Committee of the Whole (2) Report

DATE: Tuesday, April 21, 2020 **WARD(S):** ALL

TITLE: STUDY TO ACCELERATE ENERGY RETROFITS IN PRIVATE BUILDINGS USING LOCAL IMPROVEMENT CHARGES

FROM:
Bill Kiru, Acting Deputy City Manager, Planning and Growth Management
Wendy Law, Deputy City Manager, Administrative Services and City Solicitor
Michael Coroneos, Deputy City Manager, Corporate Services and Chief Financial Officer

ACTION: DECISION

Purpose

Staff are seeking Council endorsement of a pilot project to initiate a home energy retrofit program using Local Improvement Charges (LICs) as a financing tool based on the results of the City's LIC study.

Report Highlights

- Building energy retrofits are identified by the Intergovernmental Panel on Climate Change and C40 Cities as one of the top strategies to reduce carbon emissions by 2030 to avoid dangerous climate change.
- The Local Improvement Charges regulation is an existing financing tool available under the *Municipal Act 2001* to encourage building energy retrofits.
- Vaughan's Local Improvement Charges study to finance energy retrofits in private buildings, funded in part by the Federation of Canadian Municipalities, includes a main study report, a municipal toolkit that includes a draft model by-law and application forms, and a high-level business case.
- The results of Vaughan's Local Improvement Charges study recommended a Third Party model for program administration and financing.
- Staff recommend the City pursue a pilot project that uses Local Improvement Charges to finance energy retrofits in the residential sector, subject to securing financing.

Recommendations

1. THAT Council endorse, in principle, the attached draft By-law to permit the raising of funds for a pilot project to use Local Improvement Charges to finance home energy retrofits;
2. THAT staff be directed to seek external financing and grant funding to implement the pilot project;
3. THAT staff be directed to finalize the Local Improvement Charges By-law for adoption by Council once the required funds are available; and
4. THAT staff report to a future Committee of the Whole meeting with further recommendations based on the pilot project, or other City participation.

Background

The City's Municipal Energy Plan (MEP) identifies building energy retrofits as a potential climate mitigation strategy. Collaboration between City staff and staff from York Region and the Toronto and Region Conservation Authority (TRCA) resulted in obtaining external funds to study the use of Local Improvement Charges (LICs) to increase the uptake of building energy retrofits in the private sector. A grant from the Federation of Canadian Municipalities (FCM), under the Municipalities for Climate Innovation Program (MCIP), was awarded in June 2018 for an amount of up to $65,700 to undertake the operational study on the use of LICs for deep carbon emission reductions in buildings.

The Climate Emergency Declaration adopted by Council in June 2019 identifies the LIC study as an initiative demonstrating progress on climate action.

Previous Reports/Authority

The City's community energy and emissions reduction plan, the Municipal Energy Plan, was approved by Council in 2016.

The City of Vaughan endorsed a Climate Emergency Declaration (Communication #23 to Report No. 20) at the Committee of the Whole meeting on June 4, 2019.

Action 1.2.4, of the revised Community Sustainability Plan approved by Council in December 2019, Green Directions Vaughan 2019, directed the study of the use of Local Improvement Charges to encourage energy retrofits in private buildings.

Analysis and Options

The LIC study was undertaken in four phases:

1. research and a municipal scan;
2. risk assessment;
3. stakeholder consultations and input; and
4. the LIC toolkit development, including a model implementing by-law.

The study documents, which are found on the study web site, provide the elements of a business plan to initiate a building energy retrofit program and include:

- a main study report
- the municipal toolkit comprised of a draft model by-law and application forms
- a high-level business case

The Intergovernmental Panel on Climate Change (IPCC) has determined the need for urgent action to curb carbon emissions by 2030 to avoid catastrophic climate change

Buildings account for 50% of energy consumption and greenhouse gas (GHG) emissions in urban municipalities. The residential sector in Vaughan accounts for over 35% of GHG emissions, most of which is associated with space heating and water heating in residential buildings. Energy consumption for space heating and cooling of buildings is likely a large component of the industrial and commercial GHG emissions accounting for an additional 40% of Vaughan's carbon footprint.

The study by C40 Cities assessing three critical de-carbonization strategies modelled an annual building energy retrofit uptake of 3% of the existing building stock in North

America. They determined it would generate 1.5 million jobs and an annual reduction of 80 megatonnes (Mt) of carbon dioxide equivalents (CO_2e). For Vaughan, this would translate to retrofitting 2,000 to 3,000 dwellings per year if a 3% retrofit rate could be achieved.

The Local Improvement Charges regulation is an existing tool available under the *Municipal Act 2001*

The LIC financing mechanism is known as Property Assessed Clean Energy (PACE) financing in the US, and it has been in place since 2008 starting with Berkley, California. PACE legislation is now being used in almost 40 states in America and has enabled retrofits for over 200,000 households and leveraged over $5 billion in energy improvements.

The LIC regulation (Ontario Regulation 586/06 as amended by O. Reg. 322/12) is a type of property-assessed financing mechanism. The main benefit to the building owner under the LIC financing program is the repayment of the financing by the building owner is added to the property tax account and 'runs with the land'. 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 priority lien. Property owners also have the option of repaying the LIC in full.

Low finance rates that are available to municipalities and a government-endorsed program are additional benefits of an LIC program. The LIC financing mechanism addresses key barriers limiting the uptake of energy retrofits by homeowners as follows:

- Low energy prices, from an international perspective, mean that comprehensive energy retrofits can often have a payback period longer than the time a homeowner intends to remain in the home
- Inability to acquire financing or unattractive financing terms from financial institutions
- Complexity of utility and government incentive programs
- Delays between project completion and receipt of incentive payments

The following objectives are recommended for a building energy retrofit program to guide program design and implementation:

- Demonstrated energy conservation
- Demonstrated GHG reductions
- No utility cost increase to the applicant (for example, fuel-switching from natural gas to electricity for hot water and space heating may result in similar utility bill

expenses as greater energy efficiency is offset by the higher costs of electricity than natural gas)
- Economic stimulus in the contractor/renovator network
- Improved health outcomes from more comfortable, healthier, and more quiet dwellings.

Key recommendations from the LIC study address program scale-up by recommending a Program Administrator to improve applicant intake and a Third Party Entity to secure program financing

Role of a Program Administrator
Constrained staff resources were identified as one of the identified risks assessed in Phase 2 of the LIC study. A Program Administrator contract or third party arrangement is recommended to address this risk and act as a 'concierge' for the energy retrofit program by providing a service to applicants. The Program Administrator, by taking on most of the applicant process loads, allows City staff to focus on tracking payments on the property tax roll and amending appropriate by-laws to meet the disclosure requirements under the LIC regulation.

Confirming the appropriate procurement approach to contract the service of the Program Administrator can be determined at a later date. This can take the form of a performance contract, such as an administrative fee per applicant, to emphasize applicant uptake and achieve program goals.

Role of a Third Party Entity to Secure Program Financing
The risk assessment of the LIC financing mechanism addressed the issue of a sustainable financing source for long-term implementation given the limited revenue generation options of lower-tier municipalities. Options to consider in the future would include a potential municipal services corporation to manage the program, or an agreement with a Third Party Entity to secure private capital. These longer term options will be considered by staff as we engage in the pilot and we will report to Council at a later date.

On December 2, 2019, the Association of Municipalities of Ontario (AMO), the Independent Electricity System Operator (IESO), the Clean Air Partnership (CAP) and the City of Toronto announced their partnership to act as an independent Third Party to deliver a Province-wide, LIC-financed energy retrofit program. The City will monitor progress of this Third Party consortium to determine the opportunity and limitations to contract with the Third Party to implement the LIC-financed energy retrofit program.

Role of York Region
In addition to establishing a municipal services corporation (MSC) or engaging with a Third Party to obtain capital financing, York Region can issue debentures on behalf of lower-tier municipalities at a competitive interest rate. Upon considering the costs and benefits of securing financing through the MSC or Third Party, if it is decided that it would be more financially prudent for the Region to issue debentures at the time financing is required, the Region may secure debt from the market on behalf of the City for the first phases of implementation. For long-term scale-up and full implementation, the City will work with the Region to explore financially feasible options.

An initial pilot program can build experience and early success with the intent to migrate to an outsourced multi-municipal model for full implementation

Recommended Approach to Implementation – Pilot Program to Migrate to Scale-Up
Several years will be needed for the program to gain momentum and support a high number of homeowners (i.e. in the thousands) to apply for the LIC financing mechanism. This requires ongoing education and awareness, for residents and renovators, of the multiple benefits of energy retrofits.

The City also requires more time to determine longer term funding models including a multi-municipal collaborative model, a municipal services corporation, or establishing a relationship with a Third Party Entity.

For these reasons, and to minimize delay in the implementation of a full energy retrofit program, it is recommended that a pilot project/program be initiated over the next 24 months. Ideally, the pilot project/program should also test the service of a Program Administrator as a retrofit 'concierge'. This will require allocating City budget as matching funds to leverage external financing and funds in the form of both loans and grants, or a combination of grant funding and Region debenture financing. The portion of external financing as a loan or Region debenture financing can be used for the homeowner to pay for the energy and water conservation upgrades and repaid through the LIC mechanism. The portion of external funds as a grant can be used to hire the Program Administrator, support marketing and outreach, and can also be allocated for staff cost recovery.

City Staff Administrative Processes
The Policy Planning and Environmental Sustainability department will retain overall management and coordination of the home energy retrofit pilot project/program with support from Legal Services, Financial Services, Financial Planning and Development Finance, and other pertinent departments (e.g., for licensing contractors, issuing permits, etc.).

The administrative processes under the LIC regulation include:
- implementing the by-law (Legal)
- contract document development per property owner (administrative staff)
- financial and technical underwriting (administrative staff)

It is recommended that the Legal Services department lead the administration of these tasks. This will involve review and approval of documents prepared and reports to Council to disclose priority liens placed on residential properties. In addition, one or two existing staff members from other departments working part-time may also be required to provide support (several hours per month depending on the number of applicants).

In addition to the administrative processes, financial processes of servicing LIC assessments (billings, collections), paying the homeowners and recording priority lien on the property will be required by the municipal tax department. It is recommended that one existing municipal staff member in the Financial Services department be responsible for these tasks with the support of administrative staff.

Financial Impact

Most of the costs associated with the LIC study are covered by the grant award from FCM (MCIP 15786) with the remaining costs covered by the approved capital project (PL-9572-18). A disbursement for $34,788.74 has been received from FCM to fund a portion of the LIC Study. As a result, project PL-9572-18 requires a budget amendment to increase the budget from $138,221.00 to $173,009.74. The update will add $34,788.74 to the Federal Grant funding source and have no impact to the City's tax base.

The cost to conclude the setup of the pilot project is estimated at $50,000 in in-kind staff time to finalize the forms delivered in the toolkit (Model By-Law and Forms document).

In addition to ongoing financial processes, the role of a delivery agent or 'concierge' is estimated at $100,000 for the pilot. The delivery agent will lead the applicant intake and processing of applications as well as be the single point of contact for the homeowner to address any questions and/or concerns regarding the program. An administration fee may be charged to all applicants to cover the cost of administration.

To help offset some of these costs, staff is pursuing grant funding. Matching funds from a City budget will likely be required to secure the grant portion of any external funding source. For example, a pilot project that aims to process 100 applications may require $2 million to cover the retrofit costs of homeowners, based on an average $20,000 per retrofit for 100 dwellings. A grant of up to $100,000 may be requested, which may require some form of matching funds from the City, to cover the costs of the Program Administrator, contractor education, and staff recovery. If the pilot is undertaken during the time period of the Sustainable Neighbourhood Action Plan (SNAP) project in Thornhill, for which the City was awarded over $150,000 from FCM to undertake, then homeowner education to raise awareness of the benefits of home energy improvements can be provided through the ongoing and extensive community engagement of the SNAP project.

Staff is continuing to assess the most appropriate funding model including internal and external funding and financing sources. Under the Green Municipal Fund (GMF), the Community Efficiency Financing initiative (formerly the Community Eco-efficiency Acceleration Fund) of $300M is a community finance program to support household energy projects in up to 200 municipalities of all sizes. The program has two components, a loan and a grant portion for those ready to implement in the first intake. The first intake for applications is targeted for April 2020. Staff will continue to monitor and engage with FCM to ensure the City meets the conditions for the first intake, and to better understand what conditions may be tied to receiving loan financing from FCM. Staff will also continue to monitor the progress of the Third Party consortium established by AMO, IESO, CAP and the City of Toronto.

Broader Regional Impacts/Considerations

York Region is preparing a high-level climate change plan and a separate Community Energy and Emissions Plan in support of the Municipal Comprehensive Review. Enhancing building energy performance and water conservation is identified as a climate change mitigation strategy.

Using the LIC financing mechanism to encourage building energy retrofits is aligned primarily with the Natural Gas Conservation initiative and the Carbon Trust initiative in the Province’s Made-in-Ontario Environment Plan.

The 2019 Federal Budget established the Community Eco-efficiency Acceleration Fund, to be delivered through FCM, to work directly with municipalities on climate action. The funding program has been launched as the Community Efficiency Financing initiative and specifically notes the community benefits of the PACE model that is adaptable to finance a broad range of initiatives at the individual home level. These can include initiatives such as solar hot water systems, roof top solar photovoltaics, major energy efficiency retrofits, combined heat and power units, and more.

Conclusion

The Climate Emergency Declaration adopted by Council in June 2019 specifically states that staff, "*Report back to Council by Q2 2020 with results of the study on the use of Local Improvement Charges to enable energy efficiency retrofits in private buildings as a key action to reduce energy use, save money, and reduce GHG emissions."*

The LIC financing mechanism requires that the City borrow funds to run the home energy retrofit program. FCM's Community Efficiency Financing initiative or Region debenture financing are available financing options, but are most useful for a pilot or initial program implementation. The recommendation from the LIC study is to eventually opt into a Third Party model, that includes multiple municipalities, to reduce risk to the City and achieve administrative efficiencies for ongoing program implementation.

Hence, staff recommend a phased approach towards implementing an energy retrofit program. The first step would be to proceed to a pilot program to enlist a select number of homeowners for energy retrofits. This allows the City to test the role of a Program Administrator as a 'concierge' for applicants, better understand staff time commitments to administer the property tax component of the program, build success and provide outreach in the community. It also allows the City to continue to study the role of a municipal services corporation or Third Party to secure financing for full program implementation.

The LIC financing mechanism is a clear contribution to climate action that can be offered by municipalities. Other financing approaches, by utility companies and the Canada Mortgage and Housing Corporation, will also be needed to achieve the scale necessary to significantly curb carbon emissions by 2030.

For more information, please contact: Tony Iacobelli, Manager of Environmental Sustainability, ext. 8630.

Attachments

1. Draft Implementing By-law for Local Improvement Charges Financing of a Home Energy Retrofit Program

Prepared by

Tony Iacobelli, Manager of Environmental Sustainability, ext. 8630