

Corporate Electric Vehicle Charging Station Policy

Approved By:

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Policy Statement

The intent of the policy is to support the use of electric vehicles (EV) through the provision of charging stations and related charging infrastructure on City of Ottawa (City) property.

Purpose

In February 2016, City Council approved a target to reduce greenhouse gas emissions by 80% below 2012 levels by 2050. The policy will support the use of EVs in Ottawa to reduce greenhouse gas emissions in the transportation sector.

Application

This policy applies to all City projects involving the planning, design, procurement, installation, oversight, maintenance, and operation of EV charging stations on City property that are available for private vehicle charging. It would include charging infrastructure owned by the City, owned and/or operated by other entities, and charging infrastructure within the City right-of-ways.

Policy Requirements

All Corporate Facilities

Ownership

- The City will prioritize agreements with third parties to own and operate EV charging stations over ownership and operation by the City.
- Third party operators will be required to enter into agreements with the City for the design, installation, operation, and maintenance of EV charging infrastructure and stations.
- Each EV charging station will be served by its own electrical account where viable.
- The utility account of the EV charging station will be registered in the name of the third party operator if a separate utility account is used on site.
- Third party EV charging station operators shall be required to share usage data with the City on an annual basis.

Fee Structure

The following fee structure provisions apply to EV charging infrastructure installed after December 13, 2017.

a) City owned and operated EV charging stations and infrastructure

- Appendix A of this policy outlines the per use fee schedule.
- The total fee calculated per use is based on the total time that an EV is connected to the charging station, not the duration of the charge or the total energy transfer.
- Fee revenues are to be allocated to both the affected utility budget and maintenance of the EV charging station / parking space.
- The City should investigate opportunities for advertising and or sponsorship to defray the cost of EV charging stations.

- Parking fees, if applicable, are independent and in addition to charging fees for the EV charging stations.

b) Third party operators of EV charging station and infrastructure

- The City may set limitations on fees charged to the consumer by third parties. Fees should be priced at the equivalent to no more than two times the electrical cost for Level 2 charging stations and one and half times for DC Fast Chargers.
- The City may consider asking for a portion of the fees from third party operators to be used towards future investments in EV charging infrastructure to defray maintenance and infrastructure costs.
- Parking fees, if applicable, are independent and in addition to charging fees for the EV charging stations.

Hours of Use

- Unless otherwise specified by signage on site, the time limits for using the charging stations shall be:
 - **Level 1 charging stations** – 24 hours maximum
 - **Level 2 charging stations** – 12 hours maximum at Park and Ride parking lots; 6 hours maximum at all other City sites
 - **DC Fast Chargers** – 2 hours maximum

Orientation and Design

- New corporate facilities should be designed with a minimum number of EV parking spaces as indicated in Appendix B.
- EV parking spaces can be added to existing corporate facilities up to the rate required for new corporate facilities.
- Any additions of 80 or more parking spaces to an existing corporate facility shall comply with policy requirements for new corporate facilities as outlined in Appendix B.
- DC Fast Chargers should be designed as a drive-through with one tandem queuing space where feasible.
- All charging stations with their own utility account should have at minimum 200kW service where DC Fast Chargers are planned.
- New corporate facilities are to be designed with the capacity to supply a predicted need based on project market penetration for EV charging five (5) years out from when the facility has been built.

Operation and Maintenance

- EV parking spaces should have adequate lighting to operate the EV charging infrastructure in a safe environment and should meet the appropriate reference documents per section 5.7 of the City's *Accessibility Design Standards*.
- Lighting should be sufficient to easily read associated signs and instructions on EV charging stations, as well as provide sufficient lighting around EV parking spaces for safety and security.
- Snow clearing will be required for all outside sites with a level of service that ensures both the EV parking space and control equipment are fully usable at times indicated on signage.

Accessibility and Signage

- EV parking spaces for new City facilities are to be designed to meet Type A accessible parking spaces requirements per section 3.1 of the City's *Accessibility Design Standards*.
- EV parking spaces should be located in proximity to accessible parking spaces in order to share an access aisle.
- EV charging stations and infrastructure should be accessible to all users.
- EV charging stations and parking spaces will be clearly identified through signage that will include any restrictions on use.

Liability

- The City assumes no responsibility or liability for any damage to vehicles using either City or third party owned and operated EV charging stations.

Responsibilities

Infrastructure Services staff are responsible for ensuring that new City facilities and major expansions of existing facilities meet the requirements of this policy. It will be the responsibility of the City department managing the individual projects to meet the requirements of the policy for charging stations added to existing City parking areas.

Any day-to-day maintenance and operations activities (e.g. snow clearing, garbage collection, etc.) not delegated to outside vendors will be the responsibility of the City department managing the site. It will also be the responsibility of the department managing the site to coordinate maintenance and other issues with any partners responsible for the charging stations.

Economic Development and Long-Range Planning staff are responsible for undertaking a three-year review of the policy.

Contraventions

The Traffic and Parking By-law will enforce the strict use of EV parking spaces for EVs that connect to a charging station and initiate a charge. EVs parked in Park and Ride parking lots will also need to abide by the Transit By-law.

Monitoring

This policy will be periodically reviewed to determine that Appendix A and Appendix B are compliant with current best practices and legislative requirements.

Criteria for reviewing Appendix A include, but are not limited to:

- Changes in fees should match the change in electricity costs. Fees should be priced at the equivalent of no more than two times the electrical cost for Level 2 charging stations and one and half times for DC Fast Chargers.
- Fees should be adjusted to reflect any provincial legislative amendments, including for demand incentives or charging rate controls.
- Fees should be adjusted should the time of use electricity rates or utility incentives significantly reduce the effective cost for off peak electricity.

Criteria for reviewing Appendix B include, but are not limited to:

- The need for EV charging infrastructure should be calculated based on provincial, federal, and industry EV targets, historic growth rates, or current percentage EV growth from the past three years and be of a rate comparable to that anticipated by the public five years in the future. This ratio may be adjusted should there be a dramatic change in the market.

Additionally, this policy will be reviewed for its effectiveness in three years' time from the day the policy is enacted and will assess:

- The potential for expansion of DC Fast Charger sites when the utilization rate of the charging station exceeds 15%.
- The frequency of use of charging stations to determine capacity constraints on the system.

- The market demand and penetration rates of EVs in the local and provincial market.
- Any major advancement in EV and charging infrastructure technology.

Any amendments made to this policy as a result of monitoring will be approved by the General Manager of the Planning, Infrastructure, and Economic Development Department as delegated authority.

References

[City of Ottawa's Air Quality and Climate Change Management Plan \(2014\)](#)

[City of Ottawa's Accessibility Design Standards \(2015\)](#)

Legislative and Administrative Authorities

[City of Ottawa Traffic and Parking By-law 2003-530](#)

[City of Ottawa Zoning By-law 2008-250](#)

[City of Ottawa Transit By-law 2007-268](#)

[Proposed 2015-2018 Term of Council Priorities, Finance and Economic Development Committee Report ACS2015-CMR-OCM-0016](#)

[City of Ottawa's Green Building Policy for the Construction of Corporate Buildings](#)

Definitions

DC Fast Charger – 480-volt DC charging station that can supply at minimum 50 kilowatt of power. DC Fast Chargers are sometimes referred to as Level 3 charging stations or DC Quick Chargers.

Electric vehicle (EV) – any vehicle that is partially or entirely propelled by electricity and plugs in to recharge. This does not include power-assisted bicycles as defined in the Highway Traffic Act, R.S.O. 1990, c. H.8.

Electric vehicle charging station – any facility or equipment that is used to charge a battery or other energy storage device of an electric vehicle

Electric vehicle parking space – a parking space, the use of which is charging a battery or other storage device of an electric vehicle

Level 1 charging station – 120-volt charging station that can supply up to 2.4 kilowatt of power

Level 2 charging station – 240-volt charging station that can supply up to 9 kilowatt of power

Keywords

Charging Station

Electric vehicle

Emissions

Parking

Transportation

Enquiries

For more information on this policy, contact:

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Building Engineering and Energy Management

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Appendices

Appendix A – Fee Schedule (as of December 13, 2017)

Type of Charging Station	Per Use Fee
Level 1	<ul style="list-style-type: none"> No per use fee To be offered based on permit, through sponsorship, or free at City staff-only facilities.
Level 2	<ul style="list-style-type: none"> \$3.50 flat rate for Park and Ride parking lots \$2.00/hour at all other City sites (regardless of breaker status).
DC Fast Charger	<ul style="list-style-type: none"> \$0.28/minute (regardless of breaker status and based on a 50 kilowatt charger)

Appendix B – Minimum Number of EV Parking Spaces for New City Facilities (as of December 13, 2017)

Facility Type	Type of Charging Station	Capacity of Parking Area (Number of Parking Spaces)	Minimum Number of EV Parking Spaces
New Park and Ride parking lots	Level 1	Not applicable	Project Lead to consult with Facility Services, OC Transpo, and affected Ward Councillor
	Level 2	250 or more	Minimum 1 EV parking space or 0.5% of total parking spaces
	DC Fast Charger	Not applicable	Project Lead to consult with Facility Operations Services, OC Transpo, and affected Ward Councillor
New public facilities or combined	Level 2	80 or more	Minimum 1 EV parking space or 0.5% of total parking spaces

Facility Type	Type of Charging Station	Capacity of Parking Area (Number of Parking Spaces)	Minimum Number of EV Parking Spaces
City staff and public facilities	DC Fast Charger	Not applicable	Project Lead to consult with Facility Operations Services and affected Ward Councillor
New City staff facilities	Level 1	Not applicable	Project Lead to consult with Facility Operations Services and affected Ward Councillor
	Level 2	80 or more	Minimum 1 EV parking space or 0.5% of total parking spaces
	DC Fast Charger	Not applicable	Project Lead to consult with Facility Operations Services and affected Ward Councillor
Notes: <ul style="list-style-type: none"> Appendix B does not preclude smaller parking lots or areas of high demand to include an EV parking space. Exceptions may be made for instances where it is not technically feasible to add charging stations. 			