

Authority: Infrastructure and Environment Committee
Item IE23.3, as adopted by City of Toronto Council on
July 14, 15, and 16, 2021

CITY OF TORONTO

BY-LAW 818-2021

To further amend By-law 1105-2013 which authorized the undertaking of energy efficiency and water conservation works on private residential property as local improvements under the Residential Energy Retrofit Program.

Whereas City Council previously enacted By-law 1105-2013 to authorize the undertaking of energy efficiency and water conservation works on private residential property as local improvements under the Residential Retrofit Program (the "Program"), which Program requirements were attached to the by-law as Appendix A; and

Whereas City Council previously adopted Item PE18.4 (April 26, 27, and 28, 2017) to enhance the Program by, among other things, amending various requirements of the Program; and

Whereas City Council has now adopted Item IE23.3 (July 16, 17, and 18, 2019) to further enhance the Program by, among other things, further amending the various requirements of the Program;

The Council of the City of Toronto enacts:

1. By-law 1105-2013 is amended to add the following additional provision:
 - "2. The Executive Director, Social Development, Finance and Administration is authorized to review and, where necessary, revise the High-rise Retrofit Improvement Support Program and Taking Action on Tower Renewal Program from time to time (each as defined in Appendix A), solely for the purpose of integrating the City's program with industry best practices and new or existing Federal, Provincial and utility company energy, climate change and poverty reduction programs."
2. Appendix A to By-law 1105-2013 is removed and replaced with a new Appendix A, attached as Attachment 1 to this By-law that includes, among other things, the addition of a new Multi-Residential stream to be named the Taking Action on Tower Renewal Program as well as changes generally to all Multi-Residentail streams.
3. This by-law is effective as of the date of enactment.

Enacted and passed on October 4, 2021.

Frances Nunziata,
Speaker

(Seal of the City)

John D. Elvidge,
City Clerk

Attachment 1

Appendix A Residential Retrofit Program Design

I. Single-Family Housing Program Stream

1.0. Overview

The Single-Family Stream of the Program supports homeowners of single-family properties across the City. The Program is designed to facilitate the installation of qualifying natural gas, electricity, renewable energy technologies and water conservation improvements, and related energy assessments and then to secure payment by imposing a local improvement charge on the private residential property, as authorized by Ontario Regulation 596/06, as amended (O'Reg. 596/06").

1.1 Objectives

The Program design will balance the need to attract participation and address the objectives of enabling a higher incidence and depth of investment in single-family housing improvements to align with a number of City objectives to:

- increase the quality and durability of existing housing stock
- address housing affordability by mitigating pressures on homeownership due to rising utility costs
- realize economic development opportunities in connection with investments in retrofitting of houses, including industry development and job creation
- achieve greenhouse gas emission reductions
- achieve a higher level of energy, water efficiency, and conservation and renewable energy generation.

1.2 Program Eligibility

Residential low-rise buildings located within the City of Toronto of the following forms are eligible: detached, semi-detached, townhouse, and more generally housing forms with fewer than seven units. The property must have a property tax account with the City of Toronto. Additionally, where the property owner anticipates seeking rebates from Toronto Hydro and or Enbridge Gas in connection with this program, The property must also be a customer of the respective utility.

The maximum eligible funding amount for a property (inclusive of the cost of borrowing and an administrative charge) would be limited to the lesser of 10 percent of the Current value Assessment of the property or \$75,000 per house.

Participation is voluntary, owner-initiated and subject to the following conditions:

- all registered owner(s) of the property must consent to participating in the Program
- property tax, utility bills and all other payment obligations to the City for the past five years must be in good standing
- consent from all mortgage lenders, if the property is subject to one or more mortgages.

1.3. Home Energy Assessments

City's Program will utilize the EnerGuide Rating System (the "ERS") that provides a standard measure of a home's energy performance. It provides a standardized tool and process to assess home energy efficiency and can model energy savings and renewable energy generation projects.

The property owner must hire a Registered Energy Advisor (the "REA") - certified by Natural Resources Canada ("NR Can") - to perform pre- and post-retrofit assessments in accordance with ERS. REAs are experts in the field of energy efficiency and trained in the 'whole home' approach to home energy systems, technologies and products. The cost of the energy assessments are paid by the homeowner to the REA. Under the current Enbridge Gas incentive program, a homeowner is eligible for a rebate for the cost of an energy assessment of up to \$550 should a homeowner complete a retrofit project and achieve a minimum natural gas savings (e.g. 25 percent natural gas reduction) and/or any other Enbridge requirements.

Upon completion of the pre-retrofit home energy assessment, a Renovation Upgrade Report with a home Energuide rating is provided to the homeowner along with recommendations for energy improvements that could potentially improve the rating. This report is to be provided to the City in order to access funding.

After the retrofit is complete, a second and final home assessment is performed by the REA to obtain a second EnerGuide home rating and to verify the completion of the improvements. Provided that the second assessment that the homeowner provides to the City indicates that the EnerGuide rating has improved and the work has been completed, then the utility incentives (described in Section 1.8. – Access to Utility Rebates & Incentives) can be determined and the City can issue the final disbursement of funds, minus those incentive amounts.

1.4. Qualifying Energy Efficiency, Renewable Energy Technologies and Water Conservation Measures

The home energy assessment must demonstrate the potential to achieve cost-effective energy improvements in order to qualify for LIC funding. Funding is designated for capital costs (not maintenance costs) with an expected useful life of 5 years or greater and for measures that are permanently affixed to a property. The expected useful life of the improvements shall not exceed the LIC term selected by the homeowners.

Only costs associated with improvements of up to the lesser of 10 percent of the Current Value Assessment of the property or \$75,000 are eligible for the Program.

A non-exhaustive list of the categories of improvements support by the Program includes:

- i. Thermal envelope upgrades: attic, wall and basement insulation, windows and doors, air-sealing;
- ii. Mechanical systems: furnace and boiler replacement, air and ground source heat pumps, heat and energy recovery ventilators, water heater replacement, thermostats and controllers, drain water heat recovery systems;
- iii. Water efficiency: low-flow toilets and fixtures;
- iv. Renewable Energy Technologies: solar thermal heating, solar photovoltaics for electricity generation, geothermal heating and cooling, energy storage technology, energy efficient vehicle chargers (Level 2 and above) and associated works; and
- v. Energy efficient resilience measures.

Ineligible measures include equipment or products not permanently affixed to the property, previously installed in another home and are deemed general maintenance. Incidental costs essential and integral to facilitate the energy improvements – such as electrical plumbing upgrades, demolition and construction waste removal and environmental remediation may be funded by the program subject to review and approval of the Program Manager. In instances, where the homeowner chooses to pursue a high performance building certification (e.g. Passive House) the Program Manager may choose to waive the requirement for an EnerGuide Home Evaluation.

By recommending categories of retrofit improvements and associated measures, the City makes no guarantees of the materials, performance, cost-effectiveness or any warranty of the measures supported by the Program.

1.5. Completing the Retrofit through Contractor Engagement

The City will provide funding to homeowners for eligible measures covered by the Program that have been recommended by the REA, verified by the City and installed by contractors hired by the property owner. The City will not pre-qualify contractors or procure contractors to perform energy assessments or install retrofit improvements on behalf of homeowners in connection with this Program. The homeowner will use the funds disbursed by the City to pay contractors directly. When an utility incentive is not available or does not cover the full cost of the energy assessment, that cost can be included up to an amount of \$678 (standard cost of \$600 + HST).

The City is not responsible for the work quality of any contractors hired in connection with this Program and assumes no liability for the works undertaken. All retrofit improvements and renovations must adhere to local codes and by-laws. The homeowner is responsible for ensuring that hired contractors are licensed, bonded, and insured. Any issues that may arise relating to the quality of workmanship or post-installation performance of energy measures, for example, should be dealt with by the property owner and contractor.

1.6. Application Process

The steps below outline the process and requirements homeowners need to follow as part of the Program. City staff will periodically review this process to ensure effective Program implementation and, where deemed appropriate, the City may make changes in its sole discretion.

Step 1: Pre-qualification

Homeowners submit an online or hardcopy pre- application form that includes, but is not limited to, the following information:

- property assessment roll number to confirm no outstanding payments owed to the City in the last five years
- evidence of mortgage lender consent (where applicable)

If a homeowner has one or more outstanding mortgage(s) associated with the property, then the homeowner must obtain (at his or her own expense) consent from the mortgage lender(s) through a form that the City will provide. Property owners will advise their mortgage lender(s) of their intention to participate in the Program and receive permission from the lender(s) (perhaps up to only a specific dollar amount) as a requirement of the Program.

Once the property owner has been prequalified by City staff, based on the above criteria, the City will provide Notice to Proceed to the homeowner.

Step 2: Energy Assessment and Funding Request Form

1. Energy Assessment

The homeowner completes the pre-retrofit home energy assessment in accordance with Section 1.3 (Home Energy Assessments) and submits to the City the resulting Renovation Upgrade Report that the REA provides to the homeowner.

That Renovation Upgrade Report must include:

- the current NR Can EnerGuide home rating;
- recommended improvements that have been customized for the home based on existing conditions which could potentially improve the EnerGuide home rating;
- estimated energy cost savings that may be realized after installing the recommended improvements; and
- potential eligibility for utility rebates and incentives offered by Independent Electricity System Operator, Toronto Hydro and Enbridge Gas or other government sponsored programs.

2. Funding Request Form

Along with the Renovation Upgrade Report, the homeowner also will need to submit a Funding Request Form that:

- identifies the improvements that the property owner intends to install based on the Renovation Upgrade Report;
- identifies the cost for each improvement (including equipment, materials and labour costs) inclusive of HST; and
- requests an initial disbursement (up to a maximum of 30 percent of the estimated cost of the work from the City upon signing the POA).

Following receipt of the Funding Request Form, the City will:

- confirm the eligibility of the works (e.g. items affixed to property);
- verify the reasonableness of retrofit costs and labour costs by consulting manufacturer pricing and prevailing labour rates;
- calculate the administrative costs using a formula that apportions the cost to the City to operate this program between participating properties as percentage of the cost of the work undertaken relative to the percentage of the cost of the work to the overall Program budget for each Program Stream; and
- estimate the eligible utility rebates and incentives available to the homeowner.

Step 3: Property Owner Agreement

After the City has confirmed the acceptability of the Renovation Upgrade Report and the Funding Request Form, the City will prepare a property owner agreement ("POA") for the homeowner(s) to review and sign.

Step 4: Completing Improvements

1. Initial Funding Disbursement

Following execution of the POA, the City will provide the homeowner with the initial disbursement agreed upon in the POA to a maximum of thirty percent of the estimated cost of the work that can be used by the homeowner to pay contractors or suppliers (i.e. security deposit). Requests for initial disbursements will be evaluated on a case-by-case basis subject to the project information submitted by homeowners to the city. The Director, Environment and Energy Division of the City of Toronto has sole discretion in determining if an initial disbursement is warranted and determining the amount. The property owner will be contractually obligated to repay this initial disbursement, together with any applicable administrative fee, to the City if the property owner does not complete the improvements.

The property owner can then proceed with hiring contractor(s) and performing the approved improvements to the property. The improvements must be completed within a reasonable timeframe, as stipulated in the POA, to be determined by the City in its sole discretion.

2. Final Funding Disbursement

As will be detailed in the POA, the City will provide the final disbursement only after the homeowner provides a copy of the Energuide home rating label from the REA that:

- includes a Certificate of Completion that attests the approved improvements having been installed and provides an EnerGuide rating of the house after the improvements have been completed which is better than the original EnerGuide rating; and
- indicates the actual costs and useful life for all the works.

Step 5: LIC Repayment

Following the City Treasurer's periodic certification of the local improvement roll, (which occurs after the improvements on a given set of properties are complete and the final amounts of funding are confirmed), the City Solicitor will submit a corresponding bill for Council to adopt a by-law pursuant to Section 35.14 of O.Reg 596/06 to impose the special charges on the participating properties. For each property included in the by-law, the Treasurer will then add to the City's tax roll for that property each year that portion of the imposed special charge that is due in that year. These collective steps will provide priority lien status for the annual amount that the Treasurer adds to the tax roll and will ensure that any subsequent property owner who was not a party to the POA is bound to pay that amount.

To facilitate repayment of the annual special charge, the POA will require homeowners to sign-up for the pre-authorized payment plan option of 11 monthly instalments similar to the existing Program for property tax payments.

At any time, a homeowner can make a one-time payment of the total outstanding amount owing to clear the property of the LIC charge. In this case, the outstanding funding amount and administrative fee becomes payable to the City. Failure to make payments is treated with the same remedy as uncollected property taxes which may include penalties and interest charges.

1.7. LIC Disclosure

As indicated above, the subsequent owner of a property on which the City has imposed a special charge is required to pay the City the annual LIC amount even though that subsequent owner was not a party to the original POA. In addition to notice that the City will be giving in accordance with the provisions of O.Reg 596/06, the City also will take the following steps to ensure even greater transparency of the LIC to interested parties by:

- i. posting on the City's website notice of the special charge by-law to impose the charge on the property in advance of its introduction and after its adoption; and

- ii. updating the Tax Certificate to include the full LIC amount, amount payable in the current year, outstanding amounts owing and a note to reference the by-law pursuant to which the special charge was imposed.

1.8. Access to Utility Rebates & Incentives

The City will promote relevant offerings from utilities and other incentive providers (i.e. Enbridge Gas, The Independent Electricity System Operator (IESO), Toronto Hydro, Provincial/Federal government) in the delivery of the program to facilitate homeowner's access to incentives and promotions. Incentives are subject to change and availability.

The funding advances by the City will be net of any rebates or other incentives received by the homeowner, with the exception of rebates received to offset the costs of the energy assessment.

1.9. Quality Control

As a means of additional oversight to confirm that the funded improvements were completed, the POA will indicate that the City reserves the right to have a City official or third party contractor arrange with the property owner for an inspection. The property owner(s) is also responsible for keeping original copies of contractor invoices and photos of installed measures, especially for the REA to verify measures like insulation, and be prepared to disclose this information to the City upon request.

1.10. Measurement and Verification

Via the POA, the property owner(s) must consent to providing the City with access to the property's utility usage data in order to monitor results and evaluate the Program's effectiveness for a period of five years after completion of the retrofit. Also, the property owner(s) agrees to participate in surveys and other follow-up activities to help the City evaluate the Program.

II. Multi–Residential Stream Program Design

The Multi-Residential Stream of the Program supports owners of multi-residential apartment properties across the City. The Multi-residential Stream consists of two programs: the High-rise Retrofit Improvement Support Program and the Taking Action on Tower Renewal Program, described below in II.A. and II.B., respectively.

II.A. High-rise Retrofit Improvement Support Program

2.0. Outline

The High-rise Retrofit Improvement Support Program will reach out to residential rental apartment owners across the City. The Program is designed to facilitate the installation of qualifying energy efficiency, water conservation, and renewable energy technology retrofits at residential rental buildings as well as related energy audits by providing financing. Repayment will be secured by imposing a local improvement charge on the private residential rental apartment, as authorized by Ontario Regulation 596/06, as amended (O'Reg. 596/06").

2.1. Objectives

The Program design will balance the need to attract participation and addresses the objectives of enabling a higher incidence and depth of investment in apartment building retrofits to align with a number of City objectives to:

- increase the quality and durability of rental housing stock;
- address housing affordability by mitigating pressures on rent increases due to rising utility costs;
- realize economic development opportunities in connection with investments in retrofitting of apartment buildings, including industry development and job creation;
- achieve greenhouse gas emission reductions; and
- achieve a higher level of energy efficiency, water conservation and renewable energy generation.

The projected benefits to the City may include improved housing affordability, enhanced energy security, extended economic development opportunities and improved environmental performance.

2.2. Program Eligibility

Rental apartment buildings located within the City of Toronto with three or more storeys and seven or more units would be eligible to apply to the Program. The property must have a property tax account with the City of Toronto. Properties that are property tax exempt are eligible however, City staff will initiate an additional review process that may require a financial assessment in this specific case.

Properties where a third-party mortgage lender pays the property taxes are required to create an arrangement between the Property Owner and the mortgage lender that either the mortgage lender or the Property Owner will provide the City with one single periodic payment through either the City's Pre-authorized Property Tax Payment Plan or the third-party mortgage payment plan, respectively, for both the repayment of the LIC Special Charge and the payment of applicable property taxes. Properties that have multiple single owners would not be eligible without commitment from all owners.

The maximum eligible funding amount for a property (inclusive of the cost of borrowing and an administrative charge) would be limited to the lesser of 10 percent of the Current Value Assessment of the property or \$2,500,000 per building.

The City would require that participating property owners do not apply for Above Guideline Increases for retrofit measures completed through the Program.

Additional eligibility criteria would include:

- All registered owner(s) of the property must consent to participating in the Program;
- Property tax, utility bills and all other payment obligations to the City for the past five years must be in good standing; and
- Specification that the property owner will obtain independent legal and financial advice with respect to participation in the Program.

2.3. Outreach

Staff will work with a number of parties in order to build Program awareness and effectively engage participants in the Program. The Program will be available across the City with outreach focused in:

- areas with a concentration of buildings with a preponderance of residents with low-incomes – to maximize outcomes aligned with city objectives;
- areas designated by City Council as Neighbourhood Improvement Areas (NIAs) or Emerging Neighbourhoods; and
- areas designated by City Council as Residential Apartment Commercial (RAC) pilot project areas as part of the City-Wide Zoning By-law implementation - to complement existing outreach and staff activities in these areas maximizing Program delivery efficiencies
[\(http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PG21.1\)](http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PG21.1).

2.4. Building Energy Assessment

As part of the Program application process, the City will require property owners to have a building energy assessment (also referred to as an energy audit) completed by a certified professional energy auditor that meets the eligibility criteria set out below. This energy assessment report should meet the ASHRAE Level 2 requirements in addition to any criteria outlined below.

To meet program eligibility requirements, the energy assessment and related report would need to be completed by a qualified professional energy auditor with expertise in building energy efficiency who must be independent of and third party to the Program applicant, and meets the following criteria:

- a professional engineer ("P.Eng."), a certified engineering technologist ("CET"), a certified energy manager or a certified measurement and verification professional; with a minimum of three years of experience evaluating energy systems in buildings;
- an engineer-in-training under the supervision of a P.Eng. or a CET, only if a qualified and experienced person as described in (i) above certifies and signs the energy assessment report; and

- a professional architect with a license to practice from the Ontario Association of Architects in consultation with a professional engineer ("P.Eng."), a certified engineering technologist ("CET"), a certified energy manager or a certified measurement and verification professional; with a minimum of three years of experience evaluating energy systems in buildings.

Property owners will be responsible for engaging a certified professional to complete the building energy assessment and will assume any associated costs. Property owners may be able to offset these costs through any existing incentives from Enbridge as described in Section 2.9. below. Property owners will also be responsible for any costs incurred by the City to verify the assessment report and these costs will be recovered as part of the Program administration costs.

The property owner will be required to provide the City with an energy assessment (energy audit) report that includes the identification of: recommended energy efficiency, water conservation and renewable energy generation improvements (the measures), the anticipated energy and cost savings, the expected useful life of measures, the cost range for the recommended measures and eligibility for incentives. Further criteria may be included to reflect industry best practices. This criteria may be amended by City staff to reflect best practices in the industry.

The report provided by an eligible certified professional will be reviewed by either a third party or City staff to determine the reasonableness of the associated costs of the proposed retrofit project. In the instance where property owners are applying to the Program for measures that have received prior approval from Enbridge or the Independent Electricity Systems Operator (IESO), the Enbridge and/or IESO approval would suffice as third-party verification for those measures.

2.5. Qualifying Energy Efficiency, Renewable Energy Technologies and Water Conservation Measures

In the Multi-Residential Stream of the Program, property owners would be able to propose a range of retrofit measures that would improve the quality of life for residents, improve building condition and help to reduce building operating costs. To qualify for funding, retrofit measures proposed by the property owner must be identified by the energy assessment (energy audit) report, provided by an eligible certified energy auditor. The qualified energy auditor must meet the criteria set out in Section 2.4.

Eligible retrofit measures would be required to demonstrate the potential to achieve cost-effective savings or to demonstrate how the retrofit measure complements an overall state of good repair capital program for the building. For example, undertaking a window replacement and balcony door replacement may significantly improve resident comfort and address deferred maintenance issues as well as generating energy savings.

A non-exhaustive list of the categories of retrofit measures supported through the Program include:

- i. Mechanical Systems (including electricity and HVAC related measures): boilers, bi-level lighting in parking garages, hot water circulation pump controls;

- ii. Building Envelope improvements: window and balcony door replacement, solar walls, insulated cladding for exterior walls;
- iii. Water Efficiency improvements: low-flow toilets and fixtures;
- iv. Renewable Energy Technologies: solar photovoltaics for thermal heating, solar photovoltaics for electricity generation, geothermal heating and cooling, energy storage technology, energy efficient vehicle chargers (Level 2 and above) and associated works; and
- v. Energy efficient resilience measures.

Retrofit measures that are not permanently affixed to the property or measures with an expected useful life of less than five years would not be eligible for the Program. The LIC term selected by the property owners shall not exceed the expected useful life of the retrofit. By defining categories of retrofit improvements and associated measures, the City makes no guarantees of the materials, performance, cost-effectiveness or any warranty of the measures supported by the Program.

2.6. Completing the Retrofit Project

The City will provide funding to property owners for approved retrofit projects consisting of eligible retrofit measures that meet the criteria outlined in section 2.5, and have been recommended as part of the energy assessment report prepared by an eligible qualified energy auditor and verified by the City or its third party agent. Contractors will be hired by the property owner. The City will not pre-qualify contractors or procure contractors to perform energy assessments or undertake retrofit projects on behalf of property owners in connection with this Program. The property owner will use the funds disbursed by the City to pay contractors directly.

The City is not responsible for the work quality of any contractors hired in connection with this Program and assumes no liability for the works undertaken. All retrofit improvements must adhere to local codes and by-laws. The property owner is responsible for ensuring that hired contractors are licensed, bonded, and insured. Any issues that may arise relating to the quality of workmanship or post-installation performance of retrofit measures, for example, should be dealt with by the property owner and contractor.

2.7. Application Process

The steps below outline the process and requirements property owners need to follow as part of the Program. City staff will periodically review this process to ensure effective Program implementation and, where deemed appropriate, the City may make changes in its sole discretion.

Step 1: Prequalification

Property owners submit an on-line application form that will include the following information:

- property address to confirm property is an eligible building type and ownership type;
- property assessment roll number to confirm no outstanding payments owed to the City in the last five years;
- acknowledgement that the property owner will obtain independent legal and financial advice with respect to participation in the Program; and
- acknowledgement of the application to the Program and consent to Program participation from all registered property owners.

Once the property owner has been prequalified by City staff, based on the above criteria, the City will provide a Notice to Proceed letter to the property owner.

Step 2: Building Energy Assessment and Funding Request Form

1. Building Energy Assessment

The property owner completes and provides a building energy assessment in accordance with Section 2.4 above and submits to the City the resulting Energy Assessment Report that the eligible qualified energy auditor provides the property owner.

The report must include:

- recommended energy efficiency, water conservation and renewable energy generation improvements (the measures);
- the anticipated energy, water, emissions and cost savings (expressed as a quantity e.g. kWh, m³, tonnes of equivalent CO₂ emissions,dollars and percentage);
- expected useful life of measures;
- the cost range for the recommended measures; and
- potential eligibility for incentives.

A written description of the physical characteristics of the building, as well as its current condition, age and construction typeFurther criteria may be included to reflect industry best practices. This criteria may be amended by City staff to reflect best practices in the industry.

2. Funding Request Form

Along with the Energy Assessment Report, the property owner also will need to submit a Funding Request Form that:

- identifies the improvements that the property owner intends to install based on the Energy Assessment Report;

- identifies the cost for each improvement (including equipment, materials and labour costs) inclusive of HST;
- acknowledges that the property owner will obtain independent legal and financial advice with respect to participation in the Program; and
- specifies the amount of a prepayment (up to a maximum of 10 percent of the estimated cost of the work) that is being requested from the City upon signing the POA, if any. The City will determine at its sole discretion whether a prepayment will be advanced.

Following receipt of the Funding Request Form, the City will:

- confirm the eligibility of the works (e.g. items affixed to property);
- verify the reasonableness of retrofit costs by consulting precedents, current pricing and other means;
- calculate the administrative costs using a formula that apportions the cost to the City to operate this Program between participating properties as a percentage of the cost of the work undertaken relative to the percentage of the cost of the work to the overall budget for each Program Stream; and
- calculate reasonable additional administrative expenses incurred by the City of Toronto for exceptional circumstances associated with the implementation of a Local Improvement Charge on a property

(n.b. the "cost to the City" includes recurring costs and any non-recurring costs not covered by the grant funding that the City has obtained for the Program).

Step 3: Property Owner Agreement

After the City has confirmed the acceptability of the Building Energy Assessment Report and the Funding Request Form, the City will prepare a property owner agreement ("POA"), for the property owner(s) to review and sign.

Step 4: Completing Improvements

1. Initial Funding Disbursement

Following execution of the POA, the City will have the option at its sole discretion to provide the property owner with an initial disbursement that can be used to pay contractors (i.e. security deposit).

- the initial disbursement can be up to a maximum of 10 percent of the estimated cost of the work.

If provided, such disbursement would be agreed upon in the POA. The property owner will be contractually obligated to repay this initial disbursement if the property owner does not complete the improvements.

The improvements must be completed within a reasonable timeframe, as stipulated in the POA, to be determined by the City in its sole discretion.

Where a property owner anticipates several disbursements over a longer period of time to complete the work, the City may require the property owner to enter into separate POAs and may impose a separate special charge on the property for each disbursement.

2. Final Funding Disbursement

As will be detailed in the POA, the City will provide the final disbursement only after the property owner provides:

- i. proof that the work to install the approved retrofit measures has been properly completed and the work has been approved and accepted by the property owner; and
- ii. a detailed invoice and specification of the actual costs and useful life for all the works.

The City will be responsible for verifying that the retrofit project specified in the POA has been completed, either through a City staff or a third party verifying agent contracted by the City. The City will also verify all eligible utility rebates to be paid to the property and ensure that the rebate amounts are not included in the final funding disbursement.

Step 5: LIC Repayment

Following the City Treasurer's periodic certification of the local improvement roll (which occurs after the improvements on a given set of properties are complete and the final amounts of funding are confirmed), the City Solicitor will submit a corresponding bill for Council to adopt a by-law pursuant to Section 35.14 of O.Reg 596/06 to impose the special charges on the participating properties. For each property included in the by-law, the Treasurer will then add to the City's tax roll for that property each year the portion of the imposed special charge that is due in that year. These collective steps will provide priority lien status for the annual amount that the Treasurer adds to the tax roll and will ensure that any subsequent property owner who was not a party to the POA is bound to pay that amount.

To facilitate repayment of the annual special charge, the POA will require property owners to sign-up for the pre-authorized payment plan option of 11 monthly instalments similar to the existing Program for property tax payments. At any time, a property owner can make a one-time payment of the total outstanding amount owing to clear the property of the LIC charge. Failure to make payments is treated with the same remedy as uncollected property taxes which may include penalties and interest charges.

2.8. LIC Disclosure

As indicated above, the subsequent owner of a property on which the City has imposed a special charge is required to pay the City the annual LIC amount even though that subsequent owner was not a party to the original POA. In addition to notice that the City will be giving in accordance with the provisions of O.Reg 596/06, the City also will take the following steps to ensure even greater transparency of the LIC to interested parties by:

- i. posting on the City's website notice of the special charge by-law to impose the charge on the property in advance of its introduction and after its adoption; and
- ii. updating the Tax Certificate to include the full LIC amount, amount payable in the current year, outstanding amounts owing and a note to reference the by-law pursuant to which the special charge was imposed.

2.9. Access to Utility Rebates & Incentives

The City plans to promote relevant offerings from Enbridge Gas and IESO in the delivery of the Program to facilitate property owner's access to the range of incentives and promotions. Incentives are subject to change and availability.

- i. Examples of incentives currently available from Enbridge Gas:
 - a. Retrofit incentives for up to 50 percent of eligible project cost to a maximum of \$100,000.
- ii. Examples of incentives currently available from IESO:
 - a. Retrofit incentives providing up to 50 percent of the project cost for approved measures

The funding advanced by the City will be net of any rebates or other incentives received by the property owners.

2.10. Quality Control

As a means of additional oversight to confirm that the funded improvements were completed, the City reserves the right to have a City official or third party contractor complete an inspection. The property owner(s) is also responsible for keeping original copies of contractor invoices and may be required disclose this information to the City upon request.

In addition to the criteria outlined above, the Taking Action on Tower Renewal Program will have interim and final reporting requirements for program participants as outlined in section 2.6 "Completing the Retrofit Project". Further criteria may be included to reflect industry best practices. This criteria may be amended by City staff to reflect best practices in the industry.

2.11. Measurement and Verification

The property owner(s) must consent to providing the City with access to the property's utility usage data in order to monitor results and evaluate the Program's effectiveness three years prior to the project, over the duration of the construction, for a minimum of 12 months after the completion of the retrofit and over the length of the financing term. Also, the property owner(s) agrees to participate in surveys and other follow-up activities to help the City evaluate the Program.

II.B. Taking Action on Tower Renewal Program

3.0. Outline

The Taking Action on Tower Renewal Program will reach out to owners of residential rental apartment buildings in areas of the City with low socio-economic indicators. The Program is designed to facilitate the installation of qualifying energy efficiency, water conservation, and renewable energy technology retrofits at residential rental buildings as well as related energy audits by providing financing. Repayment will be secured by imposing a local improvement charge on the private residential rental apartment, as authorized by Ontario Regulation 596/06, as amended (O'Reg. 596/06").

3.1. Objectives

The Program design will balance the need to attract participation and addresses the objectives of enabling a higher incidence and depth of investment in apartment building retrofits to align with a number of City objectives to:

- increase the quality and durability of rental housing stock;
- address housing affordability by mitigating pressures on rent increases due to rising utility costs;
- realize economic development opportunities in connection with investments in retrofitting of apartment buildings, including industry development and job creation;
- achieve greenhouse gas emission reductions; and
- achieve a higher level of energy efficiency, water conservation and renewable energy generation.

The projected benefits to the City may include improved housing affordability, enhanced energy security, extended economic development opportunities and improved environmental performance.

3.2. Program Eligibility

Rental apartment buildings located within the City of Toronto with three or more storeys and seven or more units would be eligible to apply to the Program. The property must have a

property tax account with the City of Toronto. Properties that are property tax exempt are eligible however, City staff will initiate an additional review process that may require a financial assessment in this specific case.

Properties where a third-party mortgage lender pays the property taxes are required to create an arrangement between the Property Owner and the mortgage lender that either the mortgage lender or the Property Owner will provide the City with one single periodic payment through either the City's Pre-authorized Property Tax Payment Plan or the third-party mortgage payment plan, respectively, for both the repayment of the LIC Special Charge and the payment of applicable property taxes. Properties that have multiple single owners would not be eligible without commitment from all owners.

The maximum eligible funding amount for a property (inclusive of the cost of borrowing and an administrative charge) would be limited to the lesser of 25 percent of the Current Value Assessment of the property or \$5,000,000 per building.

The City would require that participating property owners do not apply for Above Guideline Increases for the full cost of the retrofit project completed through the Program and do not condominiumize the building over the financing term as stated in the Property Owner Agreement.

Additional eligibility criteria for the Program would include:

- all registered owner(s) of the property must consent to participating in the Program;
- property tax, utility bills and all other payment obligations to the City for the past five years must be in good standing;
- specification that the property owner will obtain independent legal and financial advice with respect to participation in the Program; and
- properties must be located in Neighbourhood Improvement Areas, low-income census tracts and areas of the City with low socio-economic indicators.

3.3. Outreach

Staff will work with a number of parties in order to build Program awareness and effectively engage participants in the Program. The Taking Action on Tower Renewal Program will focus outreach in:

- areas with a concentration of buildings with a preponderance of residents with low-incomes – to maximize outcomes aligned with city objectives;
- areas with a concentration of buildings with a preponderance of residents with core housing need - to maximize outcomes aligned with city objectives;
- areas with a concentration of buildings with a preponderance of residents that have low socioeconomic indicators;

- areas designated by City Council as Neighbourhood Improvement Areas (NIAs) or Emerging Neighbourhoods; and
- areas designated by City Council as Residential Apartment Commercial (RAC) pilot project areas as part of the City-Wide Zoning By-law implementation - to complement existing outreach and staff activities in these areas maximizing Program delivery efficiencies
[\(http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PG21.1\);](http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PG21.1)

As part of the Program, participating property owners are required to commit to engaging residents and this includes:

- developing resident engagement information sessions communication packages prior, during and after the retrofit project is completed;
- supporting the implementation of a conservation awareness training for residents through the Tower Renewal Green Champions Program at each building to address the behavioural components of energy efficiency, water conservation and waste diversion; and
- participating in any workforce development and local training or employment programs developed by the City.

3.4. Building Energy Assessment

As part of the Program application process, the City will require property owners to have a building energy assessment (also referred to as an energy audit) completed by a certified professional energy auditor that meets the eligibility criteria set out below. This energy assessment report should meet the ASHRAE Level 2 requirements in addition to any criteria outlined below.

To meet program eligibility requirements, the energy assessment and related report would need to be completed by a qualified professional energy auditor with expertise in building energy efficiency who must be independent of and third party to the Program applicant, and meets the following criteria:

- i. a professional engineer ("P.Eng."), a certified engineering technologist ("CET"), a certified energy manager or a certified measurement and verification professional; with a minimum of three years of experience evaluating energy systems in buildings; or
- ii. an engineer-in-training under the supervision of a P.Eng. or a CET, only if a qualified and experienced person as described in (i) above certifies and signs the energy assessment report; and
- iii. a professional architect with a license to practice from the Ontario Association of Architects in consultation with a professional engineer ("P.Eng."), a certified engineering technologist ("CET"), a certified energy manager or a certified measurement and verification professional; with a minimum of three years of experience evaluating energy systems in buildings.

Property owners will be responsible for engaging a certified professional to complete the building energy assessment and will assume any associated costs. Property owners may be able to offset these costs through any existing incentives from Enbridge as described in Section 2.9. below. Property owners will also be responsible for any costs incurred by the City to verify the assessment report and these costs will be recovered as part of the Program administration costs. The property owner will be required to provide the City with an energy assessment (energy audit) report that includes the identification of: recommended energy efficiency, water conservation and renewable energy generation improvements (the measures), the anticipated energy and cost savings, the expected useful life of measures, the cost range for the recommended measures and eligibility for incentives. Further criteria may be included to reflect industry best practices. This criteria may be amended by City staff to reflect best practices in the industry.

The report provided by an eligible certified professional will be reviewed by either a third party or City staff to determine the reasonableness of the associated costs of the proposed retrofit project. In the instance where property owners are applying to the Program for measures that have received prior approval from Enbridge or the Independent Electricity Systems Operator (IESO), the Enbridge and/or IESO approval would suffice as third-party verification for those measures.

3.5. Qualifying Energy Efficiency, Renewable Energy Technologies and Water Conservation Measures

In the Multi-Residential Stream of the Program, property owners would be able to propose a range of retrofit measures that would improve the quality of life for residents, improve building condition and help to reduce building operating costs. To qualify for funding, retrofit measures proposed by the property owner must be identified by the energy assessment (energy audit) report, provided by an eligible certified energy auditor. The qualified energy auditor must meet the criteria set out in Section 2.4.

Eligible retrofit measures would be required to demonstrate the potential to achieve:

- i. a minimum 15 percent energy and emissions reduction to be eligible to receive a grant against the estimated project costs in the Property Owner Agreement; or
- ii. meet 30 percent emissions reduction (plus or minus 5 percent) to be eligible to receive a grant against the estimated project costs in the Property Owner Agreement and up to \$50,000 in an energy assessment and technical study grant to cover up to 50 percent of the study cost.

Grant will be provided in the form of loan forgiveness.

Eligible retrofit measures must include at least one of the following:

- i. high efficiency windows;
- ii. roof replacement with enhanced insulation;
- iii. insulated overcladding; or

iv. Heat pumps.

Relevant ventilation improvements must be completed alongside window, roof and overcladding retrofits. Alongside any of the above measures, relevant upgrades to the building automation system or control systems must be undertaken. Retrofit measures must improve resident comfort and reduce emissions.

A non-exhaustive list of the categories of retrofit measures that can be supported through the Program in addition to at least one of the above measures include:

- Mechanical Systems (including electricity and HVAC related measures): boilers, bi-level lighting in parking garages, hot water circulation pump controls;
- Building Envelope improvements: window and balcony door replacement, solar walls, insulated cladding for exterior walls;
- Water Efficiency improvements: low-flow toilets and fixtures;
- Renewable Energy Technologies: solar photovoltaics for thermal heating, solar photovoltaics for electricity generation, geothermal heating and cooling, energy storage technology, energy efficient vehicle chargers (Level 2 and above) and associated works; and
- Energy efficient resilience measures.

Retrofit measures that are not permanently affixed to the property or measures with an expected useful life of less than five years would not be eligible for the Program. The LIC term selected by the property owners shall not exceed the expected useful life of the retrofit. By defining categories of retrofit improvements and associated measures, the City makes no guarantees of the materials, performance, cost-effectiveness or any warranty of the measures supported by the Program.

3.6. Completing the Retrofit Project

The City will provide funding to property owners for approved retrofit projects consisting of eligible retrofit measures that meet the criteria outlined in section 2.5, and have been recommended as part of the energy assessment report prepared by an eligible qualified energy auditor and verified by the City or its third party agent. Contractors will be hired by the property owner. The City will not pre-qualify contractors or procure contractors to perform energy assessments or undertake retrofit projects on behalf of property owners in connection with this Program. The property owner will use the funds disbursed by the City to pay contractors directly.

The City is not responsible for the work quality of any contractors hired in connection with this Program and assumes no liability for the works undertaken. All retrofit improvements must adhere to local codes and by-laws. The property owner is responsible for ensuring that hired contractors are licensed, bonded, and insured. Any issues that may arise relating to the quality of workmanship or post-installation performance of retrofit measures, for example, should be dealt with by the property owner and contractor.

The Taking Action on Tower Renewal Program will have interim and final reporting requirements for program participants.

The interim report may ask for project progress information including but not limited to:

- activities completed to date and in progress;
- significant changes to the scope or costs of the programs and how these changes will impact the environmental benefits of the project and as well as the budget;
- any updates on the expected project completion date;
- lessons learned to date including any barriers encountered and creative solutions to these projects, reflection the project process and advice for future projects;
- materials used as part of the project that could be shared with others wanting to undertake this work;
- high quality photos of the project; and
- other information as requested by the City.

The final report may ask for project progress information including but not limited to:

- implementation of project activities and an explanation of any changes as well as the impact on the project;
- lessons learned in the design, procurement, contracting, planning, resident engagement, and construction phases Environmental benefits information including energy, water and waste reduction;
- financial benefits including reduction in maintenance costs;
- resident engagement information and activities;
- materials used as part of the project that could be shared with others wanting to undertake this work;
- high quality photos of the project; and
- other information as requested by the City.

3.7. Application Process

The steps below outline the process and requirements property owners need to follow as part of the Program. City staff will periodically review this process to ensure effective Program

implementation and, where deemed appropriate, the City may make changes in its sole discretion.

Step 1: Prequalification

Property owners submit an on-line application form that will include the following information:

- property address to confirm property is an eligible building type and ownership type;
- property assessment roll number to confirm no outstanding payments owed to the City in the last five years;
- acknowledgement that the property owner will obtain independent legal and financial advice with respect to participation in the Program; and
- acknowledgement of the application to the Program and consent to Program participation from all registered property owners.

Once the property owner has been prequalified by City staff, based on the above criteria, the City will provide a Notice to Proceed letter to the property owner.

Step 2: Building Energy Assessment and Funding Request Form

1. Building Energy Assessment

The property owner completes and provides a building energy assessment in accordance with Section 2.4 above and submits to the City the resulting Energy Assessment Report that the eligible qualified energy auditor provides the property owner.

The report must include:

- recommended energy efficiency, water conservation and renewable energy generation improvements (the measures);
- the anticipated energy, water, emissions and cost savings (expressed as a quantity e.g. kWh, m³, tonnes of equivalent CO₂ emissions,dollars and percentage);
- expected useful life of measures;
- the cost range for the recommended measures;
- potential eligibility for incentives;
- a written description of the physical characteristics of the building, as well as its current condition, age and construction type;

- a description and assessment of the condition and maintenance needs of all existing components below including lighting, all sources of heating and cooling, their energy consumption and fuel type as well as the manufacturer, model number, physical condition and years of service, and any issues or deficiencies:
 - Structural: walls, floors, roofs, windows, sealing, doors, insulation, and cladding;
 - Systems: plumbing, HVAC, electrical, emergency and life safety;
 - Interior and exterior components including finishes and fixtures; and
 - Using a low carbon lens, this information should be summarized in a table of expected costs and the timeline (capital plan) to remedy those issues and deficiencies similar to a Building Condition Assessment (BCA);
- work with the City of Toronto to submit post-retrofit measurement and verification plan and report that meets IPMVP standards;
- consider improvements to ventilation as part of any retrofits to the building envelope;
- consider equipment and system failure risk in retrofit design;
- consider the impact on Indoor Environmental Quality (IEQ) of the recommended measures;
- consider the City of Toronto's long-term carbon reduction target to 2050 and the requirements in the Net Zero Existing Buildings Emissions Strategy; and
- energy modeling requirements will be determined by City staff and the technical advisory committee in consultation with project technical consultant:
 - Example: TGS energy modeling criteria https://www.toronto.ca/wp-content/uploads/2019/02/93d5-CityPlanning_V3-Energy-Modelling-Guidelines-Feb-2019.pdf

Further criteria may be included to reflect industry best practices. This criteria may be amended by City staff to reflect best practices in the industry.

2. **Funding Request Form**

Along with the Energy Assessment Report, the property owner also will need to submit a Funding Request Form that:

- identifies the improvements that the property owner intends to install based on the Energy Assessment Report;
- identifies the cost for each improvement (including equipment, materials and labour costs) inclusive of HST;

- acknowledges that the property owner will obtain independent legal and financial advice with respect to participation in the Program; and
- specifies the amount of a prepayment that is being requested from the City upon signing the POA, if any. The City will determine at its sole discretion whether a prepayment will be advanced.
 - The Property Owner may be eligible for an initial disbursement of up to a maximum of 30 percent of the estimated cost in the Property Owner Agreement plus up to \$50,000 for the energy assessment and technical study.

An optional second disbursement for a maximum of 30 percent of the estimated cost in the Property Owner Agreement can be provided at 50 percent project completion upon the receipt of certification documents from a qualified engineer that verify construction progress.

Following receipt of the Funding Request Form, the City will:

- confirm the eligibility of the works (e.g. items affixed to property);
- verify the reasonableness of retrofit costs by consulting precedents, current pricing and other means;
- calculate the administrative costs using a formula that apportions the cost to the City to operate this Program between participating properties as a percentage of the cost of the work undertaken relative to the percentage of the cost of the work to the overall budget for each Program Stream; and
- calculate reasonable additional administrative expenses incurred by the City of Toronto for exceptional circumstances associated with the implementation of a Local Improvement Charge on a property.

(*n.b.* the "cost to the City" includes recurring costs and any non-recurring costs not covered by the grant funding that the City has obtained for the Program).

Step 3: Property Owner Agreement

After the City has confirmed the acceptability of the Building Energy Assessment Report and the Funding Request Form, the City will prepare a property owner agreement ("POA"), for the property owner(s) to review and sign.

Step 4: Completing Improvements

1. Initial Funding Disbursement

Following execution of the POA, the City will have the option at its sole discretion to provide the property owner with an initial disbursement that can be used to pay contractors (i.e. security deposit).

- the initial disbursement can be up to a maximum of 30 percent of the estimated cost in the Property Owner Agreement plus up to \$50,000 for the energy assessment and technical study.
 - An optional second disbursement for a maximum of 30 percent of the estimated cost in the Property Owner Agreement can be provided at 50 percent project completion upon the receipt of certification documents from a qualified engineer that verify construction progress.

If provided, such disbursement would be agreed upon in the POA. The property owner will be contractually obligated to repay this initial and second disbursement if the property owner does not complete the improvements.

The improvements must be completed within a reasonable timeframe, as stipulated in the POA, to be determined by the City in its sole discretion.

Where a property owner anticipates several disbursements over a longer period of time to complete the work, the City may require the property owner to enter into separate POAs and may impose a separate special charge on the property for each disbursement.

2. **Final Funding Disbursement**

As will be detailed in the POA, the City will provide the final disbursement only after the property owner provides:

- i. proof that the work to install the approved retrofit measures has been properly completed and the work has been approved and accepted by the property owner; and
- ii. a detailed invoice and specification of the actual costs and useful life for all the works.

The City will be responsible for verifying that the retrofit project specified in the POA has been completed, either through a City staff or a third party verifying agent contracted by the City. The City will also verify all eligible utility rebates to be paid to the property and ensure that the rebate amounts are not included in the final funding disbursement.

The Taking Action on Tower Renewal Program includes the eligibility for grants which will only be provided 12 months post retrofit and upon the completion of a measurement and verification report that will verify the compliance with energy reduction targets. The grants will be applied in the form of loan forgiveness in line with the existing Local Improvement Charge repayment process. Grants will be set by apportioning a percentage of the estimated project costs relative to the overall available grant amount received from FCM.

Property owners may become eligible for grants in one of two ways:

- i. retrofit project meets 15 percent energy and emissions reduction to be eligible to receive a grant against the estimated project costs in the Property Owner Agreement; and

- ii. retrofit project meets 30 percent emissions reduction plus or minus 5 percent to be eligible to receive a grant against the estimated project costs in the Property Owner Agreement and up to \$50,000 in an energy assessment and technical study grant to cover up to 50 percent of the study cost.

Step 5: LIC Repayment

Following the City Treasurer's periodic certification of the local improvement roll (which occurs after the improvements on a given set of properties are complete and the final amounts of funding are confirmed), the City Solicitor will submit a corresponding bill for Council to adopt a by-law pursuant to Section 35.14 of O.Reg 596/06 to impose the special charges on the participating properties. For each property included in the by-law, the Treasurer will then add to the City's tax roll for that property each year the portion of the imposed special charge that is due in that year. These collective steps will provide priority lien status for the annual amount that the Treasurer adds to the tax roll and will ensure that any subsequent property owner who was not a party to the POA is bound to pay that amount.

To facilitate repayment of the annual special charge, the POA will require property owners to sign-up for the pre-authorized payment plan option of 11 monthly instalments similar to the existing Program for property tax payments. At any time, a property owner can make a one-time payment of the total outstanding amount owing to clear the property of the LIC charge. Failure to make payments is treated with the same remedy as uncollected property taxes which may include penalties and interest charges.

3.8. LIC Disclosure

As indicated above, the subsequent owner of a property on which the City has imposed a special charge is required to pay the City the annual LIC amount even though that subsequent owner was not a party to the original POA. In addition to notice that the City will be giving in accordance with the provisions of O.Reg 596/06, the City also will take the following steps to ensure even greater transparency of the LIC to interested parties by:

- i. posting on the City's website notice of the special charge by-law to impose the charge on the property in advance of its introduction and after its adoption; and
- ii. updating the Tax Certificate to include the full LIC amount, amount payable in the current year, outstanding amounts owing and a note to reference the by-law pursuant to which the special charge was imposed.

3.9. Access to Utility Rebates & Incentives

The City plans to promote relevant offerings from Enbridge Gas and IESO in the delivery of the Program to facilitate property owner's access to the range of incentives and promotions. Incentives are subject to change and availability.

- i. Examples of incentives currently available from Enbridge Gas:

- a. Retrofit incentives for up to 50 percent of eligible project cost to a maximum of \$100,000
- ii. Examples of incentives currently available from IESO:
 - a. Retrofit incentives providing up to 50 percent of the project cost for approved measures

The funding advanced by the City will be net of any rebates or other incentives received by the property owners.

3.10. Quality Control

As a means of additional oversight to confirm that the funded improvements were completed, the City reserves the right to have a City official or third party contractor complete an inspection. The property owner(s) is also responsible for keeping original copies of contractor invoices and may be required disclose this information to the City upon request. Additional interim and final reporting requirements are outlined in section 2.6 "Completing the Retrofit Project". Further criteria may be included to reflect industry best practices. This criteria may be amended by City staff to reflect best practices in the industry.

3.11. Measurement and Verification

The property owner(s) must consent to providing the City with access to the property's utility usage data in order to monitor results and evaluate the Program's effectiveness three years prior to the project, over the duration of the construction, for a minimum of 12 months after the completion of the retrofit and over the term of the financing term. Also, the property owner(s) agrees to participate in surveys and other follow-up activities to help the City evaluate the Program.

A measurement and verification plan and report must be developed in consultation with City staff. This plan and report must be in line with the International Performance Monitoring and Verification Protocols. The report must be submitted after retrofit completion in order to verify the compliance with energy reduction targets and confirm eligibility for the grant 12 months post retrofit.