

FINANCIAL MANAGEMENT COMMITTEE

TO: MAYOR AND COUNCILLORS

**SUBJECT: PUBLIC ELECTRIC VEHICLE CHARGING NETWORK –
ENERGY-BASED USER FEES**

RECOMMENDATION:

THAT the proposed energy-based user fees, as detailed in the report titled “Public Electric Vehicle Charging Network – Energy-Based User Fees” dated February 17, 2026, of the Financial Management Committee meeting, be approved for City-owned public electric vehicle charging stations;

THAT staff be authorized to apply for Temporary Dispensation from Measurement Canada for the sale of electricity for electric vehicle charging; and

THAT the City Solicitor be authorized to bring forward amendments to the following bylaws to implement energy-based fees for electric vehicle charging:

- (a) Burnaby Parking Meter and Electric Vehicle Charging Meter Bylaw 2019
- (b) Burnaby Consolidated Fees and Charges Bylaw
- (c) Burnaby Bylaw Notice Enforcement Bylaw 2009

in accordance with Attachment 1 of the report.

REPORT

The Financial Management Committee, at its meeting held on February 17, 2026, received and adopted the attached report seeking Council approval to implement an energy-based user fees system for City-owned public electric vehicle charging stations.

On behalf of the Financial Management
Committee,

Councillor S. Dhaliwal
Chair

Councillor A. Gu
Vice Chair

TO: FINANCIAL MANAGEMENT COMMITTEE (FMC)
FROM: GENERAL MANAGER ENGINEERING
SUBJECT: **PUBLIC ELECTRIC VEHICLE CHARGING NETWORK – ENERGY-BASED USER FEES**
PURPOSE: To propose new energy-based user fees system for City-owned public electric vehicle charging stations.

RECOMMENDATION

THAT the proposed energy-based user fees, as detailed in the report titled “Public Electric Vehicle Charging Network – Energy-Based User Fees” dated February 17, 2026, be approved for City-owned public electric vehicle charging stations;

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EXECUTIVE SUMMARY

As part of the Climate Action Framework, public Electric Vehicle (EV) charging infrastructures were implemented across the City in early 2021. The City currently operates and manages a total of 73 public EV charging stalls at various civic facility locations including on-street. Many municipalities, including Burnaby, currently employ a time-based fee structure for its public EV charging stations. For example, users are charged based on the duration that their vehicle is connected to the charger, regardless of the amount of electricity consumed. Time-based fees can result in inequitable costs and overcharging concerns.

To promote efficient use of charging infrastructure, the transition to energy-based EV charging fees is recommended. With this system the user will be billed according to the amount of energy consumed (kWh) and further amounts if EVs do not disconnect after being fully charged. The new system will improve equity, transparency, and consistency with regional practices.

Approval from Measurement Canada will be required for the City as part of the process to transition to energy-based billing.

1.0 POLICY SECTION

This report responds to the City of Burnaby's Corporate Strategic Plan and goals for a connected and dynamic community, aligning with Council-adopted policies, plans, and strategies within the Burnaby Transportation Plan, Connecting Burnaby and the Climate Action Framework.

2.0 BACKGROUND

Public EV charging infrastructure was first deployed across the City in early 2021 following approval from Council to support the uptake of electric vehicles in alignment with the City's sustainability plan as outlined in the Climate Action Framework. Since the deployment date, the City operates and manages a total of 73 public EV charging stalls across Burnaby at various locations. The EV charging stations are primarily located within civic facilities with a few that have expanded to curbside on-street.

Currently, the City employs a time-based fee structure for its public EV charging stations. In this model, the users are charged based on the duration that their vehicle is connected to the charger, regardless of the amount of electricity consumed. The current, time-based, fee structure is outlined in the Burnaby Consolidated Fees and Charges Bylaw No.14485, Schedule C6 – Parking Meter and Electric Vehicle Charging Meter Bylaw. A vehicle owner using a City EV charging station will pay \$2.00 per hour between 6:00AM and 10:00PM and \$1.00 per hour between 10:00PM to 6:00AM.

3.0 GENERAL INFORMATION

Time-based rates were originally introduced to encourage the efficient use of charging infrastructure and ensure user turnover; however, this structure has several notable limitations including:

- *Creates Inequitable Costs* – different EV models have varying charging capabilities. Vehicles with slower charging capabilities pay more per kilowatt-hour (kWh) of electricity compared to EVs with faster charging rates. This creates disparities among EV users.
- *Discourages EV Adoption* – vehicles with slower charging capabilities will result in higher costs while reducing convenience which will impact and discourage potential EV owners.
- *Undercharging and Overcharging Issues* – users concerned over high fees may disconnect before the vehicle is adequately charged leading to user inconvenience and range anxiety. Conversely, some users may occupy charging spaces longer than necessary, reducing availability for others.

In 2023, Measurement Canada under the *Electricity and Gas Inspection Act* (EGI Act) introduced specific regulations that allow EV charging providers a regulatory pathway to transition to energy-based billing per kWh. The EGI Act is federal legislation that

governs the accuracy of devices used for billing electricity and gas sales. Under the energy-based fee structure, EV users will be billed according to the amount of energy consumed (kWh) at an EV charging station. In addition to alignment in costs with actual energy consumption, energy-based fees eliminate inequities associated with differing EV charging capabilities, which are penalized under a time-based fee structure.

Proposed Energy-Based Fees

Staff recommend the adoption of an energy-based fee structure for City-owned public EV charging stations that have the capability to do so. The few public EV charging stations without this capability will be upgraded in the future. The proposed energy-based rates would align with existing rate structures in the region such as BC Hydro, Vancouver, Richmond and other major charging providers in the province. The proposed energy-based rates for City EV charging stations are outlined in Table 1 below.

Table 1: Proposed Energy-Based User Fees for City-owned EV Chargers in Burnaby

Level 2 Charging EV Charging Stations	\$0.2865 per kWh
Idle Fee (6am – 10pm)	\$0.08 per minute (after 5-minute grace period)
Level 3 Charging EV Charging Stations	\$0.3479 per kWh
Idle Fee (6am – 10pm)	\$0.40 per minute (after 5-minute grace period)

At present, only Level 2 public EV Charging stations are provided in the City; however, as part of the Burnaby Public EV Charging Strategy that was endorsed by Council in December 2024, providing Level 3 public EV charging infrastructure is necessary to meet the City’s future public charging needs. Introducing a Level 3 energy-based fee rate will allow Level 3 EV charging stations to be easily deployed in the future.

A higher rate is proposed for Level 3 EV charging stations to offset higher equipment and operating costs as compared to Level 2 chargers. This tiered approach ensures that the higher operation cost of a Level 3 station is accounted for, while still achieving cost recovery for the City’s EV charging network.

To promote efficient use of charging infrastructure, the implementation of an idle fee of \$0.08 per minute for Level 2 stations and \$0.40 per minute for Level 3 stations is recommended to discourage EV parking spaces from being occupied after EVs are fully charged. The idle fee for Level 2 stations will apply between 6:00AM and 10:00PM to prevent users from using charging spots as long-term parking during peak hours. The fee will be removed overnight (10:00PM to 6:00AM) to allow EV drivers who rely on public charging to charge for extended periods in the evenings.

Implementation – Site Location

As mentioned above, the energy-based fee rate will apply to all City-owned public EV charging stations with this capability. Current sites include the eight Level 2 public EV charging stalls within the municipal EV parking lot at City Hall. The City’s EV parking lot adjacent to Deer Lake Parkway primarily provides charging for City fleet vehicle parking, with eight charging stalls opened to the public in 2024 with no user fees as part of a pilot to understand utilization and demand within the City Hall precinct area. Moving forward, the eight public stalls in the municipal EV parking lot will align with all public EV parking spaces in the City and will be charged the proposed energy-based fee rates as detailed in Table 1 above.

Due to equipment capability, the time-based fee rates will be maintained for the six public EV charging stalls located at 4276 Norland Avenue (Deer Lake Building 2). Future plans will include updating the existing infrastructure to permit energy-based fee rates.

Temporary Dispensation from Measurement Canada

Measurement Canada ensures that devices used for billing – like EV chargers that charge by energy consumption – are accurate and properly certified. Under the EGI Act, providers must either use certified devices or obtain temporary dispensation. Currently, most existing EV chargers are not fully covered by these certification standards, as the certification and approval process is still being developed.

Transitioning to an energy-based system requires Council approval followed by a staff application to Measurement Canada for a temporary dispensation on behalf of the City. This dispensation will allow the City to begin charging energy-based fees, while manufacturers and regulators finalize compliance. By securing this authorization, the City can adopt the proposed energy-based fee structure while meeting regulatory requirements during the transitional period.

4.0 PROPOSED BYLAW AMENDMENTS

In order to implement the proposed energy-based fee structure, amendments to the following bylaws are required:

- Burnaby Parking Meter and Electric Vehicle Charging Meter Bylaw 2019
- Burnaby Consolidated Fees and Charges Bylaw
- Burnaby Bylaw Notice Enforcement Bylaw 2009

The proposed amendments to these bylaws are set out in Attachment 1 of this report.

5.0 COMMUNICATION AND COMMUNITY ENGAGEMENT

Following Council approval and the receipt of City’s temporary dispensation from Measurement Canada, staff will implement a 30-day public notification period before transitioning to energy-based fees for City EV charging stations with this capability. Staff will work with the EV charging infrastructure operator to include messaging at the EV charging stations and City communications regarding the new rates including idle fees and implementation date. The switch from time-based to energy-based fees at the

City EV charging stations with this capability will take place after the 30-day transitioning period.

6.0 FINANCIAL CONSIDERATIONS

The shift to energy-based EV charging fees will have minimal financial impact. Introducing fee rates to the existing eight public stalls in the City Hall EV parking lot will generate additional revenue. It is anticipated that approximately \$25,000 additional revenue could be generated per year. The introduction of an idle fee will improve station turnover, and support cost recovery.

Respectfully submitted,

May Phang, P.Eng., General Manager Engineering

ATTACHMENTS

Attachment 1 – PROPOSED BYLAW AMENDMENTS

REPORT CONTRIBUTORS

This report was prepared by Kathy Ho, P.Eng., PTOE, Senior Manager, Transportation, and reviewed by Amy Choh, P.Eng., PMP, Director Engineering, Transportation, Kyle Laplante, Staff Solicitor, May Leung, City Solicitor and Richard Rowley, Director Finance Revenue Services