



## REFERRAL REPORT

Report Date: March 15, 2022  
Contact: Margarita Pacis  
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RTS No.: 14230  
VanRIMS No.: 08-7000-14  
Meeting Date: April 12, 2022

TO: Vancouver City Council

FROM: General Manager of Planning, Urban Design and Sustainability  
and General Manager of Development, Buildings and Licensing

SUBJECT: Encouraging EV Charging at Gas Stations and Parking Lots – Climate  
Emergency Action Plan

### **RECOMMENDATION**

THAT the General Manager of Planning, Urban Design and Sustainability be instructed to bring forward the application as described below and that the application be referred to Public Hearing together with the recommendations set out below;

FURTHER THAT the Director of Legal Services be instructed to prepare the necessary Zoning and Development By-law and License By-law amendments, in accordance with the recommendations set out below, for consideration at the Public Hearing.

#### *RECOMMENDATION FOR PUBLIC HEARING*

- A. THAT Council approves, in principle, the application to amend Section 2 of the Zoning and Development By-law to change the definitions for gasoline stations, cardlock fuel stations, and parking uses to permit the use of electric vehicle (“EV”) charging;

FURTHER THAT the Director of Legal Services be instructed to bring forward for enactment an amendment to the Zoning and Development By-law generally in accordance with Appendix A.

- B. THAT Council approves, in principle, amendments to the License By-law to:
- i. amend the definition of “Gasoline Station” to include “Cardlock Fuel Station”, and add a new definition for “Cardlock Fuel Station” to include the provision of electricity for electric vehicle (“EV”) charging in accordance with the definitions attached in Appendix B;

- ii. remove the definitions of “Gasoline Station – Full Serve”, Gasoline Station – Self Serve” and “Gasoline Station – Split Island” in accordance with Appendix B;
- iii. add a new definition of “Marine Service Station” in accordance with Appendix B;
- iv. create a new business licence category for gasoline stations that provide electric vehicle charging with a total power output of at least 50 kW and establish a separate business licence fee for such gas stations. 2022 licence fees are \$243 and the actual fees set for 2025 implementation would be subject to the annual business licence fee review and report to Council in 2024;
- v. set the licence fee for gas stations that do not provide electric vehicle charging with a total power output of at least 50 kW at \$10,000 for implementation in 2025;
- vi. set the licence fee for marine service stations, at the same fee as gas stations that provide electric vehicle charging with a total power output of at least 50 kW;
- vii. add new definitions of “Auto Parking”, “Auto Parking Small” and “Auto Parking with Charging” in accordance with Appendix B;
- viii. add a new section 10.5 (9) to allow auto parking licence holders to provide electricity for electric vehicle (“EV”) charging;
- ix. create a new business licence category for motor vehicle parking businesses that provide electric vehicle charging with a total power output of at least 26.6 kW and establish a separate business licence fee for such parking businesses. 2022 licence fees are \$163 and the actual fees set for 2025 implementation would be subject to the annual business licence fee review and report to Council in 2024; and
- x. set the licence fee for motor vehicle parking businesses that do not provide electric vehicle charging with a total power output of at least 26.6 kW at \$10,000 for implementation in 2025, except the licence fee for parking lots with fewer than 60 parking stalls, which shall be set at the same fee as parking lots that provide electric vehicle charging with a total power output of at least 26.6 kW;

FURTHER THAT the Director of Legal Services be instructed to bring forward for enactment an amendment to the License By-law generally in accordance with Appendix B.

- C. THAT Recommendations A through B be adopted on the following conditions:
  - (i) THAT passage of the above resolutions creates no legal rights for any person, or obligation on the part of the City and any expenditure of funds

or incurring of costs is at the risk of the person making the expenditure or incurring the cost;

- (ii) THAT any approval that may be granted following the public hearing shall not obligate the City to enact any amending by-laws; and
- (iii) THAT the City and all its officials, including the Approving Officer, shall not in any way be limited or directed in the exercise of their authority or discretion, regardless of when they are called upon to exercise such authority or discretion.

## **REPORT SUMMARY**

This report recommends:

- **Amending the definitions** for gas stations (including cardlock fuel stations and marine service stations), and parking uses in the Zoning and Development By-law and the License By-law to permit EV charging
- **Creating new business licence categories** for gas stations and commercial parking lots that provide enough EV charging to meet minimum standards set by the City of Vancouver. These business licence categories would have an annual fee similar to current fees
- **Increasing annual business licence fees** for gas stations and parking lots that do not provide enough EV charging to meet the minimum standards set by the City of Vancouver

## **COUNCIL AUTHORITY/PREVIOUS DECISIONS**

- In November 2020, Council adopted the [Climate Emergency Action Plan](#) (CEAP), with an objective to cut emissions to 50% of 2007 levels by 2030, and an objective that 50% of the kilometres driven on Vancouver’s roads will be by ZEVs by 2030 (Big Move 3).
  - The CEAP’s recommendations I, J, K, and L aim to increase access to EV charging so that residents and businesses can feel confident they will have access to charging. Recommendation L directed staff to bring forward recommendations to change the business licence fees for gas stations and parking lots to encourage installation of EV charging. From 2012 to present, the City of Vancouver has invested approximately \$3M in EV charging infrastructure with a further \$2.8M committed and planned. The City has leveraged Provincial and Federal funding (\$1.15M) to support the installation of approximately 9 DC fast chargers (with an additional 8 underway) and approximately 100 Level 2 chargers (with an additional 17 underway).
- In July 2021, Council approved changes to the Parking By-law to require electric vehicle charging infrastructure in all new non-residential buildings.
- In March 2018, Council approved changes to the Vancouver Building By-law and Parking By-law to require that 100% of parking stalls, excluding visitor stalls in new multi-unit residential buildings include EV charging infrastructure. Council subsequently approved

updates in April 2020 to these By-laws to clarify that all new residential parking stalls in one- and two-family dwellings must also have EV charging infrastructure.

- In November 2016, Council adopted the EV Ecosystem Strategy, which established 32 priority actions for the City between 2016 and 2021, with the aim of achieving broader home, workplace, and public charging opportunities for the growing EV market.
- In August 2013, Council adopted new minimum requirements for all parking stalls in new one and two-family homes, 20 per cent of parking stalls in multi-unit residential buildings, and ten per cent of parking stalls in new commercial buildings, such that they be equipped with a “Level 2” charging circuit under the Vancouver Building By-law.
- In October 2012, Council adopted Transportation 2040, which includes actions to support electric vehicle deployment and the provision of charging infrastructure.
- In 2009, Council adopted requirements in the Vancouver Building By-law for electric vehicle charging circuits in new homes and multi-unit residential buildings. These were the first such requirements in North America.

### **CITY MANAGER'S/GENERAL MANAGER'S COMMENTS**

The City Manager recommends approval of the foregoing. Staff were directed by Council to bring this report forward in November 2020 as part of the Climate Emergency Action Plan.

### **REPORT**

#### ***Background/Context***

Nearly 40% of carbon pollution in Vancouver comes from burning gas and diesel in vehicles. The CEAP includes actions to increase public, home, and workplace EV charging. Providing a city-wide supply of accessible charging stations on private land for public use will accelerate the transition to electric vehicles (EVs) by our residents who do not have access to home or workplace charging, thereby reducing the use of fossil fuels.

While there is some uptake of providing EV charging at gas stations and parking lots, the pace of adoption is slow. Only two gas stations (out of a total of 66) and roughly 60 parking lots (out of a total of 366) currently provide EV charging. Staff believe these new regulatory requirements will encourage and accelerate EV uptake and adoption.

#### ***Strategic Analysis***

#### **Proposed Amendments**

*Staff recommend the following proposed Zoning and Development By-law amendments (see Appendix A):*

- Amend Section 2 of the Zoning and Development By-law to change the definitions for gas stations, cardlock fuel stations, and parking uses to permit the use of EV charging.

*Proposed changes to the License By-law are as follows (see Appendix B):*

- Amend Section 2 of the License By-law to change the definitions for gas stations and cardlock fuel stations to permit the use of EV charging.
- Amend Section 2 of the License By-law to add definitions for marine service stations, cardlock fuel stations, and auto parking.
- A change to Schedule A of the License By-law to create new business licence categories for gas stations and commercial parking lots that provide enough EV charging to meet minimum standards set by the City of Vancouver. These business licence categories would have an annual fee similar to current fees, and will come into effect in 2025.
- A change to Schedule A of the License By-law to increase annual business licence fees for gas stations and commercial parking lots that do not provide enough EV charging to meet the minimum standards set by the City of Vancouver to \$10,000. This change will come into effect in 2025.

### **Barriers to EV Adoption**

According to a 2021 survey for the City of Vancouver Climate Emergency Parking Program, 49% of residents who plan on purchasing a vehicle in the next two years are somewhat or very likely to buy an EV. Of the residents who are interested in buying a new car, but unlikely to choose an EV, 59% identified a lack of available places to charge as a barrier. While this survey is not representative of all Vancouverites, it had over 12,000 responses. Many residents, including renters, are not able to install charging at home. Increasing the public EV charging network on private land would reduce barriers to EV adoption.

### **Encouraging EV Charging at Gas Stations and Parking Lots**

At present, there are 66 gas stations and 366 commercial parking lots licensed to operate in Vancouver. The recommendations in this report aim to encourage owners of gas stations and commercial parking lots to install EV charging where people are accustomed to fuelling up and parking.

The proposed recommendations maintain the current business licence fee for businesses that choose to install a specified amount of charging. Businesses that do not install the specified amount of charging would be subject to a higher business licence fee.

The proposed changes to business licences for gas stations and parking lots are summarized in Table 1, below. Draft by-law language detailing the proposed requirements are included in Appendices A and B. Some of the amendments come into effect on enactment, but the proposed changes regarding license fees would come into effect on January 1, 2025.

Table 1 - Summary of Proposed Requirements

Policy Design Element	Gas Stations	Parking Lots
<b>EV charging required for business to qualify for lower fee</b>	50 kW – e.g. one DC fast charger	26.6 kW – e.g. four dedicated Level 2 chargers
<b>Annual licence fee for business that have the specified amount of EV charging</b>	\$243*	\$163*
<b>Annual licence fee for business that do not have enough EV charging to meet City specifications</b>	\$10,000	\$10,000
<b>Exemptions</b>	Marine service stations	Lots with <60 stalls

\* These are the fees in 2022. The actual fees set at the time of implementation (2025) would be subject to the annual Business Licence fee review and report to Council, which would reflect any annual fee increases that account for things like cost escalation.

Power outputs (e.g. kW) are specified instead of the type and/or number of chargers, in order to provide flexibility to businesses. For example, a parking lot may choose to install a mix of eight Level 1 (approximately 1 to 2 kW) and two Level 2 (approximately 6 to 8 kW) chargers instead of four Level 2 chargers. Parking lots may choose to install an energy management system, which would allow them to add more than four Level 2 chargers with the same power output of 26.6 kW. The intention behind providing flexibility is to allow businesses to install the type of charging that is appropriate to their business and customers.

The specified power output for each business type is structured based on typical dwelling times of their customers. The requirement for gas stations assumes that in *most* cases one DC fast charger is an optimal minimum standard, while parking lots are *typically* more suited to larger numbers of Level 2 chargers. Having fast charging at gas stations would be beneficial because it would offer a higher turnover rate for their limited parking areas.

### The Business Case for Electric Vehicle Charging

Costs associated with installing EV charging infrastructure are the responsibility of the business owner. Any revenues from fees to use the charging infrastructure would accrue to the business. Business owners would also be eligible to collect Low Carbon Fuel Standard Credits and associated revenues. However, the financial case for installing EV charging at gas stations and parking lots is not compelling. A significant intervention is necessary to increase EV charging on private land.

In 2021, the City contracted Dunsky Energy and Climate Advisors to complete an economic analysis of different scenarios for gas stations and parking lots. If the policy is implemented with the proposed gas station and park lots annual fee of \$10,000, there would be an incentive to invest in EV charging to avoid the higher annual licence fee with a payback period of 7 to 8 years. Businesses that choose not to install the specified amount of charging would have to pay the \$10,000 fee annually; this could amount to \$200,000 to \$230,000 over the estimated payback period.

As well, the addition of EV charging could attract more EV drivers to the business. This benefit could help gas stations, since a study done by University of California at Davis shows that a significant portion of their profits are generated from the sales of convenience store items rather than fuel sales. The financial modelling results for installing charging at gas stations and parking lots are summarized in Table 2 below.

*Table 2 – 2030 Financial Scenario for Adding EV Charging*

	Gas Stations	Parking Lots
<b>Cost to install charging</b>	\$136,000	\$100,000*
<b>Annual profit in 2030**</b>	\$6,000	\$5,000
<b>Annual Licence Fee Avoided</b>	\$10,000	\$10,000
<b>Payback period</b>	8 years	7 years
<b>Deployment</b> (# of businesses that install charging)	21 (of 66)	80 (of ~200 in scope)

\* This estimate is conservative and includes extensive electrical upgrades

\*\* Profit for gas stations includes estimated additional revenue from convenience store customers, while profit for parking lots does not include estimates around additional parking revenue from customers with EVs who choose to park at parking lots with EVs.

It is important to note that the Province has committed to strengthening the Low Carbon Fuel Standard (LCFS). The LCFS requires fuel suppliers to reduce the carbon intensity of the fuels they supply in BC by 1.09% annually until 2030. Fuel suppliers receive credits for selling low carbon fuels, including electricity. In addition to being able to charge customers for the use of the EV chargers, gas station and parking lot owners would be eligible to receive LCFS credits for selling electricity through EV chargers. Strengthening the LCFS will increase the value of LCFS credits and greatly improve the business case for providing EV charging.

## Engagement

In May 2021 and January 2022, City staff engaged stakeholders, including owners of gas stations and parking lots, EV charging-related companies, Business Improvement Associations, and others. Feedback was collected at the workshops and through two surveys. Overall, stakeholders seemed interested in the project and in the transition to EVs. There were comments about demand for charging and the cost of EV chargers. A summary of their feedback is included in Appendix D.

## Implications/Related Issues/Risk

### Financial

#### Program Revenues

Should Council adopt the recommendations in this report, the incremental net revenue to the City would be dependent on the adoption rates. Dunsky's model predicts adoption rates of 30% for gas stations and 40% for parking lots by 2030. At those adoption rates, approximately \$1.6M

in revenue would be generated from business licence fees in 2030. Table 3 below provides illustrative examples of potential revenue generated by different adoption rates. As adoption rates increase, incremental net revenue is expected to decrease over time. Adoption rates for gas stations are expected to be lower than for parking lots because the minimum power output specified to qualify for the lower business licence fee is higher for gas stations and would require them to install a significantly more expensive type of EV charger.

*Table 3 – Illustrative examples of potential annual revenue to the City based on adoption rates*

ADOPTION RATE		DEPLOYMENT *		REVENUE		
Gas stations	Parking Lots	Gas stations	Parking Lots	Gas stations	Parking Lots	Total
10%	20%	7	40	\$594,000	\$1,592,000	\$2,186,000
30% **	40% **	20	80	\$462,000	\$1,194,000	\$1,656,000
50%	60%	33	119	\$330,000	\$796,000	\$1,126,000
80%	90%	53	179	\$132,000	\$199,000	\$331,000

\* Deployment is based on 66 gas stations and 199 parking lots in scope for this policy

\*\* Row 2 is roughly similar to what Dunsky’s model predicts for 2030

## Program Costs

The implementation of this program is not expected to add significant costs to Development, Buildings, and Licensing’s work. A small portion of revenues raised through this program would cover administrative costs associated with implementing this action. This amount would be the same as the “business-as-usual” business licence fees for gas stations and parking lots (e.g. the fee for businesses that provide enough charging to meet City specifications; this is \$243 for gas stations and \$163 for parking lots in 2022).

## Future Revenue Use

The intention of this policy is not to generate revenue for the City, but to encourage private investments in EV infrastructure at gas stations and parking lots. However, any net revenue generated from this program would be transferred to a reserve and held for the purpose of funding various Climate Emergency initiatives outlined in the CEAP. For example, this could include making EV charging more accessible to underserved groups by adding EV charging in rental buildings.

## Human Resources/Labour Relations

Development, Buildings, and Licensing staff do not foresee the need for additional positions to administer this program. If Council approves these recommendations, staff will undertake internal training and industry engagement and training prior to enactment.

## Environmental

Using Dunsky’s modelling tool, staff expect the addition of EV charging at 21 gas stations and 80 parking lots, delivering an additional 21 DC fast chargers and 320 Level 2 chargers



### ***Equitable Access***

This policy reduces barriers for residents living in rental accommodations and others who may not have access to home charging. Additionally, residents who must regularly drive for employment or personal reasons will benefit from access to lower cost “fuel”. A transition to EVs will improve air quality for all of Vancouver’s residents by reducing the amount of fossil fuels burned for transportation. Lower income and marginalized communities are disproportionately impacted by poor air quality.

### ***Legal Considerations***

The Vancouver Charter authorizes Council to enact zoning by-laws that create different categories of use or occupancy. Sections 203, 272 and 273 of the Vancouver Charter create a broad business authority, including the authority to create licence fees that “are in the nature of a tax”.

### ***CONCLUSION***

Staff recommend Council approve the proposed changes to the License By-law and the Zoning and Development By-law to encourage electric vehicle charging at gas stations and parking lots proposed in this report as part of the implementation of the Climate Emergency Action Plan.

\* \* \* \* \*

**APPENDIX A: AMENDMENTS TO ZONING AND DEVELOPMENT BY-LAW**

*Note: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.*

**A By-law to amend Zoning and Development By-law  
Regarding Provisions for EV Charging Infrastructure**

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This By-law amends the indicated provisions of the Zoning and Development By-law.
2. In section 2, Council strikes the definitions of “Gasoline Station – Full Serve” and “Gasoline Station – Split Island” and replaces them as follows:

“Gasoline Station Full Serve	The use of premises for the retail sale of motor fuels and lubricants that are dispensed by an attendant for the customer and where staff are available to provide other services such as checking tire pressure and fluid levels, cleaning windows and doing minor repairs and may include the retail sale of electricity dispensed by the customer or the attendant for the purpose of charging motor vehicles.
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Gasoline Station – Split Island	The use of premises for the retail sale of motor fuels and lubricants that are dispensed by the customer, and which includes at least one pump island at which all types of gasoline and diesel fuels sold by the station are dispensed by an attendant for the customer at all times the station is open for business, and where staff are available to provide other services such as checking tire pressure and fluid levels, cleaning windows and doing minor repairs and may include the retail sale of electricity dispensed by the customer or the attendant for the purpose of charging motor vehicles.”.
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3. In section 2, Council strikes the definitions of “Cardlock Fuel station” and replaces it as follows:

“Cardlock Fuel Station	The use of premises for the sale of motor fuels for vehicles registered as commercial vehicles or the sale of electricity for electric motor vehicles, where motor fuel is dispensed by the customer who has been supplied with a card, key or other device for the operation of the fuel dispensing equipment and may include the retail sale of electricity dispensed by the customer for the purpose of charging motor
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vehicles.”.

4. In section 2, Council strikes the definitions of “Parking Area” and “Parking Garage” and replaces them as follows:

“Parking Area	An open area of land other than a street or lane, used or intended to be used to provide space for the parking or storage of motor vehicles, and includes parking spaces, loading spaces, manoeuvring aisles and other areas providing access to parking or loading spaces, but does not mean an area providing no more than four spaces accessory to a residential use and may include the retail sale of electricity for the purpose of charging motor vehicles.
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Parking Garage	A structure or a portion of a structure which is principally used or intended to be used for the parking or storage of motor vehicles, but does not mean a structure providing no more than four spaces accessory to a residential use and may include the retail sale of electricity for the purpose of charging motor vehicles.”.
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5. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

6. This By-law is to come into force and take effect upon enactment.

ENACTED by Council this \_\_\_\_\_ day of \_\_\_\_\_, 2022

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Clerk



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- |                                |           |            |
|--------------------------------|-----------|------------|
| Gasoline Station with Charging | per annum | \$243.00.  |
| Marine Service Station         | per annum | \$243.00.” |
14. Council strikes “Gasoline Station” from Appendix A and replaces it as follows:
- |                                |           |             |
|--------------------------------|-----------|-------------|
| “Gasoline Station              | per annum | \$10,000.00 |
| Gasoline Station with Charging | per annum | \$243.00    |
| Marine Service Station         | per annum | \$243.00”.  |
15. Council adds new definitions of “Auto Parking”, “Auto Parking Small” and “Auto Parking with Charging” as follows:
- ““Auto Parking” means premises used for the purpose of providing paid parking for 60 or more motor vehicles.
- “Auto Parking Small” means premises used for the purpose of providing paid parking for 59 or fewer motor vehicles.
- “Auto Parking with Charging” means Auto Parking that has the capacity to provide electricity to motor vehicles at a rate not less than 26.6 kW.”.
16. Council adds a new section 10.5 (9) as follows:
- “Every holder of any auto parking licence may provide electricity to any vehicle parked on the licensed premises.”
17. Council strikes “Auto Parking” from Appendix A and replaces it as follows:
- |                            |           |            |
|----------------------------|-----------|------------|
| “Auto Parking              | per annum | \$163.00   |
| Auto Parking Small         | per annum | \$163.00   |
| Auto Parking with Charging | per annum | \$163.00”. |
18. Council strikes “Auto Parking”, “Auto Parking Small” and “Auto Parking with Charging” from Appendix A and replaces them as follows:
- |                            |           |            |
|----------------------------|-----------|------------|
| “Auto Parking              | per annum | \$10,000   |
| Auto Parking Small         | per annum | \$163.00   |
| Auto Parking with Charging | per annum | \$163.00”. |
19. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.
20. This By-law is to come into force and take effect upon enactment, except for sections 8

and 12, which are to come into effect on January 1, 2025.

ENACTED by Council this                      day of                      , 2022

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Clerk

## APPENDIX C: Amendments to Zoning and Development By-law

*Note: This document is being provided for information only as a reference tool to highlight the proposed amendments. The draft amending by-laws attached to the Council report RTS No. 14230 entitled “Encouraging EV Charging at Gas Stations and Parking Lots through Zoning and Development By-law and License By-law Amendments – Climate Emergency” represent the amendments being proposed to Council for approval. Should there be any discrepancy between this redline version and the draft amending by-laws, the draft amending by-laws prevail.*

### **A By-law to amend Zoning and Development By-law Regarding Provisions for EV Charging Infrastructure**

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

21. This By-law amends the indicated provisions of the Zoning and Development By-law.

22. In section 2, Council strikes the definitions of “Gasoline Station – Full Serve” and “Gasoline Station – Split Island” and replaces them as follows:

“Gasoline Station Full Serve	The use of premises for the retail sale of motor fuels and lubricants that are dispensed by an attendant for the customer and where staff are available to provide other services such as checking tire pressure and fluid levels, cleaning windows and doing minor repairs <b>and may include the retail sale of electricity dispensed by the customer or the attendant for the purpose of charging motor vehicles.</b>
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Gasoline Station – Split Island	The use of premises for the retail sale of motor fuels and lubricants that are dispensed by the customer, and which includes at least one pump island at which all types of gasoline and diesel fuels sold by the station are dispensed by an attendant for the customer at all times the station is open for business, and where staff are available to provide other services such as checking tire pressure and fluid levels, cleaning windows and doing minor repairs <b>and may include the retail sale of electricity dispensed by the customer or the attendant for the purpose of charging motor vehicles.”.</b>
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23. In section 2, Council strikes the definitions of “Cardlock Fuel station” and replaces it as follows:

“Cardlock Fuel Station	The use of premises for the sale of motor fuels for vehicles registered as commercial vehicles <b>or the sale of electricity for electric motor vehicles</b> , where motor fuel is dispensed by the customer who has
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been supplied with a card, key or other device for the operation of the fuel dispensing equipment and may include the retail sale of electricity dispensed by the customer for the purpose of charging motor vehicles.”.

24. In section 2, Council strikes the definitions of “Parking Area” and “Parking Garage” and replaces them as follows:

“Parking Area	An open area of land other than a street or lane, used or intended to be used to provide space for the parking or storage of motor vehicles, and includes parking spaces, loading spaces, manoeuvring aisles and other areas providing access to parking or loading spaces, but does not mean an area providing no more than four spaces accessory to a residential use and may include the retail sale of electricity for the purpose of charging motor vehicles.”.
Parking Garage	A structure or a portion of a structure which is principally used or intended to be used for the parking or storage of motor vehicles, but does not mean a structure providing no more than four spaces accessory to a residential use and may include the retail sale of electricity for the purpose of charging motor vehicles.”.

25. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

26. This By-law is to come into force and take effect upon enactment.

ENACTED by Council this \_\_\_\_\_ day of \_\_\_\_\_, 2022

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Clerk



## **APPENDIX D**

### **Engagement Summary**

City staff engaged key stakeholders in two phases. Each phase consisted of an online workshop and a survey. Staff reached out to business licence holders that have licences for gas stations or parking lots, BIAs, EV-related companies, and academics for feedback. The objectives for stakeholder engagement were to inform stakeholders about this proposed program, get feedback, and learn about challenges or opportunities from stakeholders. A summary is included below, and a more detailed engagement summary report is available upon request.

#### **Phase 1: May – June 2021**

##### *Online Workshop (May 20, 2021)*

Stakeholders were invited to participate in the engagement process through e-mail. Thirty-three attendees representing gas stations, parking lots, EV charging companies, and BIAs attended the workshop. City staff shared a high level overview of the proposed program design, as well as context about CEAP, relevant EV policies, and market trends. Attendees were open to the idea and interested in the shift to EVs. Some concerns around demand for charging, space constraints, and utilities were raised

##### *Online Survey (May - April 2021)*

The survey was open for four weeks and had eight responses from stakeholders representing gas stations, parking lots, and EV companies. The survey asked for high-level feedback and initial thoughts; the response rate may have been low since there was no concrete proposal to provide feedback on at this point.

##### Survey findings:

- Respondents had either installed charging at their business or had considered it
  - o None of the respondents indicated that they had never considered installing charging
- Barriers & challenges to installing and operating EV charging include cost, utilities, logistics (e.g. shared buildings, permitting, space), and utilization
- Most respondents felt that EV charging would present a good market opportunity in 3-10 years
- Most respondents felt that they would need 1-6 months for charging to be installed and operational if they chose to install charging and qualify for the lower business licence fee
- Respondents indicated that supports such as faster City processes (e.g. permits), changes to BC Hydro's rate structure and processing times, and incentives or rebates would be desired

#### **Phase 2: January – February 2022**

*Online Workshop (January 26, 2022)*

In order to increase engagement from the previous phase, City staff also sent mail to all licence holders for gas stations and parking lots in Vancouver. Thirty-eight attendees representing gas stations, parking lots, EV charging companies, and BIAs attended the workshop. City staff reported findings from Phase 1 engagement, presented the proposed program design, and shared the results of the economic analysis completed by Dunskey Energy and Climate Advisors. Attendees seemed supportive of the policy and had questions regarding logistics (e.g. use of the chargers, fee structure).

*Online Survey (January - February 2022)*

The survey was open for three weeks and had 17 responses from stakeholders representing gas stations, parking lots, and EV companies. 11 of these respondents were licence holders for a gas station or parking lot. The survey asked for specific feedback on the proposed program design.

Survey findings:

- Respondents felt that the City should provide flexibility so businesses can choose what kind of EV charging to provide
- Cost was cited as a barrier to installing EV charging
- Space constraints and access to power were cited as barriers to installing charging; some respondents felt that these should be taken into account when considering the higher business licence fee or the minimum threshold for chargers
- Some businesses noted that they are installing charging at certain sites but not at all of their sites due to a lack of demand for charging in certain locations
- The majority of licence holders who do not currently have enough EV charging to meet the proposed specifications said they are somewhat or very likely to install enough EV charging to meet the proposed minimum specifications
- Many of the respondents felt that they would need more time than 2 years to install EV charging, citing supply-chain constraints
- Suggestion to consider providing charging to companies such as fleets, and to continue advocacy for reform on demand chargers from utilities
- Comments about supply chain issues for chargers