for City owned Level 3 (fast) electric vehicle chargers; Report back with the necessary amendments to the Rates and Fees bylaw as well as the Parking and Idling bylaw for approval by City Council to implement the fees at a future date; and

Approve the EV Chargers on City Property corporate policy attached as Appendix A to the Electric Vehicle Charging Policy and Fee Options report PWS-02-05.

Key Dates & Milestones

Pending approval of the recommended option:

- Report to amend the Rates and Fees bylaw as well as the Parking and Idling Bylaw: September 2025
 - Communications campaign to advise EV charging rates: September 2025
 - Implementation date for introduction of hourly charging fee pending approval: October 2025
 - Update report one year after implementation: October 2026
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Implications

- Staff will monitor the rates of usage of the EV charging stations and cost recovery from charging fees and report back in a year from the date of implementation to recommend any necessary changes.
 - A communications plan will be developed and implemented to engage the community and EV drivers on the new fees, in advance of being introduced.
 - It is estimated that just over 500 tonnes of greenhouse gas emissions have been saved through the utilization of the City's EV charging stations.
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References

- [EICS-08-23 Electric Mobility Update](#)
 - [Climate Action Plan](#)
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Strategic Alignment

- Designing and delivering complete communities
- Providing the best services and experiences

- Protecting and improving the natural environment and taking action on climate change
 - Driving organizational performance
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Appendices:

- A. EV Chargers on City Property corporate policy

Draft By-laws for Approval at Council:

- Report to amend the Rates and Fees bylaw as well as the Parking and Idling Bylaw: September 2025.
- Implementation date for introduction of hourly charging fee pending approval: October 2025.

Report Approval:

All reports are reviewed and approved by the Commissioner, Head of Corporate Affairs, Chief Financial Officer, and Commissioner of Legal and Legislative Services/City Solicitor.