

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), otherwise 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	GMF17560
Name of lead applicant (municipality or municipal partner)	Corporation of the City of Thunder Bay
Name, title, full address, phone, fax and e-mail address of lead technical contact for this study	<p>Summer Stevenson Sustainability Coordinator, City of Thunder Bay</p> <p>111 Syndicate Ave S Victoriaville Civic Centre, 2nd Floor PO Box 800 P7C 5K4</p> <p>P: 807-627-7268 F: 807-625-3588 E: summer.stevenson@thunderbay.ca</p>
Date of the report	July 26, 2022
Type of study (Feasibility study or Program Design study)	Feasibility Study

1. Introduction

- a) Who was involved in doing the 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 following table includes the municipal staff who participated on the Project Advisory Team and the main contact for the consulting team. It does not include stakeholders who participated during the engagement period. Details regarding stakeholder engagement are included in the Stakeholder Engagement Report and summarized in question two.

Name	Title	Affiliation	Contact
City of Thunder Bay Project Advisory Team			
Summer Stevenson	Sustainability Coordinator	City of Thunder Bay	Summer.Stevenson@thunderbay.ca
Kerri Marshall	General Manager – Infrastructure & Operations	City of Thunder Bay	Kerri.Marshall@thunderbay.ca
Kathleen Cannon	Director – Revenue	City of Thunder Bay	Kathleen.Cannon@thunderbay.ca
Emma Westover	Director – Financial Services	City of Thunder Bay	Emma.Westover@thunderbay.ca
Penny Kok	Director – Building Services	City of Thunder Bay	Penny.Kok@thunderbay.ca
Amy Coomes	Project Manager – Infrastructure & Operations	City of Thunder Bay	Amy.Coomes@thunderbay.ca
Mike Grimaldi	Solicitor	City of Thunder Bay	Michael.Grimaldi@thunderbay.ca
Consultant – Enerva Energy Solutions Inc			
Parminder Sandhu	Executive Chair	Enerva	psandhu@enerva.ca

2. The Study

- a) Please summarize the overall objectives of your study and the key activities or approaches you undertook to meet these objectives.

The primary objective of this feasibility study was to examine the feasibility of implementing a financing program in Thunder Bay in order to address the high upfront cost burden of undertaking home energy efficiency retrofits. In addition, this study aimed to identify the market potential for building retrofits, determine local readiness and support for a residential retrofit financing program, and recommend a preferred financing option for the City and community.

The feasibility study followed the key phases of program planning for community efficiency financing as outlined in FCM's "How to plan a home upgrade financing program" factsheet. The objectives and key activities of each phase are identified below:

- **Phase 1: Goal Setting and Capacity Building**
 - *Objectives:* Build internal capacity and establish shared goals.
 - *Key Activities:* Establish internal Project Advisory Team; Co-create project Terms of Reference and Request for Proposals; Retrofit Program Best Practices Review; and Goals & Roles Workshop.
- **Phase 2: Landscape Assessment**
 - *Objectives:* Determine the technical challenges and opportunities of completing residential retrofits in Thunder Bay.
 - *Key Activities:* Technical assessment of local housing stock; cost-benefit analysis of retrofit measures; review of local building sector capacity; assessment of existing policies and programs; Risk Assessment Workshop for municipal staff; and culminating Landscape Assessment Synthesis Report.
- **Phase 3: Stakeholder Engagement**
 - *Objectives:* Gather market insights, gather market data, and identify community priorities.
 - *Secondary Objectives:* Raise awareness of the benefits of home energy retrofits; build capacity of key players within the community (i.e. contractors, energy advisors, deliver agents, etc.); and, improve the climate literacy of stakeholders.
 - *Key Activities:* Co-create Engagement and Communications Plans; Online engagement portal; Online public survey; and one-on-one interviews.
- **Phase 4: Program Approach**
 - *Objectives:* Identify preferred financing model.
 - *Key Activities:* Evaluation of financing models and funding sources; assessment of potential delivery models; and the Final Report.

- b) Please describe any public or internal consultations or workshops conducted as part of the Study and their impact on the Study.

A brief summary of the stakeholder engagement completed during this study is provided below. For more details please review the Stakeholder Engagement Report that was completed during this Study. The report includes a review of the activities, methodology, and techniques used to engage key stakeholder groups within the community.

Internal Consultation

At the onset of the project, an internal Project Advisory Team (PAT) was formed in order to begin building internal capacity, improve climate literacy, and establish a shared understanding of the project and its role in the larger picture of the Thunder Bay Net-Zero Strategy and the community's decarbonisation efforts.

The mandate of the PAT was to provide area specific expertise and assist the Project Coordinator with developing the project scope, goals, and objectives, and identify the opportunities and challenges that may arise during the development of a community efficiency financing program. Members of the advisory team are considered to have an interest in the issues and potential solutions within the scope of the feasibility study. A list of members is included in question one.

Four meetings/workshops were held with the PAT:

1. October 5, 2021: Introduction & Approving the TOR/RFP
2. February 2, 2022: Goals & Roles Workshop
3. March 7, 2022: Risk Assessment Workshop
4. June 14, 2022: Key Findings & Project Close

Feedback provided by the PAT during consultation was critical when identifying a preferred financing option. The PAT identified a current lack of capacity to support the financial administration requirements of a Local Improvement Charge program and the difficulty in securing support for hiring additional municipal staff. The PAT also determined the top three goals for the Study: (1) information gathering, (2) GHG reductions, and (3) equity. These findings informed the recommendation of pursuing a third-party financing model as it reduces the administrative burden on the municipality, is resilient to changes in government funding, and can scaled up quicker resulting in more GHG reductions faster.

External (Public) Consultation

A project page was created and published on the City of Thunder Bay's "Get Involved" citizen engagement portal in February 2022 (access here: <https://getinvolvedthunderbay.ca/community-efficiency-financing-feasibility-study>). This page includes information about the project and the results of the project. During the public engagement window in May 2022, the page included an online public survey and registration page for two virtual information sessions.

151 residents participated in the online survey and six participated in the information sessions. The survey reveals that homeowners in Thunder Bay are interested in, or open to learning more about, a City supported community efficiency financing program. In addition, 80% of respondents are considering a home renovation and 77% would consider improving home energy efficiency within the scope of renovation. These results suggest that there is community support and interest in a financing program.

In addition, there was targeted consultation in the form of one-on-one interviews with contractors, the local college, lenders, utilities, regional municipalities, and environmental community groups. The key findings from these consultations, and their resulting impact on the study, are as follows:

- **Contractors:** Feedback from local contractors showed interest in providing energy efficiency services through a local program. While there is some local capacity to complete projects in a timely and efficient manner, it was emphasized by the trade associations that current market demand for general renovations is high. Therefore, contractors are too busy to participate in training and educational programs to develop specific skills in energy efficiency. The Feasibility Study highlights that support will be required to build up contractor capacity.
- **Confederation College:** During the study window, it was announced that Confederation College received \$681,000 from Natural Resources Canada to help recruit, train, and mentor new energy advisors for northern Ontario. The Project Officers of the fund indicated interest in participating in future phases of the program. This funding will assist with addressing the current energy auditor gap in Thunder Bay, as identified during consultation with a local environmental group.
- **Lenders:** Two local credit unions participated in interviews to discuss opportunities for a community efficiency financing program. Both lenders indicated that there would be challenges approving mortgage holders looking to participate in an LIC program. As property tax liens take "first position" during a default, lenders are hesitant to approve participation. When combined with the difficulties posed by CMHC insurance requirements, an LIC program may be limited to homeowners who do

not hold a mortgage. Although this challenge was identified, both lenders expressed interest in collaborating to explore third-party lending options.

- *Utilities:* The Local Distribution Company participated on the consultant team to provide support with electrification scenarios. The LDC indicated that it was unlikely they would be able to support an on-bill financing model. This ruled out on-bill financing from consideration.
- *Regional Municipalities:* During consultation with the local credit unions, lenders posed the question of regional collaboration opportunities. As credit unions often serve more than just one community, there is a significant opportunity for smaller municipalities in the region to benefit from the same financial offering. To explore a regional approach, an informal Northern Ontario Retrofit Financing Group was created with representatives from Thunder Bay, Sault Ste Marie, Sudbury, and Timmins.
- *Environmental Groups:* EcoSuperior, a local environmental not-for-profit, and the EarthCare Advisory Committee, an advisory committee of City Council, were consulted during the study. EcoSuperior currently delivers energy auditing services for existing utility incentive programs. They are the only organization in Thunder Bay that provides regular energy audits. EcoSuperior provided a great deal of insight into the current incentive landscape and expressed interest in exploring opportunities for third-party service delivery.

3. **Feasibility Study only: Elements of a Feasibility Study**

- a) Please provide the page numbers from the Feasibility Study report for the following program design elements. If the design element is not in the report, please provide a description of the element.

Elements of a Feasibility Study	Page numbers from the Feasibility Study report or description of the feasibility element
A baseline assessment of a community's housing stock and energy upgrade potential, including assessing building types, energy use profiles and opportunities for energy upgrades to support GHG emissions reductions.	Included in section 2.0 Landscape Assessment (p. 10-16) of the Feasibility Study Report. Further details can be found in the Landscape Assessment Report and Archetype Modelling Tables, both of which are provided to FCM. The modelling tables are confidential.
Potential uptake of home energy upgrades in terms of the number of anticipated projects and level of investment required	Conservative uptake forecasting on p. 13 & p. 38. Level of investment estimate on p. 29.
Expected environmental, social and economic benefits that could be achieved from these projects	Environmental benefits included on p. 12. Social benefits included on p. 12 & p. 14. Economic benefits can be extrapolated based on information provided on p. 13. Additional commentary on expected environmental, social and economic benefits can be found in the Landscape Assessment Report and Best Practices Review, both of which are provided to FCM.
Homeowner barriers to energy efficiency and renewable energy upgrades and to participation in	Brief overview of barriers on p. 15.

existing efficiency programs, such as those offered by a utility company or regional efficiency agency	Review of barriers is also included in the Best Practices Review provided to FCM.
Evaluation of relevant financing models for your local context	Included in section 3.0 Repayment Mechanism Evaluation (p. 18 – 21) of the Feasibility Study Report.
Engagement with key municipal and external stakeholders on shared goals for a local program	Engagement overview included in section 5.0 Stakeholder Engagement (p. 32 – 35) of the Feasibility Study Report. Further details can be found in the Stakeholder Engagement Report provided to FCM.

4. Program Design Study only: Elements of a Program Design Study

Please provide the page numbers from the Program Design report for the following program design elements. If the design element is not in the report, please provide a description of the element.

Elements of a Program Design Study	Page numbers from the Program Design report or description of the design element
Target audience (e.g. housing stock, socio-economic groups, etc.)	N/A
Participant eligibility criteria	
Eligible energy measures, and non-energy measures if relevant	
Funding sources and budget	
Recommended financing model	
Financing terms and conditions	
De-risking strategies (e.g. credit assessment, municipal loan loss reserve and partial loan guarantee for third-party lenders)	
Program delivery model	
Application of the EnerGuide Rating System and relevant requirements for program participants	
Integration with other relevant incentive programs	
Consumer protection measures	
Marketing and communications strategies	
Workforce training needs	
Program implementation plan	
Stakeholder roles and responsibilities	
Client journey and application process	
Program process flow diagrams	
Program monitoring and evaluation	
Risk identification and management strategies	
Contracting and procurement	

5. Lead Applicant's Next Steps

- a) Taking the Study's recommendations into account, what next steps do you, as the municipality or municipal partner, plan to take? What barriers or challenges do you anticipate with these next steps, and how might these be overcome?

On July 18, 2022 Thunder Bay City Council passed the following resolution (relevant excerpt):

WITH RESPECT to Report R 113/2022 (Infrastructure & Operations), we recommend that Administration be directed to prepare and submit an application to the Federation of Canadian Municipalities' Green Municipal Fund for a Program Design Study to support the creation of a Home Energy Improvement Loan Program in the City of Thunder Bay;

AND THAT the City explore opportunities to collaborate on a regional third-party financing program with other municipalities in Northern Ontario.

With Council approval we will begin preparing for the Program Design phase by drafting a scope of work and including language regarding the recommended third-party financing model and regional collaboration prior to applying for funding. This stage will include assembling a steering committee with relevant stakeholders and outreach to both credit unions and regional municipalities. It is likely that we will engage a similar "Request for Information" approach as outlined by Durham Region's program design learnings.

The Program Design phase requires intentional and specific engagement with contractors, lenders, EnerGuide service organizations, and community members. It will be crucial to engage with under-represented and equity-deserving groups to ensure that equity is built in from the onset (#3 goal as identified by the PAT). This will be challenging given current internal capacity. External support will be required.

There are a number of logistical and administrative challenges present when considering how to plan for a regional approach. Close collaboration with the large municipalities in Northern Ontario and FCM will help guide this process. The intent is to produce a Program Design that can be easily replicated in similar municipalities, including templates and guidance for those without sustainability staff.

6. 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 report was prepared.

- a) What activities or partnerships were critical to the success of your Study?

The internal Project Advisory Team was critical to the success of this Study. The PAT included representatives from Financial Services, Building Services, and Legal. The PAT not only provided expert advice and feedback to help inform the Study's recommendations, but it also allowed us to establish a shared understanding of community efficiency financing and how it can be used to support the City's climate goals. This group will continue to assist with each phase of the project.

Targeted outreach with local credit unions inspired the formation of the informal Northern Ontario Retrofit Financing group. It is our hope that these partnerships will spur innovation and assist with increasing the uptake of energy efficiency retrofits across Northern Ontario.

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

We continue to experience challenges engaging the community as we emerge from the COVID-19 pandemic. Although the online survey had above-average participation, the virtual information sessions had few participants. Recommendations for improved engagement during the Program Design phase were identified in the Stakeholder Engagement Report.

It was extremely challenging to engage contractors during this Study. Thunder Bay experienced a very late start to spring that coincided with the Study's engagement window. Contractors indicated that they were very busy making up for lost time. To overcome this challenge, interviews were conducted with local trade organizations in order to gain insight into local contractor capacity, opportunities, and challenges.

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

Assembling an internal Project Advisory Team can help secure support and buy-in at the executive leadership level early on in the process. Completing the best practices review exercise internally also helped position this study within the broader context of reducing residential emissions.

If we were to do this study again, I would adjust the contractor engagement window to align with their "slow" season as opposed to attempting to engage them following the spring melt. Although moving contractor outreach to the winter months doesn't guarantee participation, there may be more uptake. Due to the challenges posed by lack of response from contractors, the originally planned "Regional Retrofit Workshop" was not completed.

- d) Do you have a project champion who has been instrumental to the success of the study? If so, please include his or her name, title and contact information, and describe his or her role in the study.

Summer Stevenson was the Project Coordinator on this file and championed the study from the application phase to final study delivery to City Council. In addition to completing the deliverables in Phase 1, Summer assisted the consulting team with public and stakeholder consultations and provided guidance and oversight throughout the study. Summer also coordinated the informal Northern Ontario Retrofit Financing group to support regional collaboration. Contact information can be found above.

7. Knowledge Sharing

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

More information can be found on the project's public engagement page: <https://getinvolvedthunderbay.ca/community-efficiency-financing-feasibility-study>

- b) FCM is developing a Community Efficiency Financing resource library to share tools and best practices on designing and implementing local financing programs for home energy upgrades. In addition to the Study results, has your Study produced any resources or materials that would be useful to share with other communities, such as checklists, toolkits, templates, guidelines, bylaws, videos or information brochures? If so, please attach copies or include the relevant website links.

Any non-confidential deliverables attached to this report can be shared in the CEF resources library.

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