



Committee of the Whole Report

For the Meeting of July 9, 2020

To: Committee of the Whole **Date:** June 26, 2020
From: Philip Bellefontaine, Acting Director – Engineering and Public Works
Subject: Bylaw Amendments for Electric Vehicle (EV) Charging

RECOMMENDATION

1. That Council direct staff to bring forward for introductory readings:
 - a. Amendments to the Streets and Traffic Bylaw (Bylaw No. 09-079) for the establishment and regulation of an electric vehicle charging zone, and collection of a fee for EV charging on city streets.
 - b. A new bylaw, City Parkades Electric Vehicle Charging Fees Bylaw (Bylaw no. 20-032) for collection of a fee for EV charging in City parkades and surface parking lots.
2. That Council authorize that revenue from fees collected from these bylaws be placed in the Climate Action Reserve Fund to support continued investment in EV charging infrastructure.

EXECUTIVE SUMMARY

The City of Victoria first introduced a network of public charging for electric vehicles (EVs) in 2013. The network was expanded to include 13 charging stations in 2018 and will be further expanded to include 21 charging stations in 2020. These expansions are being made to support the rapid adoption of EVs in the community and support the Climate Leadership Plan target stating that:

“By 2030, renewable energy powers 30 percent of passenger vehicles registered in Victoria, and 100 percent of passenger vehicles are renewably powered by 2050.”

To date, zero fees have been applied to users of the chargers. This was an initial best practice to encourage early EV adoption. Rapid growth in the use of EVs, however, has increased demand for chargers. Best practice now supports the use of a fee to manage access to charging and encourage turnover of parking stalls. Assigning a user fee reduces "opportunity charging" (those using the chargers to enjoy free charging and/or premium parking) and establishes a value for the curbside space. GO Victoria, the City's Sustainable Mobility Strategy, supports managing curb space as a public amenity as a part of achieving the vision for clean, seamless mobility for everyone.

In order to better manage access for those needing to charge their vehicles and ensure turnover, Council directed staff to bring forward a bylaw to introduce EV charging fees in November 2019. Following Council's direction, the following bylaw changes are presented for approval:

- an amendment to the Streets and Traffic Bylaw (Bylaw No. 09-079) for the establishment and regulation of a new type of parking zone: an electric vehicle charging zone, and collection of a fee for EV charging on city streets
- a new bylaw introducing fees for charging using city infrastructure in City owned parkades and surface lots to take effect January 1, 2021.

The introduction of charging fees plus the creation of a new on street EV Zone designation with associated regulations, will support the successful operation of the City's new EV charging projects coming to Broad Street and Store Street in 2020, allowing the Director of Engineering to designate certain streets or portions of streets for electric vehicle parking. These bylaw changes also outline how parking within this type of zone is to be regulated including fines for non-compliance. Additionally, these changes will enable the City to introduce a charging fee (in addition to regular parking fees) of \$1/hour for use of a Level 2 charger and a \$1 charging fee for an eight hour charge using a lower power Level 1 charger (see Appendix 1 for explanation of charger types). If approved, fees will be introduced January 1, 2021 to allow some time for parking and charging usage to stabilize following disruptions due to COVID-19.

Staff are working on developing an EV Strategy in 2020 to inform future investment in EV charger infrastructure and wider policies related to electric vehicle adoption required to meet Climate Leadership Plan targets. In anticipation of this, staff are recommending revenue from fees to be deposited in the Climate Action Reserve Fund to help support future EV infrastructure investment.

PURPOSE

This report presents a proposed amendment to the Streets and Traffic Bylaw and a new City Parkades Electric Vehicle Charging Fees Bylaw to support the successful operation of upcoming public EV charging stations and allow for the collection of fees for use of the City's public EV charging infrastructure.

BACKGROUND

On November 14th, 2019, Council directed staff to:

"Bring forward a bylaw to apply an initial per-hour City EV charging fee of \$1.00 per hour, or as required, to ensure adequate parking turnover and availability for public use, and amend the bylaw to the satisfaction of the Director of Engineering & Public Works."

On May 21, 2020, Council approved staff to authorize a license of occupation with BC Hydro to locate a DC Fast Charging Station on Store Street. Also, later in 2020, 6 Level 2 chargers operated by the City will be installed on Broad Street between Pandora Avenue and View Street. The planned charging stations on Store Street and Broad Street will be the latest additions to the City's existing network of 13 public charging stations and will be the City's first on-street EV chargers. The City's plans for future investments in charging stations in the downtown and throughout the neighbourhoods over the next 5-10 years will be outlined in the City's upcoming EV Strategy, currently under development and anticipated to be finalized later in 2020. This amendment to the Streets and Traffic Bylaw will support the appropriate use of current and future on-street EV chargers.

Since 2013, electric vehicle charging through the City's network has been made available free of charge to encourage electric vehicle adoption. Rapid growth in the use of EVs has increased demand for chargers and it is now appropriate that changes are made to ensure better access to charging. The proposed bylaw amendments will enable the City to introduce a charging fee of \$1/hour for use of a Level 2 charger and a \$1 charging fee for an eight hour charge using a lower power Level 1 charger (see Appendix 1 for explanation of charger types) in addition to existing parking fees. The introduction of these fees for use of the chargers will provide an additional means, beyond infrastructure expansion, to help make public EV charging infrastructure available to those who need it most.

OPTIONS & IMPACTS

The amendment to the Streets and Traffic Bylaw will establish a new electric vehicle charging zone. The bylaw amendment will ensure the following activities are regulated within this type of zone (see Appendix 2 for full details):

- Only electric vehicles can utilize parking spaces designated for EV charging
- EV charging spaces can only be used for parking while vehicles are actively charging.
- Plugging or unplugging the vehicle is to be performed only by those with custody of the EV
- Appropriate use of EV charging infrastructure (no vandalism)

Actions contrary to the above can incur a fine as laid out in Sections 11 and 12 of the amendment details in Appendix 2. In addition, some housekeeping changes have been included in the amendment related to the language used around accessibility, the details of which can also be found in Appendix 2.

The Director of Engineering and Public Works may by Order, pursuant to the Streets and Traffic Bylaw, adjust rates and zones based on demand. Demand is determined by usage and transaction volumes with a typical target of 85% occupancy of spaces.

Charger Usage

Experience in other municipalities, such as Vancouver, has shown that the introduction of a fee for use of City-owned EV chargers can result in a short-term decline in use of EV chargers due to a loss of incentive for those users choosing to use the stations to access a preferred parking location and/or free power – so called “opportunity chargers”. This decline is projected to be short-term, rebounding with the rapid increase in EV ownership in the region. Although EV charger usage is currently down 50% (March, April & May 2020 compared to the same period last year) due to COVID-19, prior to this, the demand for EV charging spaces was high. Therefore, it is recommended that fees be introduced starting January 1, 2021, to allow time for parking and charging usage to stabilize.

Management and Enforcement

Bylaw staff and parking staff will enforce this amendment to the Streets and Traffic bylaw and the City Parkades Electric Vehicle Charging Fees Bylaw.

Official Community Plan Consistency Statement

Supports Chapter 12, Climate Change, Goal 12(C) “Transportation options reduce fossil fuel dependence, help conserve energy and produce low greenhouse gas emissions and other air contaminants”

Accessibility Statement

Increased regulation of the City's EV charging stations improves access to available EV charging equipment for everyone, including those with disabilities.

2019-2022 Strategic Plan

Aligns with Strategic Objective Six: Climate Leadership and Environmental Stewardship

Impacts to Financial Plan

The new fee would increase revenues and would be included in the 2021 Financial Plan. Subject to Council approval, these revenues would be transferred to the Climate Action Reserve to support future investment in EV infrastructure. The amount has yet to be determined and will be dependent on usage.

CONCLUSIONS

The introduction of the City Parkades Electric Vehicle Charging Fees Bylaw (Bylaw 20-032), and amendment to the Streets and Traffic Bylaw (Bylaw No. 09-079) are aligned with the request made in November 2019 by Council to bring forward EV charging fees in support of the rapid adoption of EVs in the community and the City's Climate Leadership Plan goals. If approved, the bylaw amendment will also regulate the use of on-street EV infrastructure to ensure it is used fairly and efficiently, supporting the successful operation of the City's new EV charging projects on Broad Street and Store Street. Further, the bylaws enable the collection of fees for access to City-owned EV charging infrastructure, making EV charging more readily available by discouraging those only interested in free power, while also helping to support future investment in electric vehicle infrastructure.

Respectfully submitted,

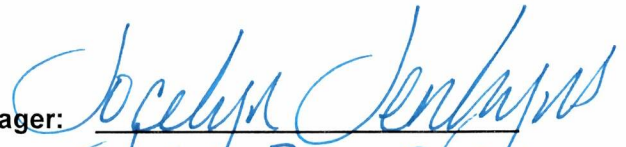


Laura Berndt
Manager – Energy and Climate Action



Philip Bellefontaine
Acting Director of Engineering & Public Works

Report accepted and recommended by the City Manager:


Date: June 30, 2020

Attachments:

Appendix 1: EV Charging Infrastructure and Technology

Appendix 2 Attachment: Amendment to Streets and Traffic Bylaw (Bylaw No. 09-079)

Appendix 3 Attachment: City Parkades Electric Vehicle Charging Fees Bylaw (Bylaw no. 20-032)