

**Report to
Rapport au:**

**Finance and Economic Development Committee
Comité des finances et du développement économique
7 July 2020 / 7 juillet 2020**

**and Council
et au Conseil
15 July 2020 / 15 juillet 2020**

**Submitted on June 23, 2020
Soumis le 23 juin 2020**

**Submitted by
Soumis par:
Don Herweyer,
Director / Directeur**

**Economic Development and Long-Range Planning Services / Services du
Développement économique et de la Planification à long terme
Planning, Infrastructure and Economic Development Department / Direction
générale de la planification, de l'infrastructure et du développement économique**

**Contact Person
Personne ressource:
Janice Ashworth,
Project manager / Gestionnaire de projet, Policy Planning / Politiques de la
planification**

613-580-2424, 27535, janice.ashworth@ottawa.ca

Ward: CITY WIDE / À L'ÉCHELLE DE LA VILLE File Number: ACS2020-PIE-EDP-0020

**SUBJECT: Federation of Canadian Municipalities Funding for a Better Homes
Loan Program to Support Residential Retrofit Projects**

**OBJET: Financement par la Fédération canadienne des municipalités d'un
programme de prêts pour la mise en valeur des habitations destiné à
soutenir les projets de modernisation des bâtiments résidentiels**

REPORT RECOMMENDATIONS

That the Finance and Economic Development Committee recommend that Council:

1. Direct staff to apply to the Federation of Canadian Municipalities (FCM) Green Municipal Fund (GMF) for funding to launch the proposed Better Homes Loan Program attached as Document 1 and as summarized in this report;
2. Approve in principle the Better Homes Loan Program Feasibility Study and Program Design attached as Document 1 and as summarized in this report for the municipality to be eligible for the FCM funding; and
3. If the City is successful in its FCM funding application, direct staff to:
 - a) Report back to Finance and Economic Development Committee (FEDCO) and Council for approval of the final Better Homes Loan Program
 - b) Update the city's current Local Improvement Charge (LIC) policy to include energy efficiency, renewable energy and water conservation in alignment with municipal goals and policies in accordance with provincial legislation; and
 - c) Secure external financing to launch the program, as required.

RECOMMANDATIONS DU RAPPORT

Que le comité permanent du Comité des finances et du développement économique recommande ce qui suit au Conseil :

1. Enjoindre au personnel d'utiliser le Fonds *municipal* vert de la Fédération canadienne des municipalités (FCM) pour financer le lancement du programme de prêts proposé pour la mise en valeur des habitations, ci-joint en tant que document 1 et résumé dans le présent rapport;
2. Donner son approbation de principe à l'étude de faisabilité et à la conception du programme de prêts pour la mise en valeur des habitations, ci-jointes en tant que document 1 et résumées dans le présent rapport, pour que la municipalité soit admissible à un financement de la FCM; et
3. Si la Ville voit sa demande de financement de la FCM acceptée, enjoindre au personnel de :

- a) **rendre compte au Comité des finances et du développement économique et au Conseil en vue de faire approuver la version définitive du programme de prêts pour la mise en valeur des habitations;**
- b) **mettre à jour la politique actuelle de la Ville sur les taxes d'améliorations locales, de manière à inclure le rendement énergétique, l'énergie renouvelable et les économies d'eau, conformément aux objectifs et aux politiques municipales, et à la législation provinciale; et**
- c) **obtenir, au besoin, le financement nécessaire au lancement du programme.**

EXECUTIVE SUMMARY

This report includes:

1. A description of the role residential building retrofits play in meeting Ottawa's target to reduce greenhouse gas (GHG) emissions 100 per cent by 2050;
2. A description of the Local Improvement Charge (LIC) mechanism, relevant legislation and the effectiveness of LICs in driving energy efficiency improvements;
3. A description of the Federation of Canadian Municipalities (FCM) Community Efficiency Financing stream including eligibility and contribution requirements;
4. An overview of the proposed Better Homes Loan Program program, eligibility criteria, application process, program delivery, benefits and potential risks; and
5. Next steps, depending on whether Ottawa is successful in its FCM funding application.

Existing buildings are a large source of GHG emissions in Ottawa, with residential buildings contributing 28 per cent of the GHG emissions in 2018. Since most of these emissions are associated with space heating and water heating, effective emissions reduction programs for Ottawa should focus on reducing and decarbonizing space heating and water heating in residential homes.

FCM Green Municipal Fund (GMF) currently has a call for applications to fund municipal programs that finance energy efficiency retrofits and renewable energy in residents' homes. The fund provides up to \$5 million in grants and \$10 million in loans and partial

loan guarantees to capitalize new and existing innovative efficiency financing programs. If Committee and Council approves in principle the proposed Better Homes Loan Program feasibility study and program design (see recommendation 2), attached as Document 1 and summarized in this report, the City will meet the eligibility criteria.

If successful with an FCM funding application, Ottawa could use the funds to offer financing tied to a property using a Local Improvement Charge (LIC) mechanism under the *Municipal Act (2001)*. This type of mechanism is also commonly referred to as a Property Assessed Clean Energy (PACE) program.

Ottawa's proposed LIC program, called the Better Homes Loan Program, would make it easier and more affordable for homeowners to pay for home energy improvements that contribute to meeting the City's GHG emission reduction targets, create jobs in the contractor, trades, and renovation sectors and make the building stock more comfortable, healthy, and resilient to extreme weather events.

Through the proposed Better Homes Loan Program, Ottawa homeowners could get a low-interest loan of up to 10 per cent of the current value of a home to cover the cost of home energy improvements such as thermal envelope upgrades (basement/attic/exterior wall insulation, window/door replacements), mechanical systems (thermostats and controllers, air/ground source heat pumps, solar hot water systems), renewable energy (solar photovoltaic systems) and electric vehicle chargers (Level 2). The loan would be tied to the property as a lien.

The grant portion of the funding would be used to cover most program delivery costs in the first three years. The loan portion of the funding would be used to flow through to homeowners for the eligible renovations, which they would pay back to the City over the expected life of the asset. An administration fee and slight interest rate rider will be charged to all applicants to cover the cost of program delivery, develop a loan loss reserve fund, and achieve a self-sustaining program model for future years.

The deadline for applications for FCM funding is July 15 and staff expect to be notified of FCM's decision by November 2020. If Ottawa's application is successful, staff will report back to FEDCO and Council with the final Better Homes Loan Program including full program details, financial implications, policy revisions and the implementation plan to launch the Better Homes Loan Program in Q1/Q2 2021.

RÉSUMÉ

Le présent rapport comprend :

1. Une description du rôle que joue la modernisation des bâtiments résidentiels dans l'atteinte de l'objectif d'Ottawa de réduire de *100 pour cent*, d'ici 2050, les émissions de gaz à effet de serre;
2. Une description du mécanisme de financement fondé sur des taxes d'améliorations locales, de la législation pertinente et de l'efficacité de ces taxes pour promouvoir les améliorations en matière d'efficacité énergétique;
3. Une description du flux de financement d'efficacité communautaire de la Fédération canadienne des municipalités (FCM), notamment en matière d'admissibilité et d'exigences de contribution;
4. Un aperçu du programme proposé de prêts pour la mise en valeur des habitations, des critères d'admissibilité, du processus de demande, du déroulement du programme, des avantages et des risques éventuels;
5. Les prochaines étapes, dans le cas où Ottawa obtiendrait un financement de la FCM.

Les bâtiments existants représentent une source importante d'émissions de gaz à effet de serre à Ottawa, les bâtiments résidentiels ayant produit 28 pour cent de ces émissions en 2018. Puisque la plupart de ces émissions sont associées au chauffage des espaces de vie et de l'eau, les programmes de réduction des émissions efficaces pour Ottawa doivent se focaliser sur la réduction et la décarbonisation du chauffage des espaces de vie et de l'eau des résidences.

Le Fonds municipal vert de la FCM est en période d'appel de candidatures afin d'aider les programmes municipaux qui financent les projets de rénovation écoénergétique et d'énergie renouvelable dans les résidences. Ce fonds permet d'accorder des subventions pouvant atteindre 5 millions de dollars et jusqu'à 10 millions de dollars en prêt et en garantie partielle d'emprunt pour capitaliser des programmes novateurs, nouveaux ou existants, de financement de l'efficacité énergétique. Si le Comité et le Conseil donnent leur approbation de principe à l'étude de faisabilité et à la conception du programme de prêts pour la mise en valeur des habitations (se reporter à la recommandation 2), ci-jointes en tant que document 1 et résumées dans le présent rapport, la Ville répondra alors aux critères d'admissibilité.

En cas d'obtention d'un financement de la FCM, Ottawa pourrait utiliser ces fonds pour proposer des subventions aux propriétaires de biens-fonds faisant appel au mécanisme de financement fondé sur des taxes d'améliorations locales en vertu de la *Loi sur les municipalités (2001)*. Ce type de mécanisme est communément appelé programme Property Assessed Clean Energy (PACE).

Le programme de taxes d'améliorations locales proposé par Ottawa, appelé programme de prêts pour la mise en valeur des habitations, rendrait plus faciles et plus abordables pour les propriétaires les améliorations énergétiques résidentielles qui contribuent à atteindre les objectifs de la Ville en matière de réduction d'émissions de GES, créerait des emplois dans les secteurs des entreprises, du commerce et de la rénovation, et rendrait le parc immobilier plus confortable, plus sain et plus résistant aux événements météorologiques extrêmes.

Par le biais du programme de prêts pour la mise en valeur des habitations, les propriétaires d'Ottawa pourraient bénéficier de prêts à faible taux d'intérêt équivalant à 10 pour cent de la valeur de leur habitation pour couvrir le coût de travaux d'améliorations écoénergétiques, comme la rénovation de l'enveloppe thermique (isolation du sous-sol, du grenier et des murs extérieurs, remplacement des portes et des fenêtres), les systèmes mécaniques (thermostats et régulateurs, pompes géothermiques et thermopompes à l'air, systèmes de chauffe-eau solaires), l'énergie renouvelable (systèmes photovoltaïques solaires) et les bornes de recharge pour les véhicules électriques (niveau 2). Ces prêts seraient liés aux propriétés en tant que privilèges.

La partie subventionnée du financement servirait à couvrir l'essentiel des coûts de prestation du programme pendant les trois premières années. La partie prêtée serait quant à elle utilisée par les propriétaires pour effectuer les travaux admissibles, et serait remboursée à la Ville pendant la durée de vie prévue de l'actif. Des frais administratifs et un léger avenant de taux d'intérêt seraient facturés à tous les candidats, pour couvrir les frais de prestation du programme, créer un fonds de réserve pour pertes sur prêts et élaborer pour les années à venir un modèle de programme autofinancé.

La date limite de dépôt des demandes de financement à la FCM est fixée au 15 juillet et le personnel s'attend à connaître la décision de la FCM en novembre 2020. Si la demande d'Ottawa est retenue, le personnel soumettra au Comité des finances et du développement économique et au Conseil la version définitive du programme de prêts pour la mise en valeur des habitations, y compris l'ensemble des détails du programme, les répercussions financières, les révisions de politique et le plan de mise en œuvre permettant le lancement du programme de prêts pour la mise en valeur des habitations au premier ou au deuxième trimestre de 2021.

BACKGROUND

In May 2014 ([ACS2014-COS-ESD-0011](#)) and February 2016 ([ACS2016-COS-ESD-0005](#)), Council received an assessment of Local Improvement Charges (LIC) to finance renewable energy and energy efficiency retrofits in buildings. At the time, staff recommended ongoing review of the program's viability by monitoring programs in other municipalities and consulting with federal and provincial governments on funding opportunities.

In April 2019, Council declared a climate emergency and directed staff to:

- Develop climate change mitigation and adaptation priorities for next five years (2019-2024) to embed climate change considerations across all elements of City business; and
- Work with senior levels of government to accelerate ambition and action to meet the urgency of climate change and provide additional resources for municipalities and the public to reduce their greenhouse gas emissions and build resiliency to climate impacts.

In January 2020, Council approved the Climate Change Master Plan ([ACS2019-PIE-EDP-0053](#)) and set a new target to reduce community greenhouse gas (GHG) emissions 100 per cent by 2050. Council also received a status update on Energy Evolution: Ottawa's Community Energy Transition Strategy which identified a Residential Building Retrofit Accelerator Program as one of 20 priority projects to meet greenhouse gas reduction targets.

DISCUSSION

Rationale

According to the Intergovernmental Panel on Climate Change (IPCC) "rapid, far reaching and unprecedented changes in all aspects of society" are required to avoid catastrophic impacts associated with climate change¹.

The buildings sector is currently the largest contributing sector to greenhouse gas (GHG) emissions in Ottawa and the largest energy consumer. Residential buildings alone contributed 28 per cent of Ottawa's emissions in 2018. Since most of these emissions are associated with space heating and water heating, effective

¹ 10 IPCC Press Release. Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by governments. October 8, 2018.
https://www.ipcc.ch/site/assets/uploads/2018/11/pr_181008_P48_spm_en.pdf

emissions reduction programs for Ottawa should focus on reducing and electrifying space heating and water heating loads in residential homes.

Integrated emissions modeling done through Energy Evolution shows that the residential building stock must be transformed the following ways over the next 30 years to achieve the necessary GHG reductions:

- Residential existing buildings must be retrofit for 70 per cent heating savings and 30 per cent electrical savings at a rate of 27 per cent of buildings by 2030 and 98 per cent by 2040 (or 327,000 single family units);
- 20 per cent of residential roofs must have solar photovoltaic systems (PV), totalling 320 MW by 2050;
- 560,350 residential heat pumps must be installed by 2040; and
- 15 per cent of residential buildings must be served by zero carbon district energy by 2050.

Financial analysis completed through Energy Evolution identifies that significant incremental investment is needed to achieve residential retrofit measures community-wide. The final report on Energy Evolution is expected to go to the Standing Committee on Environmental Protection, Water and Waste Management by the end of 2020.

Due to the scale of the investments, the ownership structure, and the other competing priorities for municipal investments, it is expected that the vast majority of the investments in retrofits will be private investments. There is, however, a role for municipalities to play in catalyzing these investments and driving down the costs to residents while optimizing GHG reductions from the investments. One way to do so is through the Local Improvement Charge (LIC) mechanism.

Local Improvement Charges

Municipalities are uniquely able to offer financing tied to a property using a LIC mechanism under the *Municipal Act (2001)*. Ontario Regulations 322/12 and 323/12, 586/06 and 596/06 authorize municipalities use LICs for improvements in energy efficiency, renewable energy generation and water conservation when it supports municipal goals and policies. Participation is voluntary and only affects one property.

Through an LIC program, municipalities can:

- Enable property owners to improve the comfort and environmental performance of their buildings;

- Target areas in transition or in need of repair, rehabilitation and redevelopment;
- Support appropriate building upgrades through expert advice and oversight;
- Stimulate private investment in property upgrades that reduce energy cost exposure to residents and businesses; and
- Stimulate local job creation in the contractor, trades, and renovation sectors.

To date, programs using LICs or similar mechanisms have been offered in 14 Canadian municipalities and 36 American states to finance green technologies or improvements in homes and commercial buildings. Experience in these municipalities has shown that LIC programs improve energy efficiency by approximately 30 per cent per building retrofit. The Energy Evolution Strategy, appended to CCMP, calls for a 64 per cent energy reduction in residential buildings over business as planned by 2040, therefore this program will be a good start but will need to be strengthened over the coming 20 years to increase the energy reductions realized. A summary of the relevant legislation, existing programs and their effectiveness is included in Document 1.

Role of Local Improvement Charges in Retrofits

The main benefit to the building owner under the LIC financing program is that the repayment of the financing is added to the property tax account and stays with the property. When the property is sold, the new owner continues the LIC payment. From the municipal government perspective, the payment obligation attaches to the benefitting property, not the owner, and is secured by a statutory lien with priority status. Property owners have the option to repay the loan over the term of the agreement or repaying the LIC in full. As governments have access to competitive interest rates, they can pass these along as another benefit to the homeowner through the LIC program. The LIC financing program helps address the following key barriers limiting the uptake of energy retrofits by homeowners:

- Relatively low energy prices, especially natural gas, result in the payback period of a comprehensive energy retrofit being longer than the time a homeowner expects to remain in the home (typically five years);
- Inability to acquire long-term financing or unattractive financing terms from financial institutions;
- Lack of awareness of how to implement a deep energy retrofit;
- Complexity of utility and government incentive programs; and
- Delays between project completion and receipt of incentive payments.

Federation of Canadian Municipalities' Green Municipal Fund

Given that municipalities are uniquely positioned to offer LICs and that experience in other municipalities has demonstrated that LICs have driven energy efficiency improvements and reduced barriers to energy retrofits for homeowners, the Federation of Canadian Municipalities (FCM) has launched a call for applications to fund municipal programs that finance energy efficiency retrofits and renewable energy in residents' homes. Staff recommend that Ottawa submit an application, and if successful, launch a new LIC program called the Better Homes Loan Program to make it easier and more affordable for homeowners to pay for home energy improvements that contribute to meeting the City's GHG emission reduction targets, create jobs in the contractor, trades, and renovation sectors and make the building stock more comfortable, healthy, and resilient to extreme weather events.

Recommendation #1: Direct staff to apply to the Federation of Canadian Municipalities (FCM) Green Municipal Fund (GMF) for funding to launch the proposed Better Homes Loan Program attached as Document 1 and as summarized in this report

The FCM GMF's Community Efficiency Financing stream will fund municipal programs that finance energy efficiency retrofits and renewable energy in existing low-rise residential housing. The fund provides up to \$5 million in grants and \$10 million in loans and partial loan guarantees to capitalize new and existing innovative efficiency financing programs.

If Committee and Council approves in principle the proposed Better Homes Loan Program feasibility study and program design (see recommendation #2), attached as Document 1 and summarized in this report, the City will meet the eligibility criteria. The deadline is July 15, 2020.

Recommendation #2: Approve in principle the Better Homes Loan Program Feasibility Study and Program Design attached as Document 1 and as summarized in this report for the municipality to be eligible for the FCM GMF funding;

Program Overview

The Better Homes Loan Program is intended to make it easier and more affordable for homeowners to pay for home energy improvements that contribute to meeting the City's GHG emission reduction targets.

The grant portion of the funding would be used to cover most program delivery costs in the first three years. Through the proposed Better Homes Loan Program, Ottawa

homeowners could get a low-interest loan of up to 10 per cent of the current value of their home to cover the cost of home energy improvements, such as:

- Thermal envelope upgrades (ex. basement/attic/interior wall insulation, window/door replacements, weather stripping or caulking, etc.);
- Mechanical systems (ex. thermostats and controllers, energy or heat recovery ventilators, air/ground source heat pumps, heat pump, electric water tanks, drain water heat recovery systems, solar hot water systems, etc.);
- Renewable energy and energy storage and electric vehicle (EV) chargers (ex. solar photovoltaic systems, electric vehicle charging stations (Level 2), battery storage devices, associated electrical and load management equipment, etc.);
- Water efficiency (ex. low-flow toilets, hot water circulation pump and system, greywater treatment system, closed-loop shower water recovery system, rainwater harvesting system, etc.);
- Health and safety measures (ex. environmental remediation, electrical wiring and panel upgrades that are required undertakings to permit energy improvements, etc.);
- Climate adaptation improvements (ex. such as back-flow prevention valves, sump pumps, basement waterproofing, permeable pavement, and tree planting); and
- Additional dwellings such as granny suites or basement apartments².

With low fixed interest rates and terms of up to 20-years amortization on qualifying measures, the Better Homes Loan Program would make it easier and more affordable for homeowners to pay for these home improvements over time. Once the loan is approved, homeowners would be able to hire the contractor of their choice and complete their renovations. The minimum loan amount approved is expected to be \$15,000 with at least two retrofit measures required. An overview of program eligibility, application process and program delivery are provided below. Proposed details are attached in Document 1. Approval in principle of this program is required to meet the eligibility requirement.

² Only 30 per cent of the total loan amount for additional dwellings would be eligible under the current FCM offering.

Eligibility

Participation in the proposed program would be voluntary, owner-initiated and available to any owner of a private home in Ottawa that meets the following proposed eligibility requirements:

- Residential, detached, semi-detached, townhouse, residential multi-unit buildings of three storeys or less, that fall under Part 9 of the Ontario Building Code;
- The property must have a property tax account with the City of Ottawa;
- Property tax, utility bills and all other payment obligations to the City of Ottawa for the past five years must be in good standing;
- All registered owner(s) of the property must sign a consent form agreeing to participate in the Program; and
- If required by the loan loss reserve manager, written consent from all mortgage lenders, if the property is subject to one or more mortgages.

Application Process

Eligible homeowners would complete the following steps as part of the proposed Better Homes Loan Program process:

- Submit a pre-qualification application form to confirm eligibility
- Complete a home energy assessment using the EnerGuide Rating System and submit a funding request to make the planned improvements
- Finalize a property owner agreement that confirms the funding for the planned improvements
- Complete the improvements and submit the project completion report
- Repay the loan over time through the property tax bill

Program Delivery

The Better Homes Loan program would be delivered internally. In the first three years, 1.5 new full-time temporary employees would be required to launch and implement the proposed program. Funding to cover the cost of 1.5 temporary employees is proposed as part of the grant portion of the FCM application. An administration fee will be charged to all applicants to contribute to the cost of program delivery, develop a loan loss reserve fund, and achieve a self-sustaining program model for future years.

Staff support to delivery the program will involve:

- Launching the proposed program, including outreach, marketing and stakeholder relations (PIED Climate Change and Resiliency);
- Processing applications (PIED Climate Change and Resiliency);
- Verifying applicant eligibility and creditworthiness (Finance);
- Preparing the LIC by-law (Legal);
- Dispersing funds (Finance); and
- Recording priority lien on the property and collecting repayment (Revenue Services).

Contributions

The maximum FCM contribution to any program is 80 per cent of eligible costs. The City is required to contribute 20 per cent of all program costs through in-kind and cash municipal or community contributions.

The City can leverage existing staff time to fulfill the majority of required in-kind contributions. The City will need to secure up to \$3 million in capital or debt to access up to \$5M in grants and \$10M in low-interest loans from FCM. Staff are still waiting for FCM to finalize the Terms Sheet for the funding agreement, including the term, interest rate, and disbursement timing and balance for the grant and loan portions of the funding agreement. Subject to the final Terms Sheet and further discussions with Finance, staff will recommend how to fund the City's portion of the funding agreement.

Staff have secured a letter of support from VanCity Credit Union to capitalize up to \$3M of the program, but will wait until FCM finalizes the Term Sheet before determining whether or not it is in the best interest of the City to work with a private investor in the short term. In the long term, it may be beneficial to work with private investors to scale up the program.

Benefits

The following benefits are expected with the launch of a Better Homes Loan Program:

- GHG reductions;
- Job creation in the contractor, trades, and renovators' sectors;

- Improved health outcomes from more comfortable, healthier, and more quiet dwellings; and
- More resilient building stock to extreme weather events.

GHG Reductions

Experience in other municipalities has shown that LIC programs improve energy efficiency by approximately 30 per cent per building retrofit. If retrofits completed through the Better Homes Loan Program reduce emissions by 30 per cent, as experienced elsewhere, GHG emissions per household would reduce from an average of 3.6tCO₂e in 2018 to an average 1.1tCO₂e after the retrofit. This is a good start, but to meet the GHG reductions in Energy Evolution, energy reductions per-retrofit will need to increase from the expected 30 per cent with this program, to 64 per cent by 2040.

Job Creation

Reducing energy consumption and promoting the use of renewable energy is already credited with the creation of new green jobs in manufacturing, construction, and trades. Retrofitting homes and buildings increases the demand for various low-carbon and renewable energy technologies while also generating a demand for workers who can perform building upgrades, such as adding insulation, installing building automation systems, or replacing inefficient furnaces. Analysis completed through Energy Evolution shows that retrofits of existing residential buildings has the potential to create approximately 30,000 jobs and one study estimated that 30 job-years of employment will be created for every \$1M invested in energy efficiency³.

The job creation potential associated with renewable energy is equally well established. Canada's clean energy sector is growing faster than the rest of the country's economy (4.8 per cent versus 3.6 per cent annually between 2010 and 2017), while also attracting tens of billions of dollars in investment every year. It's a large and growing employer, accounting for 298,000 jobs in Canada in 2017 which is equal to direct employment in the real estate sector.⁴

Given the scale of potential job creation, the Better Homes Loan Program could support economic recovery efforts. The residential retrofits targeted in Energy Evolution are projected to result in 30,000 jobs over the next 20 years, most of which would be local contractors. This program is a first step towards realizing that job creation which would also maximize the benefit to homeowners from other incentive programs such as the

³ Dunsky Energy Consulting "The Economic Impact of Improved Energy Efficiency in Canada" 2018.

⁴ Clean Energy Canada. (2019). Missing the Bigger Picture: Tracking the Energy Revolution 2019. Accessed on Nov 18, 2019 from <https://cleanenergycanada.org/report/missing-the-bigger-picture/>

utility rebate programs, and the free energy audits promised from the federal government.

Better Buildings

Retrofits have the potential to improve health outcomes from more comfortable, healthier, and quieter dwellings that are more resilient to power outages⁵. Ottawans are already spending \$2.9 billion on building renovations annually. By steering these renovations towards energy saving, these funds will result in healthier, more valuable, and more efficient buildings. A 2019 Edmonton study found that energy efficiency measures in a home increased the resale value and speed. High efficiency furnaces increased the value by 2.44 per cent, insulation by 6.74 per cent, efficient windows by 5.10 per cent, and renewable energy by 2.66 per cent⁶. The price premiums found in this study are within the range of values found in literature more generally.

More Resilient Building Stock to Extreme Weather Events

Although the Better Homes Loan Program is primarily targeted at reducing energy consumption and improving energy efficiency, eligible measures include the addition of units and climate adaptation improvements such as insulation, basement waterproofing, permeable pavement, tree planting which can make buildings more resilient to heating, cooling and extreme weather events.

Risks

The Better Homes Loan Program, as proposed, is dependent on securing financing through FCM. If Ottawa is not successful in its funding application, staff will have to rethink the program and propose alternate options to support GHG emission reductions in residential buildings.

If Ottawa is successful in its funding application, there will still be risks associated with the proposed Better Homes Loan Program. Key risks and proposed mitigation strategies are identified below:

- Loan default risk – mitigated through a \$1.5 million loan loss reserve fund (which will be increased over time as the program scales up), payment history checks, title searches, mortgage lender consent, and priority liens on property;

⁵ Clean Air Partnership “Accelerating Home Energy Efficiency Retrofits Through Local Improvement Charge Programs: A Toolkit for Municipalities” 2020. Accessed on Jun 22, 2020 from <https://www.cleanairpartnership.org/wp-content/uploads/2020/05/FINAL-LIC-TOOLKIT-Accelerating-Home-Energy-Efficiency-Retrofits-Through-LIC-Programs-2020-1.pdf>

⁶ <https://homes.changeformclimate.ca/wp-content/uploads/2019/08/City-of-Edmonton-Hedonic-Price-Analysis-Energy-Efficiency-Final.pdf?5f4561&5f4561>

- Interest rate escalation risk – mitigated through long-term fixed debt facilities and associated agreements with homeowners;
- Contractor performance risk – mitigated through recommended certification for contractors and project management support tools for homeowners;
- City liability risk – mitigated through contractual arrangements and lack of engagement of City in individual procurement choices; and
- Participation uptake risk – mitigated by the grant in the launch years to enable achieving a self-sustaining program long-term.

Because of the steps proposed to mitigate these risks, if Ottawa is successful in its funding application, staff recommend finalizing the Better Homes Loan Program with an aim to launch in Q1/Q2 2021.

Recommendation #3: If the City is successful in its FCM funding application, direct staff to:

- a) Report back to Finance and Economic Development Committee (FEDC) and Council with the final Better Homes Loan Program including the proposed approach to launch the program;**
- b) Update the city's current LIC policy to include energy efficiency, renewable energy and water conservation in alignment with municipal goals and policies in accordance with provincial legislation; and**
- c) Seek external financing to launch the program, if required.**

Staff expect to be notified of FCM's decision by November 2020. If Ottawa's application is successful, staff will report back to FEDC and Council with the final Better Homes Loan Program including full program details, financial implications, policy revisions and the implementation plan to launch the Better Homes Loan Program in Q1/Q2 2021. If Ottawa is not successful in its funding application, staff will rethink the program and propose alternate options to support GHG emission reductions in residential buildings.

RURAL IMPLICATIONS

Not Applicable – The program will be eligible to all residents in Ottawa.

CONSULTATION

The proposed Better Homes Loan Program was developed with input from city staff. An LIC advisory group was convened as a sub-committee of the Energy Evolution Interdepartmental Working Group. This sub-committee included representatives from

Legal, Finance, Collections, Water, and Planning, Infrastructure and Economic Development.

To facilitate collaboration between the municipality and community partners, staff also sought input on the creation of this program, among others from technical experts from the Energy Evolution existing buildings working group.

COMMENTS BY THE WARD COUNCILLOR(S)

This is a city-wide report – not applicable.

LEGAL IMPLICATIONS

There are no legal impediments to Committee and Council's approval of the recommendations of this Report.

RISK MANAGEMENT IMPLICATIONS

The only risk associated with Committee and Council's approval of the recommendations in this Report is that the City is not successful in securing FCM funds to launch the proposed Better Homes Loan Program.

Potential risks associated with the Better Homes Loan Program were summarized in the report and will be addressed if the City is successful with its FCM application and when the Better Homes Loan Program is brought forward for final approval.

ASSET MANAGEMENT IMPLICATIONS

There are no asset management implications associated with the recommendations of this report.

FINANCIAL IMPLICATIONS

The financial implications of this program cannot be determined at this time. Staff are still waiting for FCM to finalize the Terms Sheet for the funding agreement, including the term, interest rate, and disbursement timing and balance for the grant and loan portions of the funding agreement. The deadline for applications for FCM funding is July 15 and staff expect to be notified of FCM's decision by November 2020. If Ottawa's application is successful, staff will report back to FEDCO and Council for approval, and it is at that time, that a full analysis of the financial implications of the program will be provided.

ACCESSIBILITY IMPACTS

The program design will consider accessibility recommendations for housing when providing information on renovation options.

ENVIRONMENTAL IMPLICATIONS

If retrofits completed through the Better Homes Loan Program reduce emissions by 30 per cent, GHG emissions per household would reduce from an average of 3.6tCO₂e in 2018 to an average 1.1tCO₂e after the retrofit. Overall, the proposed program is expected to enable GHG emission reductions of 29,000 tCO₂e by 2050.

TECHNOLOGY IMPLICATIONS

There are no technology implications as part of this report. Technological solutions may be a factor in the implementation of the proposed program.

TERM OF COUNCIL PRIORITIES

This work aligns with the 2019-2022 Term of Council Priorities, Environmental Stewardship, to grow and protect a healthy, beautiful, and vibrant city that can adapt to change.

SUPPORTING DOCUMENTATION

Document 1: Better Homes Loan Program Feasibility Study and Program Design

DISPOSITION

Planning, Infrastructure and Economic Development will coordinate the Program with involvement from Finance to implement the LIC payments, charges, and collections.