



CORPORATE FACILITIES MEMORANDUM

TO: MAYOR J. LEHMAN AND MEMBERS OF COUNCIL

FROM: A. MCMULLIN, MANAGER OF ENERGY MANAGEMENT

NOTED: R. PEWS, DIRECTOR OF CORPORATE FACILITIES

D. MCALPINE, GENERAL MANAGER OF COMMUNITY AND CORPORATE SERVICES

M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RE: UPDATE ON ELECTRIC VEHICLE CHARGING STATIONS

DATE: FEBRUARY 11, 2019

The purpose of this Memorandum is to provide members of Council with an update on the installed Electric Vehicle (EV) charging stations as outlined in motion 17-G-285. Specifically, Council requested information regarding the electricity usage and costs associated with the operation of the installed EV charge stations.

Background

In late 2017, the City partnered with Tesla to install EV charging stations at four City owned locations. Tesla covered all of the capital costs for the installation of both Tesla and Universal level two charging stations, fifty-four in total. Four locations were selected:

- Marina (twelve EV stations)
- Heritage Park (twelve EV stations)
- Library (six EV stations)
- Parkade (twenty-four EV stations)

The parkade chargers were energized on February 22, 2018 followed by the Heritage Park and marina locations on July 1, 2018, with usage increasing over the course of the summer as their existence became more commonly known. The library location chargers were brought online on September 15, 2018.

Energy Consumption & Cost

The following table outlines the electricity consumption and cost at each of the locations.

EV Charge Station: Electricity Consumption and Cost (as of Dec 31/18)

Location	Electricity Consumption (kWh)	Electricity Cost (\$)
Marina	3,907	\$ 441
Heritage Park	5,804	\$ 696
Library	1,681	\$ 268
Parkade	6,021	\$ 903
	17,413	\$ 2,308

Staff previously reported an initial estimated cost of \$12,000 annually for the electrical usage of these EV charge stations. Based on part-year consumption data (as of December 31/2018), it is estimated that these costs will fall well below the initial estimate for the foreseeable future, even with an anticipated increase in utilization of the locations.



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During the planning of this initiative, the Downtown Barrie Business Association (BIA) voiced support for the EV charge station deployment, potentially offering sponsorship of the electrical operating costs. Staff have reached out to the BIA to discuss this partnership opportunity and are awaiting feedback from the BIA executive group.

Public Feedback

Staff solicited feedback from the public through an online survey and have also received direct phone calls and correspondence regarding the EV charge station deployment. The feedback contained both support and opposition for the initiative and can be broadly summarized into two areas as follows:

- Support for the initiative but request dedicated EV parking spots.
- EV users should pay for the electricity costs of charging - the cost should not be incurred by the tax payer.

Staff will continue to monitor and compile feedback from the public.

Next Steps

Staff will be reporting back to Council in the fall of 2019 after a full year of operation on public comments and feedback received, parking options, fee and charging alternatives and future opportunities. This evaluation period is necessary as the EV market is rapidly growing and the municipal best practices for adoption of EV charge infrastructure is evolving. Furthermore, it will allow staff to capture additional public feedback and evaluate the seasonal impact of usage and operation of these stations before potential options are brought forward for Council's consideration.