



ADMINISTRATIVE REPORT

Report Date: May 2, 2019
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Meeting Date: June 11, 2019

TO: Vancouver City Council

FROM: General Manager of Finance, Risk and Supply Chain Management in consultation with the General Manager of Engineering Services

SUBJECT: Funding Application to Natural Resource Canada's Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative

RECOMMENDATION

THAT Council approve a funding application to Natural Resource Canada's Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative for \$300,000 towards the City of Vancouver Electric Vehicle Charging Corridor Enhancement Project;

REPORT SUMMARY

The City's [2019-22 Capital Plan](#) funding strategy contemplates securing of senior government contributions toward a number of Council priorities. This application supports climate change adaptation and the City's Renewable City Action Plan, as well as the [Electric Vehicle Ecosystem Strategy](#), adopted by Council in 2016.

In April 2019, Council approved the [Climate Emergency](#) report to increase the City's efforts to tackle climate change. This application supports the recommendation in that report to adopt the target that by 2030, 50 percent of the kilometers driven on Vancouver's roads will be by zero emissions vehicles.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

Federal funding programs typically require a resolution of Council as part of the application package.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The General Managers of Finance, Risk and Supply Chain Management and Engineering Services recommend approval of the report.

REPORT

Background/Context

The Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative (“the Program”) is a Natural Resources Canada program meant to increase capacity to supply and use lower carbon transportation options. Through the Program, the Federal government is investing \$96.4 million to support the establishment of a coast-to-coast charging network for electric vehicles, natural gas stations along key freight corridors and stations for hydrogen fuel cell electric vehicles in metropolitan centres.

Phase 1 investments of \$16.4 million resulted in the deployment of 102 electric vehicle fast-chargers, 7 natural gas stations and 3 hydrogen stations.

In the 2017 Federal budget, an additional \$80 million was committed over four years for Phase 2 of the Program. In 2018, the City was successful in an application to fund six Level 3 DC fast charging stations at three locations as part of the City's Electric Vehicle Charging Corridor Enhancement project.

This report is seeking Council approval for another application to the program for funding towards an additional six Level 3 DC fast charging stations at three sites. Each location is adjacent to major highway routes, ensuring exposure and usage.

The program will provide funding of up to 50% of total project costs to a maximum of \$50,000 per charging station. In British Columbia, projects selected for funding will also be eligible for additional funding of up to \$25,000 per charging station.

The deadline for the application was May 16th. A resolution of Council is required for the funding application and can be submitted after the application submission deadline.

Strategic Analysis

In November 2015, Council committed to achieving 100% renewable energy use before 2050, extending an existing goal to reduce community-based greenhouse gas emissions 33% below 2007 levels by 2020. In April 2019, Council approved the Climate Emergency report to increase the City's efforts to tackle climate change. One of the recommendations in that report was to adopt a target of 50 percent of kilometers driven on Vancouver's roads by zero emissions vehicles by 2030. The installation of publicly accessible electric vehicle charging stations is a key item in the City's Renewable City Action Plan to reduce the community-based greenhouse gas emissions in Vancouver and to achieve the targets identified in the recent Climate Emergency report.

To facilitate the uptake of electric vehicles (EV) in Vancouver, Council unanimously adopted the EV Ecosystem Strategy in 2016. This strategy seeks to remove barriers to EV uptake through:

1. Accessibility: Improved access to charging infrastructure
2. Affordability: Reduced cost barriers to electric vehicle uptake
3. Economic Opportunity: Develop a market large enough to support private sector operation of electric vehicle charging infrastructure.

In support of this strategy, the City is proposing to enhance its EV charging network of 75 Level 2 and 15 DC fast charging stations (12 currently underway see table) located at 7 sites.

Table 1: City of Vancouver DC Fast Charging Stations

Operating DCFC Locations	No. of Stations	DCFC Locations Underway	No. of Stations
Empire Field	1	Empire Field #2	1
South Hill BIA	2	Richards Park	3
		2221 Main Street	2
		City Hall	2
		Roundhouse CC	2
		National Works Yard	2
Total	3	Total	12

As part of this application the City conducted a site analysis of underserved charging areas. Through this analysis, the City proposes installing six DC fast charging stations at three sites, (two stations per site).

Each of these locations is owned by the City. These sites have been selected because they are adjacent to major highway routes, ensuring exposure and usage. The installation of these stations will also support the City’s commitment to install a DC Fast Charging hub within a 10-minute drive of anywhere in Vancouver by 2020, an accelerated action under the Climate Emergency Response report.

Site #1 – 1700 Block Robson Street, Vancouver

This site is located in the west end of Vancouver in close proximity to Route 99. The location provides an important connection along the Pacific Coast Collaborative connecting Whistler to San Diego.

Site #2 – 1400 Block West 67th Avenue, Vancouver

This site, west of Granville Street near Route 99, will be highly visible and provide an important charging connection for passers through and local Vancouver residents alike.

Site #3 – 1700 Block East 11th Avenue, Vancouver

This site, near the Route 7 corridor through the city provides an important connection linking Vancouver to the Tri-Cities.

Financial Implications

Based on past projects conducted throughout the City with similar parameters, the installation of the six DC fast charging stations at the three locations noted above is estimated to cost approximately \$800,000.

Staff are recommending that the City request the maximum \$50,000 grant per charging station from the Program for a total of \$300,000 of federal funding for the project.

Electric vehicle fast charger projects located in British Columbia and selected for funding under the Program are automatically eligible for provincial funding of 25% of total project costs up to a maximum of \$25,000 per electric vehicle fast charger. This could provide \$150,000 of provincial funding for the project.

The City's \$350,000 contribution would be funded from the Gas Tax Fund (GTF) Community Works Fund reserve as provided for in the 2019-2022 Capital Plan for the Electric Vehicle Infrastructure Strategy. The GTF Community Works Fund reserve holds City's allocation of the Federal Gas Tax Fund received from Union of BC Municipalities (UBCM) to fund the eligible capital infrastructure projects, described in the Community Works Fund Agreement between COV and UBCM.

Table 2: Breakdown of Project Funding

Funding	Amount
Federal Portion	\$300,000
Provincial Portion	\$150,000
City Portion (GTF-CWF Reserve)	\$350,000
Total Project	\$800,000

If the application is successful, staff will bring forward the related capital budget requests through the quarterly budget adjustment process.

CONCLUSION

By applying to the Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative, the City has the opportunity to access external funding of up to \$450,000 to support the installation of six new DC fast charging stations to support the Electric Vehicle Ecosystem Strategy, the City's goal of achieving 100% renewable energy use before 2050 and the City's target of 50 percent of the kilometers driven on Vancouver's roads be by zero emissions vehicles by 2030.

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