



The Corporation of the City of Courtenay

Staff Report

To: Council

File No.: 5335-20

From: Director of Infrastructure and Environmental Engineering

Date: October 23, 2024

Subject: Corporate Facilities Energy Management Plan Grant Support

PURPOSE:

To update Council on the Corporate Facilities Energy Management Plan and seek support for grant applications for the project.

BACKGROUND:

The Corporate Facilities Energy Management Plan (CFEMP) seeks to develop a strategic roadmap to reduce greenhouse gas (GHG) emissions from City of Courtenay buildings to meet GHG reduction targets. The BC government has legislated targets to reduce GHG emissions, relative to a 2007 baseline. This roadmap will identify opportunities for upgrades and retrofits to improve energy efficiency, reduce energy consumption, and move away from fossil fuels where possible.

The City of Courtenay signed onto the Climate Action Charter in 2007, and identified climate change as a priority for action in the Official Community Plan (OCP), adopted in 2022. Courtenay is a participating municipality in the provincial Local Government Climate Action Program (LGCAP) administered by the BC Climate Action Secretariat. It is also a 2023-2026 council strategic priority to update the Corporate Climate Action Plan. The development of the CFEMP will inform the Corporate Climate Action Plan update to reduce GHG emissions from City of Courtenay facilities.

Prism Engineering was selected to develop the CFEMP through a competitive RFP process. Prism Engineering is an industry leader in energy management and building retrofit projects across Western Canada. The project scope includes all facilities owned and operated by the City of Courtenay, which represents approximately 40 buildings. These facilities range from small auxiliary buildings like public washrooms and park shelters, to large facilities like the Lewis Centre, Native Sons Hall, and City Hall. Prism has proposed an approach to ensure that the level of analysis is appropriate for the complexity of the facility, and is aligned with standards outlined by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE). ASHRAE standards are widely referenced in Building Codes across Canada.

It is proposed that large buildings with complex energy systems, and high GHG emissions will undergo detailed ASHRAE Level 2 energy assessments. This ensures the City will have the information required to proceed with retrofit projects that can offer the greatest GHG reductions. Small buildings, with simple energy systems and few GHG emissions will undergo less detailed ASHRAE Level 1 energy assessments.

It is anticipated that the Corporate Facilities Energy Management Plan will be completed by Summer 2025, with building retrofits and upgrades to follow.

DISCUSSION:

The development of the CFEMP is funded by the provincial Local Government Climate Action Program (LGCAP). This program provides funds to local governments to support climate initiatives that reduce emissions and prepare for climate impacts. These LGCAP funds can be used for planning initiatives and capital investments to reduce GHG emissions.

The CFEMP is also eligible for funding from the Green Municipal Fund (GMF) from the Federation of Canadian Municipalities (FCM) and BC Hydro's Integrated Energy Audit program. If funding is secured from these programs, the provincial LGCAP funds could be reallocated to other climate action initiatives at the City of Courtenay, allowing us to accomplish more.

Federation of Canadian Municipalities Funding

The GMF Community Buildings Retrofit grant for the GHG Reduction Pathway Feasibility Study covers 80% of eligible study costs up to a maximum of \$200,000. The funding is intended to help municipalities integrate reductions in emissions and energy use into long-term plans for managing municipal buildings. Funding applications are accepted for this program year-round until all funding has been allocated. It is proposed that this funding support the completion of detailed ASHRAE Level 2 energy assessments for complex facilities.

Project work completed prior to submitting a GMF application is ineligible for funding, so the application submission work has been prioritized. Staff have submitted a pre-application to the GMF program to complete the first step in securing the funding. The FCM has invited the City to complete a full application for the CFEMP. Council support for application to this funding stream is a requirement of the submission.

BC Hydro Funding

Funding under the BC Hydro Integrated Energy Audit program provides 100% of the study costs up to \$100,000. This program is intended to identify major areas of energy usage and systems that offer the best opportunities for improved efficiency, energy demand reduction and electrification. It is proposed that this funding support the completion of all ASHRAE Level 1 energy assessments of simple facilities.

The application is submitted through the City of Courtenay's key account manager at BC Hydro.

POLICY ANALYSIS:

The British Columbia provincial government has legislated greenhouse gas reduction targets for the years 2030, 2040, and 2050 under the Climate Change Accountability Act. The City of Courtenay's Official Community Plan also has set goals for greenhouse gas reduction. The Corporate Facilities Energy Management Plan seeks to develop a detailed implementation plan to meet these targets.

FINANCIAL IMPLICATIONS:

The Corporate Facilities Energy Management Plan is estimated to cost \$264,788. If successful, grants from both BC Hydro, and FCM could cover \$222,078 of the project costs. The remaining fees, estimated to be \$42,710, would be covered by provincial LGCAP funds. The following table summarizes the financial implications associated with each source of funding.

Funding Source	Total Fees (\$)	Funding Opportunity (%)	Funding Opportunity (\$)	Remaining Fees (\$)
BC Hydro Integrated Energy Audits (Level 1 Energy Assessments)	\$ 51,240	100%	\$ 51,240	\$ 0
FCM's Green Municipal Fund (Level 2 Energy Assessments)	\$ 213,548	80%	\$ 170,838	\$ 42,710
Project Total	\$ 264,788	-	\$ 222,078	\$ 42,710

In the 2024-2028 Financial Plan the Corporate Facilities Energy Management special project was identified with a budget of \$269,000 funded through LGCAP funds. The Corporate Facilities Energy Management Plan Project is not changing it is simply seeking grants to supplement the project and free up LGCAP funds for future implementation items.

ADMINISTRATIVE IMPLICATIONS:

Infrastructure and Environmental Engineering will lead the development of the Corporate Facilities Energy Management plan with support from the consultants, Prism Engineering. The development of the plan is supported by Civic Properties Services, the Fire Department, and Recreation Facilities Operations.

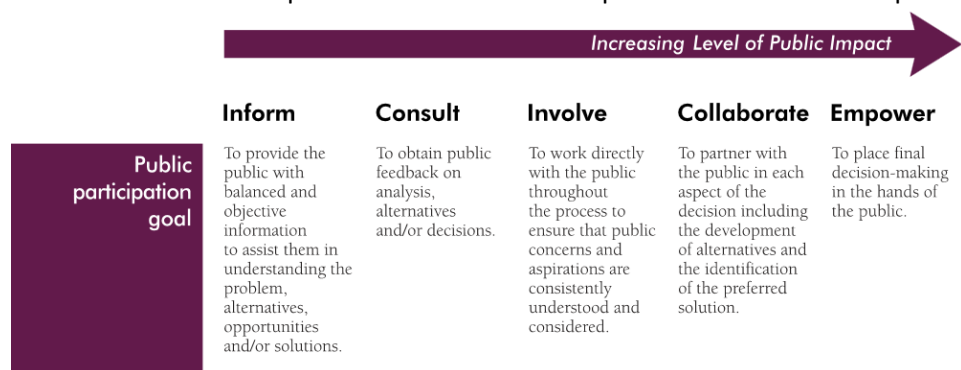
STRATEGIC PRIORITIES REFERENCE:

This initiative addresses the following strategic priorities:

- Natural Environment - Integrate climate change commitment into our governance work: Update Corporate Climate Action Plan
- Natural Environment - Integrate climate change commitment into our governance work: Include climate change lens in staff reports
- Social Infrastructure - Develop measures and criteria to track progress for the OCP's four cardinal directions: reconciliation, community well-being, equity, and climate action

PUBLIC ENGAGEMENT:

Staff would inform the public based on the IAP2 Spectrum of Public Participation:



OPTIONS:

Motion 1: Federation of Canadian Municipalities

1. THAT Council direct staff to submit a full application to the Federation of Canadian Municipalities Green Municipal Fund to support the development of the Corporate Facilities Energy Management Plan.
2. THAT Council provide alternative direction to staff.

Motion 2: BC Hydro

1. THAT Council direct staff to submit an application to BC Hydro's Integrated Energy Audit funding program, to support the development of the Corporate Facilities Energy Management Plan.
2. THAT Council provide alternative direction to staff.

ATTACHMENTS:

1. Presentation – CFEMP Grant Support

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