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 <u>Green Municipal Fund™</u> (<u>GMF</u>) <u>website</u>. 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	17565
Name of lead applicant (municipality or municipal partner)	Alberta Ecotrust Foundation
Name, title, full address, phone, fax and e-mail address of lead technical contact for this study	Thor Jensen thor.jsn@gmail.com
Date of the report	May 18, 2022
Type of study (Feasibility study or Program Design study)	Program Design 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.

Alberta Ecotrust Foundation

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City of Edmonton

Wai Tse Ramirez, General Supervisor, Energy Transition, waitse.ramirez@edmonton.ca Abhishek Chakraborti, Sr. Env. Program Manager

Senior Advisors

Monica Curtis, Principal MC Efficiency and Climate Innovation Fund Executive Advisor Areef Abraham, Founder Kambo Energy Group and Founder / President Create Climate Equity

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 overall objective of the Study was to design a residential financing program based on a critical review of other programs' performance and a focus on enabling uptake by the end consumer. The original approach included financing for home energy efficiency through the municipality and an on-utility bill payback option. The initial activities of engaging The City of Calgary administration, legal and finance divisions, and the utilities revealed the flaws in the initial program design proposal, namely: the hesitancy of the municipality to take on additional debt on their ledger; and the utility's view that there was not sufficient evidence of a financing gap to justify their role in capital supply. Based on this feedback, the approach shifted to private

financing through credit unions with municipalities providing direction on measure eligibility and incentives.

The key activities to developing the program design began with extensive research into other jurisdictions program designs and their subsequent impact. The findings from the research were presented to the cities to support their decision on the direction of the final program design study.

Once a direction was selected the program design was developed iteratively with the cities and a draft was presented to stakeholders for feedback. After feedback was incorporated a final round of review with key stakeholders was completed.

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

No public consultations were conducted during this Study.

Internal consultations were conducted as follows:

- Municipalities and utilities on the possibility of financing home retrofit programs. The
 impact of these consultations was significant as the municipalities were not supportive of
 carrying additional debt on their financial books and the utilities were not interested in
 administering a program to recover payments for a loan program
- Contractors on the possibility of expanding their scope of work with customers doing cosmetic home renovations to include energy efficiency as part of the work.
- Credit Unions on the possibility of providing financing and administration for home energy retrofit projects. The impact to the study was profound as the credit unions were supportive of participating.

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.	
Potential uptake of home energy upgrades in terms of the number of anticipated projects and level of investment required	
Expected environmental, social and economic benefits that could be achieved from these projects	
Homeowner barriers to energy efficiency and renewable energy upgrades and to participation in existing efficiency programs, such as those	

offered by a utility company or regional efficiency agency	
Evaluation of relevant financing models for your local context	
Engagement with key municipal and external stakeholders on shared goals for a local program	

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.)	Pages 9-10, 11-12, 48-49, 50
Participant eligibility criteria	Pages 11-12, 46-47
Eligible energy measures, and non-energy measures if relevant	Pages 11-12, 13-14, 19-20, 48-50
Funding sources and budget	Page 22
Recommended financing model	Pages 25-26, 29-30
Financing terms and conditions	Pages 41-44
De-risking strategies (e.g. credit assessment, municipal loan loss reserve and partial loan guarantee for third-party lenders)	Pages 41-44
Program delivery model	Pages 25-26
Application of the EnerGuide Rating System and relevant requirements for program participants	Page 45
Integration with other relevant incentive programs	Page 45
Consumer protection measures	Page 45-47
Marketing and communications strategies	Pages 27-28
Workforce training needs	Pages 37-40
Program implementation plan	Pages 16-22, 57
Stakeholder roles and responsibilities	Pages 25-32
Client journey and application process	Pages 13-14
Program process flow diagrams	Pages 13, 27, 29
Program monitoring and evaluation	Pages 29-32, 45
Risk identification and management strategies	Page 45, 46-47, 52-56
Contracting and procurement	Pages 21-22, 57

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?

As a municipal partner, Alberta Ecotrust Foundation will use the program design study recommendations to inform our work and will consider integrating it into our next Annual Statement of Plans and Objectives and 3 year strategic plan update. We are also developing a Retrofit Accelerator and the program design study will be one tool considered in the products and services offered.

Alberta Ecotrust will also use the program design study recommendations to support the Cities of Calgary and Edmonton in achieving their publicly stated goals and actions around expanding financing (note that CEIP stands for Clean Energy Improvement Program, which is Alberta's version of PACE):

- The City of Calgary, in the council-approved Calgary Climate Strategy, has committed to
 the following action within the next 5 years: "Investigate non-CEIP financing models and
 repayment mechanisms, in collaboration with public and private-sector stakeholders, to
 leverage public and private financing sources to accelerate GHG reductions in residential
 and commercial buildings." The Calgary Climate Strategy was developed concurrently
 with the program design study.
- The City of Edmonton, in the council-approved Community Energy Transition Strategy and Action Plan, has committed to the foundational goal of "Establishing innovative and participatory financing tools" with the strategy to "Access and create innovative and participatory funding mechanisms to support private green investments." Edmonton's Energy Transition Strategy and Action Plan was developed prior to the program design study.

The main barrier to implementing the recommendations within either City is that both recently launched their CEIP which will require staff resources to manage and won't result in any substantive data or learnings for some time (years). The Cities could feasibly begin work on a pilot program based on the program design study within the next 2 - 3 years and would be looking at financing options, including potential credit enhancement through CEF, at that time.

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 partnerships with the teams at both cities were most critical. These partnerships facilitated meetings with other key stakeholders and provided internal navigation of the cities' complex organization. As well the city partners were able to provide updates on the current programs underway.

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

The primary challenge was the change in direction from the original intended project (municipality financed loans repaid on utility bills) after receiving feedback from key stakeholders that this model was not desirable or feasible. The challenge was overcome by relying on the research of programs from other jurisdictions to drive the design of a program that would ultimately be most well received and have the biggest impact. This included adding new stakeholders to the engagement, such as the credit unions.

Another challenge was the timing of the municipal election that took place in October 2021. Municipal administrators are cautious about external communications and engagement prior to

elections and post-elections there is a period of adjustment as new councils and mayors declare their priorities. In the case of the 2021 election, both cities saw new mayors elected as well as several new councillors in each city. This challenge was overcome by delaying engagement.

A third challenge was the proximity and the overlap with the inaugural financing programs being launched in both cities and the necessity to distinguish the goals of this financing program study from the ones currently deployed.

An unexpected challenge was that results of the study conflict with conventional financing program designs, which dictate that lack of financing alone is the biggest barrier. It will take time to socialize the recommended approach to engaging citizens and contractors on energy retrofits. Alberta Ecotrust is committed to sharing the lessons learned from this work to help overcome this barrier. We recently invited the author of the report, Thor Jensen, and City of Calgary representative, Carlee Beaver, to present the study at the Executive Advisory Committee meeting of the Climate Innovation Fund, which includes representation from both city councils, city administration, and industry experts. The presentation sparked lively discussion and many follow-up questions.

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?

Yes, other municipalities can benefit from exploring alternative finance program designs rooted in robust research and analysis. As well, the act of engaging stakeholders serves to build relationships and socialize the concepts of financing for home energy efficiency projects.

Municipalities must be very clear about their primary goal for undertaking a financing program, whether it is greenhouse gas emission reductions, deploying financing, or supporting low and moderate income households. Whether the municipality is targeting a few deep energy retrofits or many shallow upgrades should be clearly stated before starting. The municipality's performance goals will ultimately impact the program design so having that direction set first is helpful.

Municipalities must also be realistic about the potential impact and uptake of financing programs in general when contrasted with the scale of the residential retrofit challenge. In line with setting goals, the program study's desired contribution to the overall climate strategy should be well defined.

Finally, when budgeting for a project with in-kind contributions it is important to confirm what the actual hourly amount will be instead of assuming a value as it will impact the amount of in-kind dollar contributions, even if the hours were estimated accurately.

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.

Carlee Beaver with The City of Calgary was very generous with her time and expertise in the area of financing program development. Her support in managing internal city resources such as communications and engagement on the project as well as navigating the internal processes for approvals was instrumental to the success of the study.

7. Knowledge Sharing

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

There is not currently a website with information about the 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.

No such materials were developed as part of the Study. These materials would likely be developed over the course of a pilot project, as proposed by the Study.

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