

SCHEDULE F – PROJECT COMPLETION REPORT TEMPLATE

VERY IMPORTANT:

Timing: You need to email a report, to your GMF project officer (contact info is in Schedule C), on the dates indicated in Schedule C or whenever FCM asks for such a report.

Copyright: Before you submit a report to FCM, make sure you hold the copyright for the report. If you're hiring a consultant to prepare the report, please make sure to get the copyright (see FCM's copyright tips document), or else FCM will not be able to disburse the Grant Amount.

Accessibility for people with disabilities: Please do not change the format, font, layout, etc. of this report. This template has been specially designed, following FCM's Accessibility Guidelines, in order to be accessible to people with disabilities.

Confidentiality: If your report contains any Confidential Information that you would prefer not be made available to the public (e.g. through a case study or other materials produced by FCM that relate to your Project), please submit two versions of the report:

- 1. Complete report including Confidential Information:** Please clearly label this report with the word "**Confidential**" or similar wording and FCM will treat it as confidential.
- 2. Abridged report excluding Confidential Information:** This report may be posted on the FCM website and otherwise made available to interested third parties, to help FCM meet its knowledge sharing objectives.

Please contact your project officer to receive an electronic copy of the Completion Report Template.

Upon completion of the project, a copy of the Final Deliverable must be submitted along with this Completion Report.

FCM will post your report on the [Green Municipal Fund™ \(GMF\) website](#). This is because one of FCM's mandates is to help municipal governments share their knowledge and expertise regarding municipal environmental projects, plans and studies.

How to complete the Completion Report

The purpose of the Completion Report is to share the story of your community's experience in undertaking your project with others seeking to address similar issues in their own communities.

Please write the report in plain language that can be understood by people who are not specialists on the subject. A Completion Report is typically in the range of 5–10 pages, but may be longer or shorter, depending on the complexity of the project.

GMF grant recipients must enclose **final** copies of the Completion Report and the Final Deliverable with their final Request for Contribution. The reports, including all attachments and appendices, must be submitted in PDF format with searchable text functionality. Reports that are not clearly identifiable as final reports, such as those displaying headers, footers, titles or watermarks containing terms like "draft" or "for internal use only," will not be accepted by GMF. Additionally, reports must be dated. If you have questions about completing this report, please consult GMF staff.

GMF number	GMF 16859
Name of lead applicant (municipality or other partner)	City of Welland
Name, title, full address, phone, fax and e-mail address of lead technical contact for this study	Adam Eckhart, Fire Chief 636 King St. Welland, ON L3B 3L1 Adam.eckhart@welland.ca
Date of the report	November 29, 2021

1. Introduction

- a) Who was involved in doing the Feasibility Study, and what are their affiliations? Please include name, title and contact information. Those involved could include municipal staff, engineers and other consultants, a representative from a non-governmental organization, and others.

The City hired the Project Management Firm, Mettko and the experienced design team from Pratus Group Inc. to develop the current Feasibility Study and Return On Investment assessment.

2. The Feasibility Study

- a) Describe the process that you undertook to make this feasibility study a reality, from concept, to council approval, to RFP, to final deliverable.
- Concept and idea development with Senior Leadership Team
 - Modeling considerations and research, no examples to this scale, opportunity to navigate the initiative. Every community has firehalls, could make a big difference in having examples to learn from and replicate to meet local needs
 - RFP for Project Management firm, feasibility team
 - Meetings with community college and local businesses as part of research for concept
 - Energy model and Return On Investment showed a viable path forward when considering the initial cost versus the long term operating/energy costs.
- b) What were the objectives of the Feasibility Study (what was it seeking to determine)?
The viability of various energy modelling as compared to costs of building energy efficient vs long-term cost to operate.
- c) What approach (or methodology) was used in the Feasibility Study to meet these objectives?
Balance of cost to construct versus energy savings, while considering the annual and short-term replacement costs.
- d) Please describe any public consultations conducted as part of the Feasibility Study and their impact on the Study.
No specific public input, but rather the input gathered during other projects where the public identified their support for environmental initiatives and cost savings through energy use reduction.

3. Feasibility Study Findings and Recommendations

- a) What were the environmental findings related to the options explored in the Feasibility Study? Please provide quantitative results and summary tables of these results (or the page numbers from the Feasibility Study report).
The proposal is comprehensive and was adopted to support a 75% improvement beyond the recommendations in the National Energy Code 2015 edition. Designs included using ISI panels instead of conventional framing techniques, window design features consider the summer/winter solar gain potentials and a variety of low energy fixtures and appliances installed throughout the

building. Garage doors are responsible for a considerable amount of heat loss in the winter and modern doors and truck bay designs were included to reduce the amount of energy that is used to offset this usage.

- b) What were the financial findings related to the options explored in the Feasibility Study (for example, results of a cost-benefit analysis, financial savings identified, and so on)? Please provide quantitative results and summary tables of these results (or the page numbers from the Feasibility Study report).

Page 40 of the Energy Study and ROI document shows an impressive reduction on electricity, gas and Green House Gas emissions.

- c) Based on the environmental and financial findings above, what does the Feasibility Study recommend?

A bundled approach to implement several changes in design, building materials, efficient fixtures, and equipment that support an energy efficient building.

4. Lead Applicant's Next Steps

- a) Taking the Feasibility Study's recommendations into account, what next steps do you as the municipality plan to take? What potential benefits or internal municipal improvements would result from these next steps?

The municipality has begun construction of the fire station, using the feasibility as its decision making guide. We continue to find local suppliers, vendors and contractors to support the economy and reduce the carbon footprint of larger supply networks. We have developed partnerships with the local Conservation Authority, and Community College to help remediate and naturalize a large portion of our Brownfield, and have crafted a large berm, that will also reduce sound disturbances from impacting the nearby residents.

5. Lessons Learned

In answering the questions in this section, please consider all aspects of undertaking the Study — from the initial planning through each essential task until the Final Study was prepared.

- a) What would you recommend to other municipalities interested in doing a similar Feasibility Study? What would you do differently if you were to do this again?

I encourage all municipalities to complete a Feasibility Study, the information provided supports good decision making and can help to allocate available funds to promote an energy efficient building that supports the environmental and economic health of our community for years to come. No changes, in fact, the data provided in the study was very helpful and has been included in the construction of another fire station as well.

- b) What barriers or challenges (if any) did you encounter in doing this Feasibility Study? How did you overcome them?

The decision-making process was the most difficult, where to prioritize available funds. We opted to build a smaller building, sharing spaces, and making rooms flexible to support various tasks. Although this will lead to some minor operational changes it does support the improvements and quality of construction.

6. Knowledge Sharing

- a) Is there a website where more information about the Feasibility Study can be found? If so, please provide the relevant URL.

City of Welland is redeveloping their website, a Fire Station webpage is planned, where the study and building performance will be shared. As well as, other operation information.

- b) In addition to the Feasibility Study results, has your Feasibility Study led to other activities that could be of interest to another municipality (for example, a new policy for sustainable community development, a series of model by-laws, the design of a new operating practice, a manual on public consultation or a measurement tool to assess progress in moving toward greater sustainability)? If so, please list these outcomes, and include copies of the relevant documents (or website links).

We have adopted energy efficiencies priorities in building designs and retrofit projects across the City. Our senior leadership team has identified the value of prioritizing energy use and building quality at the time of construction to prioritize the long-term operating and energy use demands.

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This project was carried out with assistance from the Green Municipal Fund, a Fund financed by the Government of Canada and administered by the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.