

Charging towards a greener future

# THE CITY OF OTTAWA'S CORPORATE ELECTRIC VEHICLE CHARGING STATION POLICY

[1]

## Supporting electric vehicle use by providing charging stations on City property

City of Ottawa's Planning Infrastructure and Economic Development Department

*With swimming lessons, dog obedience training and Jiu-Jitsu classes on offer, it's hard to imagine that our enjoyment of Ottawa's extensive municipal recreation facilities could be much improved. However, a brand new City policy may just change that. With the recent approval of the Corporate Electric Vehicle (EV) Charging Station Policy, the City has outlined its plan to increase EV charging infrastructure at new municipal facilities. How is that for an added bonus: a convenient and fast charge for your electric car while you are waiting for your children's hockey practice to finish or while you are perfecting your backhand swing on the tennis court?*

2017

New City of Ottawa  
Policy, approved in  
December 2017

**"By providing charging stations at City locations, the City is supporting residents to make the switch to EVs and transition to a low carbon future."**

*- Jen Brown, Project Manager, Environmental Programs, Resiliency and Natural Systems Planning Unit, City of Ottawa*



Provides a framework for ownership of, paying for and managing new charging facilities

## 1 INTRODUCTION

Prior to the Corporate EV Charging Station Policy, the City of Ottawa had made some strides in developing the EV charging network in Ottawa:

- ▶ Before 2016, the City installed seven Level 1 charging stations and eight Level 2 charging stations on municipal property. (The level of an EV charging station refers to the voltage supplied by the charger. A Level 1 charger uses a standard 120 volt outlet, while a Level 2 charger delivers 240 volts thereby fully charging an EV in almost a third of the time.)
- ▶ Between 2016 and 2017, Electric Circuit installed an additional seven Level 2 charging stations and six DC Fast Chargers on City property, with the latter being some of the first DC Fast Chargers in Ottawa. (DC Fast Chargers deliver 480 volts, and are the fastest chargers available today, providing around 65 kilometers of range for every 10 minutes of charging time). Funding for these most recent charging stations was through the \$20 million EV Chargers Ontario (EVCO) grant program<sup>[2]</sup>. Locations on City property included Park and Rides, municipal parking lots and a client service centre.

**These individual projects helped grow the EV charging station network in Ottawa, however their installation generally occurred in an ad hoc and incidental fashion given that there was no framework in place outlining where, when and how to install and operate charging stations.**

The Corporate EV Charging Station Policy changed this, with the 2014 Air Quality and Climate Change Management Plan<sup>[3]</sup> providing the direct impetus for this new policy's development. The new policy additionally complements ongoing efforts on the Energy Evolution: Ottawa's Community Energy Transition Strategy, with both initiatives working towards reducing community-wide emissions by 80% below 2012 levels by 2050<sup>[4]</sup>.

## 2 PROJECT DETAILS

Introduced in 2017, the policy strives to address two goals. First, it supports the use of EVs by formalizing guidance about the installation of charging stations at new and renovated municipal facilities. And second, it contributes to reducing greenhouse gas emissions from the transportation sector in Ottawa (which is currently responsible for 40% of all local greenhouse gas emissions<sup>[3]</sup>) by supporting the transition away from fossil fuels within Ottawa's vehicle fleet.

The policy has a number of key recommendations regarding its application, including:

- ▶ Ownership and operation of the charging infrastructure should be prioritized to remain in the hands of the third party partners, as third party partners will be better equipped to adapt to changes in EV technology.
- ▶ Mandating the requirement of Level 2 charging stations at new and major expansions of City facilities, with Level 1 and DC Fast Chargers considered on a case-by-case basis.
- ▶ A fee structure that is representative of the different levels of service being offered. For instance, the DC Fast Chargers charge vehicles much faster than the Level 1 and 2 chargers and will thus have a higher user fee<sup>[6]</sup>.

## 3 RESULTS

The draft policy was presented to the Environment and Climate Protection Committee on November 21, 2017, before being approved by the City Council on December 13, 2017. As such, it is too soon to report on any observed results as the policy was only approved recently.

The policy will be reviewed by Economic Development and Long-Range Planning staff at the end of 2018, as well as in three-year's time, to ensure it remains current and effective. Additionally, staff will periodically conduct a review to ensure that the policy is in keeping with legislative requirements and best practices.

## 4 CONCLUSIONS & REFLECTIONS

This new Corporate EV Charging Station Policy is only one piece of a larger effort to encourage community-wide adoption of EVs in Ottawa specifically and in Ontario more broadly. Other complementary components include a number of provincial initiatives including

- ▶ Amendments to Ontario’s Building Code, coming into effect on January 1, 2018, will require that 20% of parking spaces in new buildings be equipped with EV charging infrastructure.
- ▶ A multi-year EV Incentive Program which offers incentives for the purchase or lease of eligible EVs, as well as for the development of charging stations in Ontario<sup>[7]</sup>.

The new Corporate EV Charging Station Policy is an important next step in our journey to a lower emission transportation sector, and one that by its nature may be easy for other municipalities to adopt and learn from in their own journey to reduced emissions.

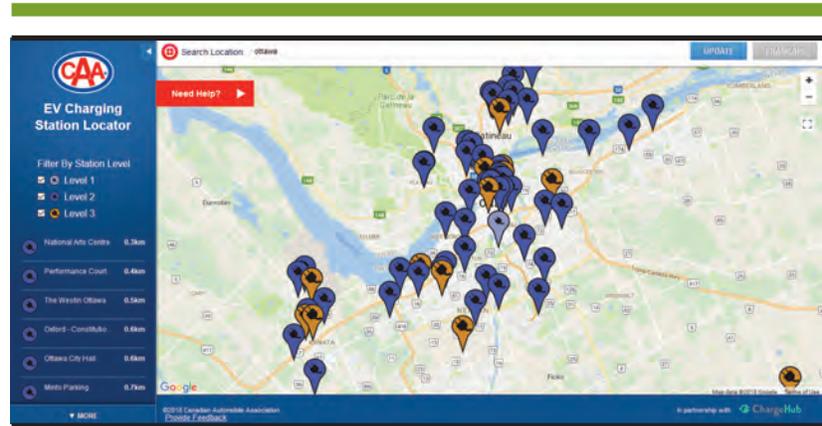


Figure 1: Location of EV charging infrastructure in Ottawa as of December 2017 <sup>[5]</sup>.



Figure 2: An existing EV charging stations at municipal facilities: at 170 Second Ave<sup>[1]</sup>.

## REFERENCES

- [1] Presentation to Environment and Climate Protection Committee, 21 November 2017.
- [2] <http://www.mto.gov.on.ca/english/vehicles/electric/electric-vehicle-chargers-ontario.shtml>
- [3] <http://ottawa.ca/en/city-hall/planning-and-development/official-plan-and-master-plans/air-quality-and-climate-change>
- [4] <http://ottawa.ca/en/news/city-ottawa-joins-carbon-613-help-cut-greenhouse-gas-emissions><http://app05.ottawa.ca/sirepub/mtgviewer.aspx?meetid=6712&doctype=minutes&itemid=343686>
- [5] <http://www.caa.ca/evstations/>
- [6] <http://app05.ottawa.ca/sirepub/mtgviewer.aspx?meetid=7090&doctype=summary&itemid=365743>
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