# FCM Funding: Deep Retrofits for Civic Facilities – Feasibility Study

## ISSUE

The Federation of Canadian Municipalities (FCM) is accepting submissions for the Green Municipal Fund (GMF) under the Community Buildings Retrofit initiative. This initiative provides funding to optimize energy performance and reduce greenhouse gas (GHG) emissions in community buildings owned by municipalities. The Administration is requesting approval to submit an application under the GHG Reduction Pathway Feasibility Study.

## RECOMMENDATION

That the Standing Policy Committee on Environment, Utilities, and Corporate Services recommend to City Council:

1. That City Council approve and direct the Administration to submit an application to the Federation of Canadian Municipalities Green Municipal Fund under the Community Buildings Retrofit initiative;
2. That, if successful, the Mayor and City Clerk be authorized to execute the agreement from FCM under the Corporate Seal;
3. That City Council approval provides evidence of municipal support and acknowledgement of eligibility limitations (see Attachment 1); and
4. That, if successful, approved sources of funding from P.10031 Deep Energy Retrofits Feasibility Study will provide the required matching funds.

## BACKGROUND

At the 2022/23 Preliminary Corporate Business Plan and Budget Meeting, capital funding was approved for the Deep Energy Retrofits Feasibility Study business case. The business case included the Civic Building Feasibility Study Report, Implementation Plan and Phased Strategy that was approved for $160,000 funding in 2023.

At its meeting held on August 26, 2019, City Council received The LEC Plan and resolved in part:

> 1. That engagement with the Community and Stakeholders is undertaken to further advance planning and to develop comprehensive implementation strategies for preliminary initiatives included in the LEC Plan.

Action 2 of the LEC plan states: Perform deep energy retrofits on municipal buildings. The target from the LEC Plan is:

- By 2031, 60% of municipal buildings are retrofitted to target Passive House standards; and

- By 2050, 100% of municipal buildings are retrofitted to target Passive House standards.

The LEC Plan Model estimates that implementation of Action 2 would result in 175,000 tonnes $CO_2e$ reduction cumulative from 2020 to 2050.

The development of a Deep Retrofit Program aligns with the sequence identified in the LEC, as indicated here:

1. Reduce Energy Consumption
2. Improve Energy Efficiency
3. Switch to Renewable Energy Supply

## DISCUSSION/ANALYSIS

The City of Saskatoon (City) owns and maintains a variety of facilities including, but not limited to, recreational buildings, administrative offices, community centres, fire halls, and operation centres. To address growing concerns regarding climate change and sustainability, the City has committed to a corporate reduction in greenhouse gas (GHG) emissions of 40% (below 2014 levels) by 2023 and an 80% reduction by 2050.

The entire portfolio of buildings is 335,400$m^2$ and subsequently consumes large amounts of energy and accounts for 18% of the corporate GHG emissions. There are significant opportunities within this portfolio of buildings where upgrades could be made that would reduce energy consumption and GHG emissions. These opportunities can be defined as deep retrofits.

A deep retrofit can be defined as:

> .. as a whole-building analysis and construction process that aims at achieving on-site energy use minimization in a building by 50% or more compared to the baseline energy use…[1]

The FCM Community Buildings Retrofit initiative was created for municipalities and their partners to renovate and upgrade community buildings. The goal of the initiative is to reduce GHG emissions, lower operating costs, and provide better quality buildings. The GHG Reduction Pathway Feasibility Study grant aims to reduce GHG emissions by at least 50% compared to the baseline of the building within 10 years, and by at least 80% within 20 years. The study will identify a sequence of measures to achieve these targets, as well as consider unique objectives and constraints the City may have, including coordination with the City's asset management planning and the Civic Building Comprehensive Maintenance Reserve. Appendix 1 is an excerpt from the Community Buildings Retrofit Application Guide, that contains the eligibility criteria for the study.

Application to the GMF is a two-step process. The first step is to fill out a pre-application form. This form will include the preliminary list of buildings that will be

[1] https://en.wikipedia.org/wiki/Deep_energy_retrofit

included in the project. This list can be found in Appendix 2. GMF staff will review the application for eligibility, and if successful, the City will move onto the full application stage. The full application will require more in-depth information, including a letter confirming sources of funding, confirmation of consultation with the provincial government, and evidence of municipal support. Once the full application is submitted, a funding decision is expected within three to five months. The full application is planned for submission in Q2 2023.

If the City is successful, it is expected that an external consultant will be hired to complete a thorough feasibility analysis of opportunities for deep energy retrofits within existing civic facilities. The study would compare different retrofit options with analysis of long-term financial, economic, and environmental benefits and impacts. The report would also identify known barriers to implementation.

Deep retrofits for civic facilities not only align with the City's LEC plan, but also with the Canadian Green Building Strategy. The goal of the federal strategy is to have a net-zero emissions and climate-resilient building sector by 2050, with the interim goal of 37% emissions reduction from 2005 levels by 2030. To achieve these goals, all orders of government, the private sector, communities, and individuals will need to participate. The feasibility study report generated from this project will outline a pathway for the City to reach the GHG reduction targets, while also taking into consideration capital planning and asset management.

## FINANCIAL IMPLICATIONS

The Community Buildings Retrofit initiative provides up to 80% of eligible costs up to a maximum of $200,000 for a portfolio of buildings, the average per building cannot exceed $65,000. Funding of $160,000 was approved for this project during the 2022/23 budget cycle, making the potential total project value $360,000.

## TRIPLE BOTTOM LINE IMPLICATIONS

Upon approval of this initiative, the project team will complete a Triple Bottom Line (TBL) Assessment using the City's TBL Decision Making Tool. A full TBL assessment will help identify opportunities to achieve higher TBL outcomes in the feasibility study and provide greater alignment with the TBL principles.

## OTHER IMPLICATIONS

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

## NEXT STEPS

Administration will prepare and submit the pre-application to FCM under the GHG Reduction Pathway Feasibility Study, and if successful, the full application. Should the City be successful in both applications, Administration is recommending that the Mayor and City Clerk be authorized to execute the agreement from FCM. Administration will then proceed with the Deep Retrofits Feasibility Study work. Following the completion of the feasibility study, a decision can be made to proceed with an application to the

GHG reduction pathway retrofit capital projects stream under FCM's Community Buildings Retrofit initiative.

## APPENDICES

1. Community Buildings Retrofit Eligibility Criteria
2. List of Civic Facilities

Report Approval

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| Written by: | Mallory Gellner, Project Engineer |
| | Kathryn Theede, Manager, Energy and Sustainability Engineering |
| Reviewed by: | Jeremy Meinema, Senior Financial Business Partner, Finance |
| | Troy LaFreniere, Director of Facilities Management |
| | Mike Jordan, Chief Public Policy and Government Relations Officer |
| | Jeanna South, Director of Sustainability |
| Approved by: | Angela Gardiner, General Manager, Utilities and Environment |