



SUBJECT: Federal funding programs to reduce greenhouse gas emissions

TO: Environment, Infrastructure & Community Services Cttee.

FROM: Corporate Strategy

Report Number: CS-01-22

Wards Affected: All

File Numbers: 155-03-01

Date to Committee: January 13, 2022

Date to Council: January 18, 2022

Recommendation:

Authorize the Mayor and City Clerk to execute the necessary agreements and other related documents or by-laws between the City of Burlington and Federation of Canadian Municipalities, in relation to the Greenhouse Gas (GHG) Reduction Pathway Feasibility Studies Program, to the satisfaction of the Executive Director of Legal Services and Corporation Counsel; and

Authorize the Mayor and City Clerk to execute the necessary agreements and other related documents or by-laws between the City of Burlington and the Government of Canada, in relation to the National Resources of Canada Zero Emission Vehicle Infrastructure Program (ZEVIP), should our application be successful, to the satisfaction of the Executive Director of Legal Services and Corporation Counsel.

PURPOSE:

Vision to Focus Alignment:

- Support sustainable infrastructure and a resilient environment

Background and Discussion:

Greenhouse Gas (GHG) Reduction Pathway Feasibility Studies Program:

The Federation of Canadian Municipalities offers several funding programs for municipalities across the country for environmental projects through their Green Municipal Fund. The Greenhouse Gas (GHG) Reduction Pathway Feasibility Studies Program focuses on integrating energy and GHG reductions into longer-term management plans for local recreational and cultural facilities. Studies in this stream will include feasibility work to support near-term and long-term capital projects while mapping out a course to extend asset life and reduce cost of ownership (i.e., the total capital, operating and maintenance costs over the building's remaining useful life). The studies must include a sequence of GHG reduction measures that allow, at minimum, local recreational and cultural facilities to achieve 50 percent GHG reductions within 10 years and 80 percent GHG reductions within the next 20 years.

To be eligible for this grant, projects must include at least one municipally owned community building.

Zero Emission Vehicle Infrastructure Program (ZEVIP):

Transportation accounts for approximately 25 percent of Canada's GHG emissions, of which almost half comes from passenger cars and light trucks. Driving down transportation emissions is critical to achieving the Federal Government's ambitious climate change commitments and is consistent with the global shift toward zero-emission vehicles. Funded through Budget 2019 and the 2020 Fall Economic Statement, the Zero Emission Vehicle Infrastructure Program (ZEVIP) is a 5-year \$280 million program. Its objective is to address the lack of charging and refueling stations in Canada; one of the key barriers to zero emissions vehicle adoption, by increasing the availability of localized charging and hydrogen refueling opportunities where Canadians live, work, and play. This program is administered through Natural Resources Canada (NRCan).

The program targets the following infrastructure streams:

- Public Places
- On-Street
- Workplaces
- Multi-Unit Residential Buildings
- Commercial and Public Fleets

The City applied under the public places stream which supports electric vehicle charging infrastructure deployment in parking areas intended for public use. The City's application, submitted in June 2021, was for the installation of 26 electric vehicle

chargers at several recreational facilities and parking lots throughout the city. One level 3 charger for Parking Lot 5 was also part of the application.

Strategy/process

Greenhouse Gas (GHG) Reduction Pathway Feasibility Studies Program

The City of Burlington's own operations have a significant energy and environmental impact. This impact was identified in the City's Strategic Plan with a goal of having the City's operations become net carbon neutral by 2040. The 2019 Corporate Energy and Emissions Management Plan aligns and defines the City's carbon reduction target of 2040.

With most of the City's emissions coming from our corporate facilities (71 percent in 2019), detailed carbon reduction plans need to be developed for each of our facility assets. These studies, commonly referred to as deep energy retrofit studies, are an in-depth investigation into how a facility will reduce its operational emissions to zero or near zero. These studies need to be aligned with asset management plans so buildings with major capital renewal are prioritized. As noted above, the City's application to FCM's GHG reduction pathway studies program was for these four facilities;

- Appleby Ice Centre,
- Brant Hills Community Centre,
- Fire Station 2 and
- Fire Station 7

These facilities all have major elements, such as windows, doors, HVAC systems, parking lots etc., of their building systems or envelope due for renewal in the next five years.

In December 2021, the City was notified by FCM that our funding application was approved.

Zero Emission Vehicle Infrastructure Program (ZEVIP):

The need to electrify transportation has been identified as an important action in both the City's Climate Action Plan and the Corporate Energy and Emissions Management Plan. The charging stations included in the City's NRCan's ZEVIP application are those to be installed as part of the council directed budget addition in the 2020 capital budget. The detailed design of the installation of these stations has been completed and is awaiting a funding decision before a tender can be issued. Charging stations included in the application would be installed at the following City locations:

- Tansley Woods Community Centre (4 heads)

- Appleby Ice Centre (4 heads)
 - Central Park Campus (4 heads)
 - Mountainside Recreation Centre (2 heads)
 - Haber Recreation Centre / Norton Park (2 heads)
 - Nelson Recreation Centre (2 heads)
 - Aldershot Arena (2 heads)
 - Mountainside Recreation Centre (2 heads)
 - Parking Lot 8 (2 heads)
 - Parking Lot 5 (2 heads) *Level 3 Charger*
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Financial Matters:

Our application for FCM's Greenhouse Gas Reduction Pathway Feasibility Study program is for \$200,000 and has been approved by the Federation of Canadian Municipalities. The total cost of the project is \$250,000.

The City's application for NRCan's ZEVIP program is in the amount of \$160,000 and is still pending approval. The total cost of this project is \$328,650.

Source of Funding

The City's portion of the project cost for the FCM's Greenhouse Gas Reduction Pathway Feasibility Studies program will be funded through the City's Energy Conservation Initiatives Capital Program.

The City's portion of the project cost for NRCan's ZEVIP program will be funded through a combination of the City's Energy Conservation Initiatives Capital Program and the Parking District Reserve Fund.

Climate Implications

The four facilities included in the FCM application represent 15 percent of the City's corporate emissions, for a total of 1058tons of CO₂e (2019). The objective of the studies is to provide a pathway to meet, at a minimum, a 50 percent GHG reduction within 10 years and an 80 percent GHG reductions within the next 20 years, through either one large deep energy retrofit or several small retrofits that align with various capital renewal projects. If the implementation of these pathways is successful at these four facilities, the City's corporate emissions would be reduced by 12.1 percent (846t CO₂e) when all measures have been implemented.

The City is encouraging the use of electric vehicles in both our corporate fleet as well as by the public by providing more electric vehicle charging facilities throughout the city. The City of Burlington continues to show leadership in greenhouse gas reductions through these installations.

Engagement Matters:

Once the Greenhouse Gas Reduction Pathway project is underway, departments including Environment Infrastructure & Community Services, Recreation, Community and Culture, Fire, and Finance will all be engaged throughout the project to ensure all aspects of the projects are considered.

Upon approval of the NRCan applications departments including Environment Infrastructure & Community Services, Recreation, Community and Culture, Transportation Services, and Finance will work together on the installation of the EV charging infrastructure throughout the city.

Conclusion:

The City of Burlington is grateful to the Government of Canada for making these funding opportunities available to municipalities across the country. By working together, we can successfully reduce GHG emissions and reach our carbon neutral targets more quickly.

Respectfully submitted,

Helen Walihura

Government Relations Manager

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Report Approval:

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.