

FCM Green Municipal Fund Budget Adjustment

ISSUE

A budget adjustment is required to Capital Project P.10015 Electric Vehicle Adoption Roadmap for approved grants from the Federation of Canadian Municipalities (FCM) Green Municipal Fund. Funding was approved for applications on the City of Saskatoon's (City) Municipal and Transit Fleet Electrification Strategy (\$53,500) and for the Community Electric Vehicle Adoption Strategy-Feasibility Study (\$85,500).

RECOMMENDATION

1. That Capital Project P.10015 Electric Vehicle Adoption Roadmap be increased by \$139,000 funded by the FCM Green Municipal Fund;
2. That Capital Project Capital Project P.10015 Electric Vehicle Adoption Roadmap transfer \$35,000 to P.01957 Community Electric Vehicle Adoption Strategy; and
3. That the Mayor and City Clerk be authorized to execute the agreements from FCM under the Corporate Seal.

BACKGROUND

At the 2022/23 Preliminary Corporate Business Plan and Budget Meeting, Capital Project P.10015 Electric Vehicle Adoption Roadmap was approved for \$220,000 funding in 2022 and \$175,000 funding in 2023. This project involves initiatives that will aim to increase Electric Vehicle (EV) uptake in the community and the corporation. This includes development of an EV Adoption Roadmap, pursuing short-term opportunities as part of existing civic fleet replacement strategies, expansion of public infrastructure pilot and education programs, and pursuing of funding opportunities and partnerships where available.

On February 7, 2022, Administration submitted pre-application proposals to FCM's Green Municipal Fund for the City's Municipal and Transit Fleet Electrification Strategy and the Community Electric Vehicle Adoption Strategy Feasibility Study. On February 23, 2022, Administration received notice that both proposals had been accepted and permission was granted to submit grant applications which were submitted on May 11, 2022.

Administration recently received noticed that both projects were approved for funding as follows:

- Municipal and Transit Fleet Electrification Strategy - \$53,500; and
- Community Electric Vehicle Adoption Strategy-Feasibility Study - \$85,500.

DISCUSSION/ANALYSIS

City Municipal and Transit Fleet Electrification Strategy

The Administration submitted an application under the fund to create a Strategy to electrify its fleet by 2030 and to identify the impact, feasibility and limitations of this target. The strategy would be developed through research, engagement with public stakeholders, coordination with internal stakeholders, and the reporting of the strategy to City Council.

The City launched a two-year pilot program in 2020 to introduce light-duty battery-powered EVs into the City fleet. Four Chevrolet Bolts were purchased for use by Saskatoon Light & Power, Facilities Management, and Parking Enforcement departments. Data collected throughout the Pilot is being used to inform the Strategy, including possible GHG reduction levels, EV lifecycle operations & maintenance costs, charging infrastructure capabilities, and whether functional capabilities of the available EVs will allow all municipal user groups to meet their required service levels.

Saskatoon Transit also completed a one-year demonstration test of a Build Your Dreams (BYD) electric bus from November 2020 to October 2021. The results of this test have been reported by Saskatchewan Research Council and findings will also be incorporated into the Strategy.

The Strategy would ultimately recommend a phased implementation and financing action plan to convert a majority or all the municipal and transit fleet to electric or other low/zero emissions alternatives to meet, if deemed feasible, the 2030 target. As well, the strategy would assess charging infrastructure requirements and limitations and make recommendations to ensure charging infrastructure is implemented at City facilities in alignment with the transition to electric vehicles.

The total project cost is estimated to be \$126,200 with the Green Municipal Fund contributing \$53,500 to this initiative, with \$72,700 of existing funding in Capital Project P.10015 being used for the remaining project costs.

Community Electric Vehicle Adoption Strategy-Feasibility Study

By 2050, the number of vehicles on the road in Saskatoon is expected to increase to 230,000 (compared to 182,117 registered vehicles as of July 4, 2018). EVs emit 30-56% less greenhouse gas emissions than gasoline vehicles, even with the high emissions intensity of Saskatchewan's fossil fuel-based grid. As our grid improves, the emissions from EVs will also decrease.

As a cold-climate prairie city, Saskatoon faces both unique and typical barriers to EV adoption. These include EV functionality (real and perceived) such as battery range limitations, currently limited access to charging infrastructure, relatively low availability and uptake of EV's, equity issues for charging and affordability of vehicles, culture, fossil-fuel based grid, and rural geography with long driving distances. The Community EV Adoption Strategy would evaluate these barriers within our local context and outline the phased action plan for the municipality to encourage the adoption of private electric

vehicles in the community. The Strategy would be developed by a consultant and will include research, engagement with public stakeholders, coordination with internal stakeholders, and the reporting of the Strategy to City Council. Engagement will be extensive to fully understand the barriers and identify solutions that will work for Saskatoon. Businesses, industry, and other organizations would be consulted to plan the expansion of the EV charging network for Saskatoon, with considerations for usage needs and electrical grid capacity.

As part of a pilot study, the City is currently installing two charging stations for public use. These stations will be monitored for their usage and EV driver interaction. This data, along with other usage data, will help inform next steps for the Strategy, including if and how much the City should invest in more stations, whether fees should be charged to the user, and if the type of location is suitable for the community's EV charging needs. Finally, the Strategy will identify metrics to understand and measure success.

The total project cost is estimated to be \$314,400 with the Green Municipal Fund contributing \$85,500 to this initiative, with \$228,900 of existing funding in Capital Project P.10015 used for the remaining project costs.

Community Electric Vehicle Charging Station Pilot

Capital Project P.01957 Community Electric Vehicle Adoption Strategy included funding to install two charging stations at two City of Saskatoon Facilities (Lakewood and Lawson Civic Centers). However, costs received from the Request for Quotation (RFQ) are higher than anticipated due to the requirement of engineering specification prior to the RFQ and the addition of a transformer at each site to allow for additional EV chargers in the future. In order to proceed with the preferred option of installing two chargers at both facilities, a transfer of \$35,000 from project P.10015 Electric Vehicle Adoption Roadmap to P.01957 Community Electric Vehicle Adoption Strategy is required. The FCM grant approval makes this transfer possible and does not affect the ability to complete both projects under FCM's Green Municipal Fund.

In order to permit release of the funds, the FCM Contribution Agreement for the Municipal and Transit Fleet Electrification Strategy was signed prior to consideration of this report. The City anticipates receiving the Contribution Agreement for the Community Electric Vehicle Adoption Strategy-Feasibility Study and is seeking City Council approval for execution of that Agreement by the Mayor and City Clerk once received.

FINANCIAL IMPLICATIONS

The total cost of producing the strategies is estimated to be \$440,600 with a total Green Municipal Fund Contribution of \$139,000 and City Contribution of \$301,600. Capital Project P.10015 has \$395,000 allocated to it through the 2022-2023 Capital Budget and with the transfer of \$35,000 out of the Capital Project to Project P.01957, will have \$360,000 remaining to cover the initiatives and any contingencies that may arise.

TRIPLE BOTTOM LINE IMPLICATIONS

In addition to direct emissions reductions from driving EVs instead of Internal Combustion Engine vehicles, some of the TBL impacts identified from the TBL reviews of the community EV Charger Pilot and the Strategy include:

- EVs are also more resilient to energy/oil price fluctuations and are not as likely to be affected by fuel shortages, increasingly so as the electricity grid becomes more renewable.
- Improved air quality and health benefits by decreasing local tailpipe emissions from the combustion of gasoline and diesel.
- EVs are quieter and would reduce noise disturbances in the community.
- The adoption of EVs by the City will create a larger local demand for EVs which may draw suppliers, and technicians to the region, increasing local job opportunities and reducing barriers for others to switch to EVs.
- EVs have lower operating and maintenance costs for users, benefiting both the residents that drive EVs and City Fleet Services as their Fleet switches to electric:
 - Electric vehicle refuelling costs 70-80% less than gas refuelling.
 - Maintenance costs are about 40% to 75% less for EVs.
- Revenue for the City:
 - Public EV charging stations will be providing electricity for EV charging for free for the duration of the Pilot, but could follow a cost-recovery model in the future; and
 - Electricity use within SL&P's distribution network could increase utility revenues by \$7,500 per vehicle.

OTHER IMPLICATIONS

There are no privacy, legal, or social implications identified.

NEXT STEPS

Administration will report back to City Council for approval of both the Municipal and Transit Fleet Electrification Strategy and Community Electric Vehicle Adoption Strategy-Feasibility Study developed under the Green Municipal Fund.

REPORT APPROVAL

Written by: Jeremy Meinema, Senior Financial Business Partner
Reviewed by: Kari Smith, Director of Finance
Angela Gardiner, General Manager, Utilities and Environment
Approved by: Clae Hack, Chief Financial Officer