

## **Document 2: Assessment of the Use of Local Improvement Charges to Finance Home Energy Retrofits in Ottawa**

### **Background**

On May 28, 2014, Ottawa City Council approved the *Air Quality and Climate Change Management Plan (AQCCMP)*, a framework for how Ottawa will mitigate and adapt to climate change over the next 20 years. The AQCCMP included an assessment of Local Improvement Charges (LICs) as a mechanism to finance home energy retrofits in Ottawa. This assessment considered:

- The Clean Air Partnership's *Collaboration on Home Energy Efficiency Retrofits in Ontario (CHEERIO)*
- The City of Vancouver's *Home Energy Loan Program*
- The City of Toronto's *Home Energy Loan Program (HELP)* and *High-Rise Retrofit Improvement Support Program (Hi-RIS)*
- Halifax Regional Municipality's *Solar City* program
- Residential and commercial Property Assessed Clean Energy Programs (PACE) in the United States

The 2014 assessment concluded that a LIC program to finance home energy retrofits would not be advisable in Ottawa due to the following concerns:

- Mixed evidence of demand, need, or take-up of the program
- A pilot or program requires start-up funding
- Inability of the municipality to compete with private sector lending rates
- Legal concerns around mortgage lender consent
- Anticipated action at the provincial level under Ontario's *Long-Term Energy Plan*

Staff committed to continued monitoring of LIC activities elsewhere and to provide an update to Environment Committee.

This report summarizes staff's assessment from the past year, and should be read in conjunction with *Appendix F: Assessment of the Local Improvement Charge (LIC) Mechanism to Foster Building Retrofits* of the AQCCMP.

### **Ontario Regulation 322/12**

Under Ontario Regulation 586/06 *Local Improvement Charge – Priority Lien Status*, municipalities are able to undertake works as a local improvement and recover the cost of the work from the benefiting properties via a special charge added to the property tax bill. The municipality can spread the cost of a local improvement over multiple years to

ease repayment. If the owner sells their property before the local improvement charge is paid off, the responsibility for the remaining payments are transferred to the new property owner.

Until recently, this mechanism could only be used to finance local infrastructure projects such as sidewalks or water/sewer pipes. However, in October 2012, the Province of Ontario amended its LIC financing regulations with Ontario Regulation 322/12. This change gave municipalities the flexibility to use LICs as a financing tool to cover capital costs for a wide range of improvements on private properties, including energy efficiency, renewable energy, and water conservation retrofits.

The City of Toronto is the only municipality to implement a LIC program since the approval of Ontario Regulation 322/12. Ottawa is one of several municipalities monitoring Toronto (and Halifax's) progress, or exploring the viability of a LIC program in their city.

Only the City of Guelph is pursuing a LIC program development, with staff scheduled to report to Council in 2016 with a full report on proposed program details.<sup>1</sup>

### **City of Toronto's Home Energy Loan Program (HELP)**

In January 2014, the City of Toronto launched HELP, a pilot program that provides loans in the form of LICs to homeowners interested in undertaking energy and water efficiency improvements. The total budget for the program is \$10M from internal capital funds.

The pilot program was designed to run from 2014 to 2016, with a target of 1,000 dwellings participating. HELP was initially limited to six Toronto neighbourhoods, with a possible 164,476 households eligible to participate. In April 2015, the program was expanded city-wide due to limited enrolment.

#### ***Design***

Participating homeowners are eligible for a maximum loan of 5% of the current value assessment of their property that they can choose to pay back in either monthly payments or in one lump sum. Three fixed interest rates and payments options are offered (Table 1), and a 2% administrative charge is calculated onto the total funding amount.

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<sup>1</sup> In September 2015, Guelph City Council directed staff to continue with the detailed design of the *Guelph Energy Efficiency Retrofit Strategy* (GEERS). GEERS has a goal of retrofitting 80% of the current stock of 48,000 homes by 2031.

**Table 1: HELP Interest Rates and Payment Terms**

<b>Terms</b>	<b>Fixed Interest Rates</b>
5 years	2.5%
10 years	3.75%
15 years	4.25%

A list of contractors is not offered by the City of Toronto, and applicants are required to complete pre and post home energy audits. The program requires that applicants must obtain consent from their mortgage lender to be eligible.

HELP has also partnered with Toronto Hydro and Enbridge Gas to offer incentives to reduce the costs of the projects to homeowners.

The program is administered by two full-time equivalents (FTE), and is supported by a Program Lead.

### ***Results***

As of March 2015, 231 out of a targeted 1,000 applications had been submitted to HELP. As a result, the program was expanded city-wide in April 2015 to increase uptake. As of October 2015, 339 applications had been submitted to HELP. Of those, 186 homeowners were extended funding offers to undertake home energy retrofits, and 87 projects were either in progress or completed. Approximately \$1.5M has been committed to projects.

### ***Findings***

Based on the life of the program so far, the City of Toronto identified some early key findings for the program:

- Mortgage lender consent is a major hurdle to program uptake. Roughly half of the applicants were unable to obtain consent from mortgage lenders.
- As applicants are unfamiliar with the LIC process and energy retrofits, a higher level of customer service and applicant support is required than initially anticipated.
- Homeowners are financing comprehensive retrofit projects, resulting in higher than forecasted funding requests (project values). As of October 2015, homeowners are accessing HELP to finance an average of four energy and water improvements. Project costs range from \$2,960 to \$35,225, with an average project cost of \$14,000.
- Partnership with utilities and the one window access has shown high customer service and satisfaction. Home energy assessments are a requirement of the program and the costs of the assessments are not eligible for reimbursement. However, homeowners may be eligible for a rebate from Enbridge Gas, and staff

have found that the availability of Enbridge performance-based incentives coupled with HELP have shown high customer satisfaction.

- Targeted neighbourhood and sector-based marketing have been found to be successful ways to promote the program.

### **Next Steps**

The City of Toronto will be conducting an interim evaluation of HELP in 2016, including causes for program drop-outs, market perception of program benefits, and the value of property-attached features. Findings from the evaluation will be used to inform program improvements going forward.

### **City of Toronto’s High-Rise Retrofit Improvement Support Program (Hi-RIS)**

Simultaneous to the launch of HELP, the City of Toronto launched the *High-Rise Retrofit Improvement Support Program* (Hi-RIS). Hi-RIS is a \$10M pilot LIC program that targets multi-residential property owners interested in pursuing energy and water efficiency and conservation improvements. The program is targeting participation of approximately 10 buildings city-wide, or approximately 1,000 units.

### **Design**

Hi-RIS is one of several key initiatives that falls under the City of Toronto’s *Tower Renewal Program*. The objective of the *Tower Renewal Program* is to improve Toronto’s concrete apartment towers and surrounding neighbourhoods through environmental, economic, social, and cultural changes. Less than one FTE is assigned to Hi-RIS as Hi-RIS accesses existing resources and staff in place under the City’s *Tower Renewal Program*.

Multi-residential buildings of five or more storeys are eligible, and all registered owners of a property must consent to participating in the program. The maximum funding amount for any property cannot exceed 5% of the property’s value. Four program interest rates and terms are offered (Table 2), and a 0.8% administrative charge is calculated on the final funding amount.

**Table 2: HELP Interest Rates and Payment Terms**

<b>Terms</b>	<b>Fixed Interest Rates</b>
5 years	2.5%
10 years	3.75%
15 years	4.25%
20 years	4.5%

## **Results**

As of October 2015, eight applications were received. All eight applicants received funding offers, with two projects under contract. Approximately \$3.5M has been committed to projects at two buildings, representing 800 of the targeted 1,000 apartment units.

## **Findings**

Based on the program so far, the City of Toronto identified some early key findings:

- Similarly to HELP, Hi-RIS requires higher levels of customer service and applicant support than initially projected.
- Uptake has been slower than anticipated, and the value of the projects is higher than expected.
- Some applicants have had challenges with obtaining agreement from all financial institutions or lenders that have a mortgage interest in the property. As a result, some applicants were unable to continue with the program.

## **Next Steps**

The City of Toronto will be conducting an interim evaluation of Hi-RIS in conjunction with the evaluation of HELP in 2016.

## **Halifax Regional Municipality's Solar City Program**

In March 2015, the Halifax Regional Municipality completed its two year *Solar City* pilot program that financed the installation of residential solar thermal systems. The pilot had a budget of approximately \$8.2M, and was designed to be delivered on a user pay basis. Halifax received a \$5.45M loan and a \$545K grant from the Federation of Canadian Municipalities (FCM), and a \$1.25M contribution from Efficiency Nova Scotia. This program design allowed for up to 1,000 homes to participate in the program.

## **Design**

In contrast to Toronto's HELP, successful applicants to *Solar City* received a free site assessment, including an estimated return on investment, and a pre-selected contractor to install the solar thermal system. Two FTEs were assigned to the program, with support from the Program Lead.

The program offered two payment options: a one-time lump sum payment or payback over a 10 year term at a 3.5% interest rate. 91% of homeowners participating in the program chose the latter option. A one-time administration fee was also charged, which rose from \$336 to \$391 over the life of the program to keep the program cost neutral.

Homeowners also benefitted from a \$1,250 rebate per installation, which was applied to the loan upfront under the program.

### **Results**

Over the life of the pilot, 388 of a targeted 1,000 households installed solar thermal systems on their property, amounting to approximately \$4M committed to projects. Homeowners participating in the program were estimated to have savings of \$434/year.

### **Findings**

Based on the outcomes of the pilot program, some key findings of the pilot include:

- Program uptake was lower than projected. As a result, the administrative charge to homeowners was raised to keep the program cost neutral.
- By offering the program as a turnkey operation, participants had a comfort level with the program as the Regional Municipality was viewed as taking on the majority of the risk.
- Administratively, focusing solely on solar thermal systems and working with one contractor streamlined the process.

### **Next Steps**

In March 2015, Council approved the development of an expanded cost neutral LIC program. Staff are currently developing *Solar City 2.0*, which will expand the program to include three types of solar energy projects: solar hot water, solar thermal and solar photovoltaic.

The total budget required for *Solar City 2.0* has been estimated at nearly \$13.1M. Staff are currently exploring funding options with key stakeholders, some of whom have expressed a strong interest from stakeholders in a program that supports low and mid-income homeowners, affordable housing units, and non-profit organizations.

Staff are expected to report back to Council in 2016.

### **United States Property Assessed Clean Energy (PACE) Programs**

Commercial PACE financing in the United States (US) continues to grow and expand, while the US government recently announced that they will revisit residential PACE financing.

Thirty-one states currently have PACE enabling legislation, and roughly 35 commercial PACE programs are in operation in 16 states. Since 2009, approximately \$176M has been invested in PACE projects.

In the report *Setting the PACE 2.0 Financing Commercial Retrofits*, PACENation, a US advocacy organization for PACE financing, had the following observations about commercial PACE programs in the US:

- PACE project development is found to be time-consuming, partly due to the lack of streamlining across the various PACE programs.
- Small-business owners are less likely to have internal resources to fund projects, and may have fewer borrowing options than large-building owners.
- Small scale projects are typically easier to implement successfully.
- Under most leases, PACE allows the building owner to pass the tax assessment to tenants. Owners are less likely to undertake energy retrofits when they pay for improvements but tenants receive the financial benefits through lower monthly utility bills.

Until recently, residential PACE programs were largely on hold in the US due to the Federal Housing Financing Authority's concerns that PACE financing was taking precedence over existing mortgages. However, the US government announced in August 2015 that they will be "unlocking residential Property-Assessed Clean Energy (PACE) financing for single-family housing to make it easier for Americans to invest in clean energy technologies".

## **Conclusions**

Based on the research to date, staff continue to have concerns around the viability of a LIC program in Ottawa to finance home energy retrofits, including:

### **a) Lending rates and loan risk suitability**

Banks continue to offer loans at lower interest rates than the City can offer. Municipalities are not lending institutions by trade, and are not organized to administer loans in a cost effective manner. To remain cost neutral, the City must add an administration fee on top of the interest rates, preventing the City from being competitive with the banks. Those who are unable to get loans or lines of credit using traditional sources are likely higher risk to the municipality and have a greater chance of defaulting on payments.

### **b) Mortgage lender consent**

Mortgage lender consent is not a requirement under Ontario Regulation 322/12. However, CHEERIO's 2013 *Local Improvement Charge (LIC) Financing Program Design for Residential Buildings in Ontario* report recommended requiring written

consent from all lenders holding liens on the property to prevent disputes. This requirement is also recommended by the City of Ottawa’s Legal Department. Roughly half of the City of Toronto’s HELP applicants failed to qualify due to challenges in receiving consent from mortgage lenders.

**c) Program demand and uptake**

Municipalities continue to show varying degrees of demand for their respective programs. Halifax’s two-year program targeted 1,000 installations, and finished the program with 388 installations. Toronto’s three-year HELP program is targeting 1,000 homes, and half way through has only 231 applications. And Vancouver’s now disbanded Home Energy Loan Program, as profiled in Appendix F of the 2014 AQCCMP, had targeted 500 homes and received less than 10 applications.

One reason for the lower uptake can be attributed to natural gas rates. Natural gas rates are roughly three times lower than they were almost a decade ago (Figure 1), limiting pressure on property owners to conserve energy and implement energy saving retrofits.

**Figure 1: Historical Changes in Natural Gas Rates for Enbridge Gas in Ontario (Source: Ontario Energy Board)**



**d) Program funding**

Both Toronto and Halifax require significant investments to run the program, \$10M and roughly \$8.2M respectively. Toronto funded their programs exclusively through internal capital funds, while Halifax financed its program largely through an FCM grant and loan.

Ottawa could apply for similar support, but it is not in a position to front-end the program from reserves.

### **e) Cost Benefits**

Roughly 2.5 FTEs administer programs such as Toronto's HELP program and Halifax's *Solar City* program, plus another 0.5 FTE in Legal and Finance Departments. The City would need a similar number of FTEs to administer a program in Ottawa.

The administrative costs would need to be recovered through the LIC program, which would increase the costs to the homeowners. If the LIC program does not meet its target number of participants, it could result in higher administrative costs. For example, Halifax had to raise their administrative costs per homeowner from \$336 to \$391 due to lower than anticipated program uptake in order for the program to remain cost neutral.

### **f) Risk mitigation**

The basic premise of the LIC program is that residents do not want to invest in expensive retrofits/improvements if they will not realize full payback on that investment before they sell or at the time of sale. This risk is mitigated through use of a LIC.

In the 2010 Ipsos Reid survey for the City of Toronto, support for attaching the proposed low-interest loan to the homeowner was much stronger than support for attaching it to the property. While 70% of respondents indicated they would likely purchase a home if they knew it was energy efficient, the proportion declined to 30% if there was an outstanding energy loan on the property. These views were also expressed in the 2013 Ipsos Reid focus groups conducted for the CHEERIO initiative.

## **Recommendations**

Staff do not recommend implementing a LIC program in Ottawa to finance home energy retrofits until there is greater evidence of its viability. In the interim, staff recommend:

- Continuing to monitor the progress of other municipal LIC programs and considering LIC programs as part of the City's work to develop a Renewable Energy Strategy.
- Consulting with the federal and provincial governments on funding opportunities, particularly with regards to grants, tax credits, and other financial tools that help homeowners, non-profit housing corporations, co-operatives, and private sector landlords to complete retrofits and install renewable energy sources.
- Exploring collaboration with banks to raise community awareness around using bank loans to undertake home energy retrofits.
- Reporting back on findings in 2017 as part of the AQCCMP update.

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