
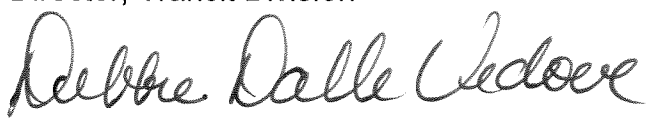



**PUBLIC WORKS DEPARTMENT**  
**Energy, Fleet and Facilities Management Division**  
**Transit Division**  
*and*  
**CORPORATE SERVICES DEPARTMENT**  
**Financial Planning, Administration and Policy Division**

<b>TO:</b>	Mayor and Members General Issues Committee
<b>COMMITTEE DATE:</b>	June 20, 2018
<b>SUBJECT/REPORT NO:</b>	Municipal GHG Challenge Fund Round Two (PW17079(a) / FCS17082(a)) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	Tom Chessman (905) 546-2424 Ext. 2494 John Savoia (905) 546-2424 Ext. 7298
<b>SUBMITTED BY:</b>	Rom D'Angelo, C.E.T., CFM Director, Energy, Fleet and Facilities Management Division
<b>SIGNATURE:</b>	
<b>SUBMITTED BY:</b>	Debbie Dalle Vedove Director, Transit Division
<b>SIGNATURE:</b>	
<b>SUBMITTED BY:</b>	Brian McMullen Director, Financial Planning, Administration and Policy Division
<b>SIGNATURE:</b>	

**RECOMMENDATIONS**

- (a) That the Hamilton Takes Charge Electric Bus Pilot Project for the requested funding amount of \$2,000,000 be approved for consideration under the Municipal Greenhouse Gas (GHG) Challenge Fund Round Two;
- (b) That the Mayor and Clerk be authorized to execute all necessary documentation, including Grant Contracts and Funding Agreements for funding under the Municipal GHG Challenge Fund Round Two, in a form satisfactory to the City Solicitor;
- (c) That copies of Report PW17079(a) / FCS17082(a) be forwarded to local Members of Provincial Parliament.

**EXECUTIVE SUMMARY**

On April 17, 2018, the Ontario Government launched Round Two of the Municipal Greenhouse Gas Challenge Fund (GHG Fund) supporting municipal projects that reduce GHG emissions by providing funding towards buildings, energy supply, transportation, water, waste and organics sectors.

The GHG Fund is investing up to \$35 M in 2018-2019 of proceeds from Ontario's carbon market that aims to support community-led action on climate change. At least 30% of funded projects will be located in Small / Rural / Northern Municipalities (population less than 100,000 or areas north of and including the districts of Parry Sound and Nipissing). Municipalities are invited to submit up to two applications for the fund by July 13, 2018. Successful applicants will be informed in writing by December 2018.

It should be noted that the GHG Fund is a competitive application-based program that will fund up to 100% of the eligible costs for greenhouse gas emissions reduction projects proposed by municipalities. Municipalities may request up to \$2 M per project. However, a higher score will be given to applicants that leverage funds for up to 50% of eligible costs (e.g. through federal / municipal governments, private sector, industry partners, etc.).

The Ontario Ministry of the Environment and Climate Change will review all applications for the GHG Fund based on the assessment criteria as outlined in the Analysis and Rationale for Recommendation section of this Report.

A number of projects were evaluated based upon staff's interpretation of the criteria, as specified within the application process and the GHG Fund's program guidelines. As such, Table 1 to Report PW17079(a) / FCS17082(a) reflects the project recommended for Council's endorsement of the project submitted under the GHG Fund:

**TABLE 1 – City of Hamilton Submissions to GHG Challenge Fund Round Two**

<b>Project Title</b>	<b>Project Cost</b>	<b>Funding Request</b>
Hamilton Takes Charge Electric Bus Pilot Project	\$ 4,000,000	\$2,000,000

At the March 19, 2018 Public Works Committee, Mayor Eisenberger moved a motion directing staff to investigate and possibly test electric buses in preparation for future procurement. Staff are currently compiling this information for a report back to Public Works Committee on July 12, 2018.

Hamilton Takes Charge Electric Bus Pilot Project replaces old technology diesel buses with new environmentally responsible urban transit buses and demonstrates leading edge, clean, reliable Public transportation for its citizens.

Should the City's application to the GHG Fund Round Two intake be successful, the municipal \$2M contribution from the Vehicle Replacement Transit Reserve (110030) would need to be approved by Council.

***Alternatives for Consideration – Not Applicable***

**FINANCIAL – STAFFING – LEGAL IMPLICATIONS**

**Financial:** Should the City's application to the GHG Fund Round Two intake be successful, the municipal \$2M contribution would be funded by the Vehicle Replacement Transit Reserve (110030).

**Staffing:** N/A

**Legal:** The City will have to enter into a funding agreement with the Ministry of the Environment and Climate Change should the City be successful with its applications to the GHG Fund that will encompass the terms and conditions of the GHG Fund. The Program Guidelines indicate funding agreements will need to be completed before the end of the 2018-2019 fiscal year (March 31, 2019).

**HISTORICAL BACKGROUND**

On April 17, 2018, the Government of Ontario announced the Municipal GHG Challenge Fund Round Two (GHG Fund) which will be funded by proceeds from Ontario's cap and trade program. This initiative is part of Ontario's Climate Change Action Plan to fight climate change, reduce greenhouse gas emissions and transition to a low-carbon economy. The Action Plan in conjunction with the cap and trade program form the backbone of Ontario's strategy to cut greenhouse gas emissions to 15 per cent below 1990 levels by 2020, 37 per cent by 2030 and 80 per cent by 2050.

The Province will be allocating \$35 M from proceeds of its carbon market initiative to the fund in 2018-2019 with at least 30% of funded projects to be located in Small / Rural / Northern Municipalities (population less than 100,000 or areas north of and including the districts of Parry Sound and Nipissing). Municipalities are invited to submit up to two applications for the GHG Fund by July 13, 2018. Successful applicants will be informed in writing by December 2018.

GHG Fund eligible projects include municipal projects that reduce GHG emissions in any sector including buildings, energy supply, transportation, water, waste and organics sectors. Projects must commence by July 2019 and must be complete by July 2022. Projects currently underway are only eligible if they have not begun construction or installation as of July 13, 2018.

Ineligible projects under the GHG Fund are projects that are not reasonably likely to directly reduce GHG emissions such as:

- Plans, studies and research initiatives
- Education and awareness initiatives
- Granting programs
- Projects exclusively focused on adaptation

GHG Fund eligible costs are those directly related to the reduction of GHG emissions associated with the project. For example, a community centre retrofit project is eligible only for construction costs that are directly related to the measure(s) that reduces energy and GHG emissions, such as renewable energy technology, adaptive thermostats and lighting retrofits.

Municipalities may request up to \$2 M per project. The Province will contribute up to 100% of eligible costs. However, a higher score will be given to applicants that leverage funds for up to 50% of eligible costs (e.g., through federal / municipal governments, private sector, industry partners etc.).

The Ontario Ministry of the Environment and Climate Change will review all applications for the GHG Fund based on the assessment criteria as outlined in the Analysis and Rationale for Recommendation section of this Report.

A number of projects have been evaluated based upon staff's interpretation of the criteria, as specified within the application process and the GHG Fund's program guidelines. This Report, "Municipal GHG Challenge Fund Round Two" (PW17079(a) / FCS17082(a)), seeks Council's endorsement of the projects to be submitted for GHG Fund consideration.

## **POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS**

N/A

## **RELEVANT CONSULTATION**

The main criterion for success in this round of Municipal GHG Challenge Fund was determined to be highly focused on Fuel Switching opportunities that provide large GHG emission reductions.

Public Works (Recreation, Healthy and Safe Communities)

- Consulted to determine the potential to switch ice cleaning equipment (Zamboni's) from current natural gas to electric. It was determined that the reduction in GHG emissions was insignificant compared to the financial investment required.

Public Works (Water and Waste Water)

- Consulted with Renewable Energy From Organics (REFO) Project Team and the GHG Municipal Challenge Fund timelines make this opportunity ineligible.

Public Works (Transit)

- Determined that the opportunity to explore Battery Electric Buses in replacement of high emission output diesel buses would be a good project for submission to the Municipal GHG Challenge Fund.

**ANALYSIS AND RATIONALE FOR RECOMMENDATION**

At the March 19, 2018 Public Works Committee, Mayor Eisenberger moved a motion directing staff to investigate and possibly test electric buses in preparation for future procurement. Staff are currently compiling this information for a report back to Public Works Committee on July 12, 2018.

In March 2018, Council passed a motion; “That staff be directed to investigate, and possibly test, electric buses in preparation for future procurement, and report back to the Public Works Committee.” The Municipal GHG Challenge Fund provides the City with potential funding to pilot electric buses which are the highest single GHG emission source for the City’s corporate assets. Transit will pilot replacing old technology diesel buses with new environmentally responsible urban transit buses.

Hamilton Takes Charge Electric Bus Pilot Project demonstrates leading edge, clean, reliable Public transportation for its citizens. The electric bus pilot will offer superior operator and customer experiences; reducing ambient noise, exhaust odours, vibration, while at the same time lowering operating costs compared to diesel buses.”

Hamilton’s pilot project aligns with a recent announcement on April 16, 2018 from the Provincial Government in support of the purchase of 14 electric buses and four charging stations for transit systems in York Region and Brampton. The Canadian Urban Transit Research and Innovation Consortium (CUTRIC), a green transportation group, is coordinating the projects. The buses are expected to begin service in 2019.

The Ontario Ministry of the Environment and Climate Change will review all applications for the GHG Fund based on the evaluation criteria as outlined below:

Project Focus (10%): Higher scores will be given to projects that aim to replace fossil fuels with clean, renewable energy and achieve net zero (or better) emissions buildings, transportation systems, and/or infrastructure.

GHG Emissions Reduction Assessment (40%): Higher scores will be given to projects that result in significant and cost-effective GHG reductions.

Project Co-benefits (10%): Higher scores will be given to projects that result in positive co-benefits, including:

- Economic Benefits
- Social Benefits
- Environmental Benefits
- Heritage Conservation Benefits
- Behavioural Change Benefits
- Innovation, Science and Technology Benefits
- Benefits to low-income and vulnerable communities

Alignment with Municipal GHG Emissions Planning (10%): Higher scores will be given to projects that align with a municipality's GHG emissions planning and to municipalities that have a comprehensive GHG reduction plan that meets or exceeds the Province's 2020, 2030 and 2050 targets. Higher scores will also be given to projects that align with the municipality's GHG emissions planning.

Work Plan and Budget (30%): Higher scores will be given to projects that have a detailed, feasible work plan to achieve the project outcomes. Municipalities may request up to \$2 M per project. The Province will contribute up to 100% of eligible costs. However, a higher score will be given to applicants that leverage funds for up to 50% of eligible costs from the municipality and/or other sources.

The possible GHG reduction of a project will be a major factor as to which projects are successful in the competitive application-based GHG Fund program. Applicants will be required to provide an estimate of the GHG reduction potential for their project as part of the application process. GHG Fund Program Guidelines provides assistance to applicants with estimating GHG impacts. It is noted that GHG quantification occurs at the project level and relies on initiative-specific information including: defining baselines, boundaries, emissions, emission factors, initiative characteristics, initiative lifespan, monitoring plan, assumptions, uncertainties and ensuring that data exists to support the quantification and monitoring approach. Staff from the Office of Energy Initiatives has assessed the GHG reduction potential of proposed projects based upon the GHG Fund program guidelines to arrive at the proposed submission for the current round two intake.

## **ALTERNATIVES FOR CONSIDERATION**

Not Applicable.

## **ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN**

### **Economic Prosperity and Growth**

*Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.*

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*OUR Vision: To be the best place to raise a child and age successfully.*

*OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.*

*OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.*

**Healthy and Safe Communities**

*Hamilton is a safe and supportive city where people are active, healthy and have a high quality of life.*

**Clean and Green**

*Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.*

**Built Environment and Infrastructure**

*Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic city.*

**APPENDICES AND SCHEDULES ATTACHED**

Not Applicable

TC/JS/dt