



City of Kingston  
Environment, Infrastructure & Transportation Policies Committee  
Agenda

08-2024

Tuesday, October 8, 2024

6:00 p.m.

Council Chamber

**Committee Composition**

Councillor Cinanni; Chair

Councillor Amos

Councillor Chaves

Councillor Hassan

Councillor Stephen

Councillor Tozzo

Please provide regrets to Allison Hannah, Committee Clerk at 613-546-4291, extension 1209 or [ahannah1@cityofkingston.ca](mailto:ahannah1@cityofkingston.ca).

Watch live on the [Kingston City Council YouTube](#) channel or register to receive the [Zoom](#) link.

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Pages

1. **Call to Order**

2. **Approval of the Agenda**

3. **Confirmation of Minutes**

1. **Previous Meeting Minutes**

**That** the minutes of Environment, Infrastructure and Transportation Policies Committee Meeting Number 06-2024 and Meeting Number 07-2024, be approved.

4. **Disclosure of Pecuniary Interest**

5. **Delegations**

6. **Briefings**

7. **Business**

1. **Pothole Key Performance Indicators**

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The Report from the Commissioner, Infrastructure, Transportation & Emergency Services (EITP-24-019) is attached.

**Recommendation:**

**That** the Environment, Infrastructure & Transportation Policies Committee recommend to Council:

**That** Council direct staff, starting in 2025, to report to the Environment, Infrastructure and Transportation Policies Committee annually on the following four pothole key performance indicators (KPI) and the following index for context:

1. KPI: Total number of potholes identified for each classification of road;
2. KPI: Percentage of potholes repaired (filled) within the timeframe outlined in the provincial Minimum Maintenance Standards;
3. KPI: Percentage of identified potholes that were reported by the public;
4. KPI: Average number of days to repair a pothole based on road classification; and
5. Index: Weather Severity Index.

**2. Options to Extend the Better Homes Kingston Program**

14

The Report from the Commissioner, Growth & Development Services (EITP-24-020) is attached.

**Recommendation:**

**That** Council direct staff to report back to the Environment, Infrastructure & Transportation Policies Committee in Q3 2025 detailing programmatic changes for the extension of the Better Homes Kingston Program, including a detailed budget and the necessary amendments to By-Law Number 2021-23, "A By-Law to Authorize the Undertaking of Energy Efficiency and Water Conservation Works on Private Residential Property as Local Improvements under the Better Homes Kingston Program (BHKP)".

**3. Recommendations for a Comprehensive Car-sharing Pilot Program**

103

The Report from the Commissioner, Growth & Development Services (EITP-24-021) is attached.

**Recommendation:**

**That** Council approve a budget amendment for \$20,000 funded from the monies collected from the Cash-in-Lieu of Parking levies to support an expanded car-share pilot program; and

Environment, Infrastructure & Transportation Policies Committee Meeting Number 08-2024 - Tuesday, October 8, 2024 at 6:00 p.m.

**That** Council authorize the Manager, Licensing, Parking Operations and Policy, in consultation with the Director of Legal Services, to enter into an agreement with Communauto Inc. for the provision of an expanded car-share pilot program for a period of up to 18 months, starting in Q2 2025.

**8. Motions**

**9. Notices of Motion**

**10. Other Business**

**11. Correspondence**

**12. Date of Next Meeting**

The next meeting of the Environment, Infrastructure and Transportation Policies Committee is scheduled for Tuesday, December 10, 2024 at 6:00 p.m.

**13. Adjournment**



**City of Kingston**  
**Report to Environment, Infrastructure & Transportation Policies Committee**  
**Report Number EITP-24-019**

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**To:** Chair and Members of the Environment, Infrastructure & Transportation Policies Committee

**From:** Brad Joyce, Commissioner, Infrastructure, Transportation & Emergency Services

**Resource Staff:** Karen Santucci, Director, Public Works & Solid Waste

**Date of Meeting:** October 8, 2024

**Subject:** Pothole Key Performance Indicators

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**Council Strategic Plan Alignment:**

Theme: 3. Build an Active and Connected Community

Goal: 3.4 Improve road condition, performance, and safety.

**Executive Summary:**

Kingston's Strategic Plan includes an initiative to develop and implement a means of tracking pothole repairs and develop metrics which can be reported to Environment, Infrastructure & Transportation Policies Committee.

Over the past two years, Public Works has implemented two new pothole tracking systems to transition away from a paper-based system. The first improvement occurred in Q1 2023 and involved using a geographic information system (GIS) application to record potholes on an iPad from inside the road patrol vehicle. The second system implemented in the spring of 2024 involved using Artificial Intelligence (AI) and camera systems to track, identify, and map potholes into the same GIS. This new system will provide more detailed accurate tracking and give staff ability to report on meaningful Key Performance Indicators (KPIs).

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**Recommendation:**

**That** the Environment, Infrastructure & Transportation Policies Committee recommend to Council:

**That** Council direct staff, starting in 2025, to report to the Environment, Infrastructure and Transportation Policies Committee annually on the following four pothole key performance indicators (KPI) and the following index for context:

1. KPI: Total number of potholes identified for each classification of road;
2. KPI: Percentage of potholes repaired (filled) within the timeframe outlined in the provincial Minimum Maintenance Standards;
3. KPI: Percentage of identified potholes that were reported by the public;
4. KPI: Average number of days to repair a pothole based on road classification; and
5. Index: Weather Severity Index.

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**Authorizing Signatures:**

ORIGINAL SIGNED BY COMMISSIONER

\_\_\_\_\_  
**Brad Joyce, Commissioner,  
Infrastructure, Transportation &  
Emergency Services**

p.p. ORIGINAL SIGNED BY COMMISSIONER

\_\_\_\_\_  
**Lanie Hurdle, Chief  
Administrative Officer**

**Consultation with the following Members of the Corporate Management Team:**

Paige Agnew, Commissioner, Growth & Development Services	<input checked="" type="checkbox"/>
Jennifer Campbell, Commissioner, Community Services	Not required
Neil Carbone, Commissioner, Corporate Services	Not required
David Fell, President & CEO, Utilities Kingston	Not required
Peter Huigenbos, Commissioner, Major Projects & Strategic Initiatives	Not required
Desirée Kennedy, Chief Financial Officer & City Treasurer	Not required

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**Options/Discussion:**

Section 3.4.1 of Kingston’s Strategic Plan, includes the following initiative:

Improve the overall state of the City’s roads through maintenance and capital planning.

- Develop and implement a means of tracking pothole repairs and develop metrics which can be reported to Environment, Infrastructure & Transportation Policies Committee.

This report provides information pertaining to pothole data collection and analysis as well as providing Key Performance Indicators recommended to be used by Public Works.

A review of current data from 2023-2024 shows a decrease in potholes being identified through customer reports and road patrol inspections. Many factors can contribute to this but two that are dominant are that the winter was much less severe than prior winters and that Public Works prioritized pothole maintenance work over the past 18 months.

**Background**

A pothole is a depression in a road surface, usually asphalt pavement. Two primary factors normally contribute to the physical development of a pothole – water in the underlying base structure and vehicle traffic passing over the affected area. Water first weakens the underlying base, and then traffic fatigues and breaks the poorly supported asphalt surface. Freeze/thaw cycles greatly accelerate the deterioration process and continued vehicular traffic ejects both asphalt and the underlying base material thereby creating a hole in the pavement. The number of potholes found each year can vary significantly depending on the weather, amount of traffic and road conditions. Certainly, the City experiences higher levels of potholes associated with seasons having more freeze/thaw cycles.

Staff introduced changes to pothole identification and tracking over the past two years that changed how the data is collected. Inspections are conducted based on legislative requirements established through provincial minimum maintenance standards. For example, main arterial roads are inspected thrice weekly while low-volume local roads are inspected once monthly. Prior to late 2023, Public Works used a manual recording method but has since transitioned to using a GIS application and, in the summer of 2024, added cameras and Artificial Intelligence (AI) technology. This permits scanning of the road as driven, with the AI system identifying issues and automatically entering them into the GIS system. These changes have improved efficiency and effectiveness, having a positive effect on the ability to properly identify and track potholes.

**Analysis**

The changes in tracking methods of potholes have made it difficult to have accurate comparable data for previous years. The technological changes implemented provide a more solid data foundation and early results point to more reliable objective information being obtained. Public

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reporting of potholes will continue to be received and inputted, and this combination will form the basis for data analysis and direct repairs.

A review of KPIs used in other municipalities indicated that there were many KPIs related to highways, however many of these relate to assigning a road condition survey index to a segment of highway, which Kingston's Engineering department already completes. For the purpose of this report, staff looked strictly at development of KPIs based on potholes and not on larger segments of roadways. A KPI review of other municipalities found that there is little consistency on pothole statistics including repair and associated completion times. This lack of cohesive data means comparators are not readily available, however, there is value in reporting and comparing internal KPIs over time.

Weather is one of the main contributing factors to the development of potholes, more specifically water. Water can impact potholes due to insufficient drainage, pavement defects that allow moisture to compromise the structural integrity of the pavement and extreme weather variations which cause freezing. Weather can have a significant effect on the number of potholes generated in a given year. For this reason, a Winter Severity Index is often used to establish how severe the weather was for a given year. A Winter Severity Index is a measure of the relative impact of winter weather on winter road maintenance operations using historical meteorological or road weather information system data. It can be used to evaluate the relative harshness of a winter in comparison with a base period.

The implementation of the new software and AI tracking will allow staff to provide consistent KPI data going forward. Starting in 2025, staff recommend that the following pothole KPIs be reported to the EITP Committee on an annual basis:

- The total number of potholes identified for each classification of road.
- The percentage of potholes repaired (filled) within the time frame outlined in the provincial Minimum Maintenance Standards.
- Percentage of identified potholes that were reported by the public.
- Average number of days to repair a pothole based on road classification.

Staff also recommend that in addition to the KPIs above, supplementary context be provided by staff report:

- the Winter Severity Index.

### **Financial Considerations**

None

### **Contacts:**

Karen Santucci, Director of Public Works & Solid Waste 613-546-4291 extension 1856



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**Exhibits Attached:**

Exhibit A - Minimum Maintenance Standards for Potholes

## Minimum Maintenance Standards for Potholes

O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways  
 Under Municipal Act, 2001, S.). 2001, c. 25

### Classification of Highways

Column 1 Average Daily Traffic (# of motor vehicles)	Column 2 91 - 100 km/h speed limit	Column 3 81 - 90 km/h speed limit	Column 4 71 - 80 km/h speed limit	Column 5 61 - 70 km/h speed limit	Column 6 51 - 60 km/h speed limit	Column 7 41 - 50 km/h speed limit	Column 8 1 - 40 km/h speed limit
53,000 or more	1	1	1	1	1	1	1
23,000 - 52,999	1	1	1	2	2	2	2
15,000 - 22,999	1	1	2	2	2	3	3
12,000 - 14,999	1	1	2	2	2	3	3
10,000 - 11,999	1	1	2	2	3	3	3
8,000 - 9,999	1	1	2	3	3	3	3
6,000 - 7,999	1	2	2	3	3	4	4
5,000 - 5,999	1	2	2	3	3	4	4
4,000 - 4,999	1	2	3	3	3	4	4
3,000 - 3,999	1	2	3	3	3	4	4
2,000 - 2,999	1	2	3	3	4	5	5
1,000 - 1,999	1	3	3	3	4	5	5

**Exhibit A to Report Number EITP-24-019**

Column 1 Average Daily Traffic (# of motor vehicles)	Column 2 91 - 100 km/h speed limit	Column 3 81 - 90 km/h speed limit	Column 4 71 - 80 km/h speed limit	Column 5 61 - 70 km/h speed limit	Column 6 51 - 60 km/h speed limit	Column 7 41 - 50 km/h speed limit	Column 8 1 - 40 km/h speed limit
500 - 999	1	3	4	4	4	5	5
200 - 499	1	3	4	4	5	5	6
50 - 199	1	3	4	5	5	6	6
0 - 49	1	3	6	6	6	6	6

O. Reg. 366/18, s. 1 (5)

## Maintenance Standards

### Patrolling

3. (1) The standard for the frequency of patrolling of highways to check for conditions described in this Regulation is set out in the Table to this section. O. Reg. 23/10, s. 3 (1); O. Reg. 366/18, s. 3 (2).

(2) If it is determined by the municipality that the weather monitoring referred to in section 3.1 indicates that there is a substantial probability of snow accumulation on roadways, ice formation on roadways or icy roadways, the standard for patrolling highways is, in addition to that set out in subsection (1), to patrol highways that the municipality selects as representative of its highways, at intervals deemed necessary by the municipality, to check for such conditions. O. Reg. 47/13, s. 2; O. Reg. 366/18, s. 3 (2).

(3) Patrolling a highway consists of observing the highway, either by driving on or by electronically monitoring the highway, and may be performed by persons responsible for patrolling highways or by persons responsible for or performing highway maintenance activities. O. Reg. 23/10, s. 3 (1).

(4) This section does not apply in respect of the conditions described in section 10, subsections 11 (0.1) and 12 (1) and section 16.1, 16.2, 16.3 or 16.4. O. Reg. 23/10, s. 3 (1); O. Reg. 366/18, s. 3 (3).

**Patrolling Frequency**

Class of Highway	Patrolling Frequency
1	3 times every 7 days
2	2 times every 7 days
3	once every 7 days
4	once every 14 days
5	once every 30 days

O. Reg. 239/02, s. 3, Table; O. Reg. 23/10, s. 3 (2)

**Potholes**

**6.** (1) If a pothole exceeds both the surface area and depth set out in Table 1, 2 or 3 to this section, as the case may be, the standard is to repair the pothole within the time set out in Table 1, 2 or 3, as appropriate, after becoming aware of the fact. O. Reg. 239/02, s. 6 (1); O. Reg. 366/18, s. 8 (1).

(1.1) For the purposes of this section, the surface area and depth of a pothole may be determined in accordance with subsections (1.2) and (1.3), as applicable, by a municipal employee, agent or contractor whose duties or responsibilities include one or more of the following:

1. Patrolling highways.
2. Performing highway maintenance activities.
3. Supervising staff who perform activities described in paragraph 1 or 2. O. Reg. 366/18, s. 8 (2).

(1.2) The depth and surface area of a pothole may be determined by,

- (a) performing an actual measurement; or
- (b) performing a visual estimate. O. Reg. 366/18, s. 8 (2).

(1.3) For the purposes of this section, the surface area of a pothole does not include any area that is merely depressed and not yet broken fully through the surface of the roadway. O. Reg. 366/18, s. 8 (2).

(2) A pothole is deemed to be in a state of repair if its surface area or depth is less than or equal to that set out in Table 1, 2 or 3, as appropriate. O. Reg. 239/02, s. 6 (2); O. Reg. 47/13, s. 6.

**Table 1: Potholes on Paved Surface of Roadway**

<b>Class of Highway</b>	<b>Surface Area</b>	<b>Depth</b>	<b>Time</b>
1	600 cm <sup>2</sup>	8 cm	4 days
2	800 cm <sup>2</sup>	8 cm	4 days
3	1000 cm <sup>2</sup>	8 cm	7 days
4	1000 cm <sup>2</sup>	8 cm	14 days
5	1000 cm <sup>2</sup>	8 cm	30 days

O. Reg. 239/02, s. 6, Table 1.

**Table 2: Potholes on Non-paved Surface of Roadway**

<b>Class of Highway</b>	<b>Surface Area</b>	<b>Depth</b>	<b>Time</b>
3	1500 cm <sup>2</sup>	8 cm	7 days
4	1500 cm <sup>2</sup>	10 cm	14 days
5	1500 cm <sup>2</sup>	12 cm	30 days

O. Reg. 239/02, s. 6, Table 2.



**City of Kingston**  
**Report to Environment, Infrastructure & Transportation Policies Committee**  
**Report Number EITP-24-020**

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**To:** Chair and Members of the Environment, Infrastructure & Transportation Policies Committee

**From:** Paige Agnew, Commissioner, Growth & Development Services

**Resource Staff:** Julie Salter-Keane, Manager, Climate Leadership

**Date of Meeting:** October 8, 2024

**Subject:** Options to Extend the Better Homes Kingston Program

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**Council Strategic Plan Alignment:**

Theme: 2. Lead Environmental Stewardship and Climate Action

Goal: 2.2 Support climate action and sustainability for residents, businesses and partners.

**Executive Summary:**

Council's 2023-2026 Strategic Plan [2.2.3 A](#) includes a commitment to evaluate and report on the potential to extend the Better Homes Kingston program beyond the initial four years. This report provides information on plans and options to extend the Better Homes Kingston program, following the completion of the program pilot in late 2025. This report, includes the financial analysis for program expansion, outlines the creation of a fee-for-service to generate revenue for the program, proposed changes to program rules, and other considerations including alignment with anticipated Federation of Canadian Municipalities (FCM) climate adaptation retrofit funding to be launched in 2025.

Better Homes Kingston is currently operating at capacity, deploying available capital through the active funding agreement between the City and the Federation of Canadian Municipalities, (FCM). Staff are recommending that due to the extensive reporting and evaluation requirements of FCM upon the conclusion of the Better Homes Kingston funded program in 2025, that the program extension be launched following the conclusion of the current program, in Q1 2026.

With the introduction of cost of borrowing associated with the loan financing that will be offered through the program extension, it is unclear what the uptake will be. It is anticipated that

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demand from participants will be reduced. However, if incentives are offered, it is likely that the program will still have sustained interest from eligible homeowners, with a particular focus on projects with significant cost savings potential.

**Recommendation:**

**That** Council direct staff to report back to the Environment, Infrastructure & Transportation Policies Committee in Q3 2025 detailing programmatic changes for the extension of the Better Homes Kingston Program, including a detailed budget and the necessary amendments to By-Law Number 2021-23, “A By-Law to Authorize the Undertaking of Energy Efficiency and Water Conservation Works on Private Residential Property as Local Improvements under the Better Homes Kingston Program (BHKP)”.

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**Authorizing Signatures:**

ORIGINAL SIGNED BY COMMISSIONER

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**Paige Agnew, Commissioner,  
Growth & Development Services**

**p.p.** ORIGINAL SIGNED BY COMMISSIONER

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**Lanie Hurdle, Chief  
Administrative Officer**

**Consultation with the following Members of the Corporate Management Team:**

Jennifer Campbell, Commissioner, Community Services	Not required
Neil Carbone, Commissioner, Corporate Services	Not required
David Fell, President & CEO, Utilities Kingston	Not required
Peter Huigenbos, Commissioner, Major Projects & Strategic Initiatives	Not required
Brad Joyce, Commissioner, Infrastructure, Transportation & Emergency Services	Not required
Desirée Kennedy, Chief Financial Officer & City Treasurer	<input checked="" type="checkbox"/>



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**Options/Discussion:**

**Background**

Council's 2023-2026 Strategic Plan [2.2.3 A](#) includes a commitment to evaluate and report on the potential to extend the Better Homes Kingston program beyond the initial four years. Information Report Number EITP-24-001 (Exhibit A) was presented to EITP in Q4 2023, providing background on financial recapitalization of the program, and conceptual details including a fee-for-service model for program revenue generation, and other changes including enhanced offerings for low-income participants.

Now in its third year of operating, the Better Homes Kingston program has been successful, completing more than 235 projects to date, achieving more than double the average greenhouse gas emissions reductions compared to the program's highest performance threshold level of 30%. As the program pilot has had access to an abundance of 0% interest loan financing, and cash incentives, made possible by the Federation of Canadian Municipalities, the success of the program is not surprising. However, the challenge will now be extending the program without access to such resources, maintaining a strong value proposition for participants, and continuing to create significant impact on residential emissions and energy consumption.

As the program is still deploying capital and operating at capacity, with the program pilot extending to Q3 2025, it will not be feasible to launch the next phase of the program until the pilot is completed. The human capital supporting the program remains static, and at capacity, with several new projects being initiated per week. However, a detailed plan with options has been developed in order that the next phase of the program can be ready for launch soon after the pilot's completion. This includes equity considerations, a fee-for-service model, and numerous other programmatic changes to enhance and streamline the programs process, reduce barriers to participation, and carry the momentum of the pilot forward to meet the ultimate 20-year goal to retrofit 25 – 50% of Kingston's pre-1991 construction one-family homes by 2040 achieving an average carbon reduction impact of 30% per home.

As the Better Homes Kingston extension will no longer have access to the 0% interest loan financing that has made its offering so attractive to homeowners, Council will be requested to approve funding for the 2026 budget cycle to continue to provide financial incentives for homeowners to undertake home energy retrofits. This will be the most significant factor in the future potential impact of Better Homes Kingston program.

**Programmatic Changes**

The following provides an overview of the programmatic changes being recommended by staff for the launch of the BHK extension in 2026, (consideration to be included in the Mayor's 2026 budget).

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As the average completed project in Better Homes Kingston has far exceeded the highest tier in the performance threshold system, which requires all eligible projects to have a minimum GHG emissions reduction potential or energy consumption reduction (measured in kilowatt hours kWh) for already electrically heated homes, it is proposed that the following performance thresholds are established to more accurately reflect actual program outcomes:

- 40% to 59% reduction in emissions or electricity consumption = \$1,000.00\*
- 60% to 79% reduction in emissions or electricity consumption = \$3,000.00\*
- Greater than 80% reduction in emissions or electricity consumption = \$5,000.00\*

\*The dollar values listed above are only an example and may change pending Council approval.

Furthermore, to expand the scope of eligible projects, making the program more inclusive of solar and major envelope insulation projects, a sub-threshold of a 40% reduction in gigajoules (GJ) will be established. This 40% threshold for GJ has been validated with program data, and as the program is likely to see a decline in interest with the introduction of a cost of borrowing, expanding eligibility criteria is necessary to maintain the required scale to meet the programs goals.

For general participants, the eligible \$600.00 rebate towards the cost of the required home energy assessments is proposed, as this cost does pose a barrier to entry for the program. That said, it is a relatively small cost when compared to the average project funding amount of \$26,275.12, as noted in Information Report Number 24-155 (Exhibit B).

As previously presented in Report Number EITP-24-001 (Exhibit A), quoting requirements will be simplified, requiring less back and forth with contractors, and allowing for expedited funding approval. Secondly, a loan minimum of \$10,000.00 will be established, limiting the inclusion of low-cost projects, which still must follow the same Energy Coaching support and administrative process when being registered as Local Improvement Charges (LIC's), and therefore result in a higher administrative cost relative to their total project cost and impact.

Currently, homeowners receive two disbursements, with a 30% advance intended for contractor pre-payments, and a 70% final disbursement upon project completion. However, many homeowners encounter contracts requiring them to seek bridge financing from another source, and thereby incurring additional interest and complexity. To address this, it is proposed that initial disbursements are raised to 50%, to address funding shortcomings, and increase the value proposition of the program, which will become less financially competitive overall.

### **Strategic Marketing**

With the introduction of a cost of borrowing and administrative fee, some projects will become less viable, and to continue making a significant impact, strategic marketing will be crucial for program success. In the next phase of the program there will be a specific focus on fuel-oil and

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propane heated homes, for which third-party incentives are available from the Federal Government, and for which significant cost savings can be realized when switching to heat-pumps. Deep energy retrofit projects requiring significant funding from diverse sources will also be a focus.

As the program grows and becomes more established over time, the aim is for homeowners in Kingston to see Better Homes Kingston as a go to resource and key opportunity when approaching major home retrofits, replacing a furnace, or air-conditioning unit, to create steady demand, and achieve a greater scale to keep costs as low as possible for participants.

Another innovative idea that will be examined is integrating program marketing within the building permitting process, to capture the demographic of homeowners already undertaking major home retrofit projects and streaming them into the program to provide additional financial support, and lead to more energy-efficiency focused projects.

### **Resilient Homes Kingston**

It is anticipated that in early 2025, a new funding stream will be launched by the Federation of Canadian Municipalities, designed to provide funding for climate adaptation focused home retrofits. While the details have not been released at this time, it is anticipated that an approved list of eligible measures will be made available following a publication from Natural Resources Canada, along with a relatively small amount of low-interest capital to provide funding for homeowners to complete resiliency focused retrofits. As Better Homes Kingston is already operating effectively, the program is well positioned to swiftly apply and if successful, rollout a climate adaptation and resilience focused stream. As more information becomes available, and if any amendments are required for By-Law 2021-23 to utilize this funding, recommendations will be presented to Council. Relatedly, the City is in the process of developing a Climate Change Adaptation Plan, which will be presented to Council in early 2025.

### **Financial Analysis**

Of primary concern for the continuation of Better Homes Kingston is the reality that access to low-interest financing is no longer available, following the completion of the Pilot. While the Bank of Canada's key interest rate has been lowered to 4.25% as of September 4<sup>th</sup>. 2024, with an overall downward trend forecasted for Q4 2024, and into 2025, the City's ability to offer loan financing at a competitive rate is contingent on this key interest rate, which still constitutes a significant cost of borrowing for homeowners. As the key interest rate will continue to change, financial analysis will be updated to reflect the ongoing rates and will be presented to Council in Q3 2025, as well as any other potential funding streams such as FCM private capital syndication if available at that time.

The following table and descriptions provide examples (with assumptions) of what can be anticipated under program extension, not including any administrative fee or rate-rider for two scenarios:

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**Better Homes Kingston Extension – Loan Amortization Scenarios**

	Loan Principal Amount	Incentive Amount	Interest Rate	Amortization Period	Gross Interest	Total Loan Payable	Homeowner Saves
<b>Loan Without Incentives</b>	\$26,275	\$0	4.25%	20 Years	\$11,725	\$38,000	\$0
<b>Loan With Incentives</b>	\$21,577	\$4,697	4.25%	20 Years	\$9,629	\$31,206	\$6,794

1. Loan without incentives: Starting with the average project funding amount of \$26,275.00 observed in the pilot, assuming no incentive, over 20 year-term at the current key interest rate of 4.25%, the total amount paid back by the homeowner would be \$38,000.00, with \$11,725.00 paid in interest, not considering any additional administrative fee or rate rider to recoup program operating costs.
2. Loan with incentives: Starting with the average project funding amount of \$26,275.00 the project receives the average incentive amount from the pilot of \$4,697.00 and repaying \$21,577.91 (\$26,275.00 minus \$4,697.00) over a 20 year-term at the current key interest rate of 4.25%, the homeowner would repay a total of \$31,206.00, with \$9,629.00 in interest, equating to a \$6,794.00 difference in the total amortization amount over 20 years.

As the Canadian Mortgage and Housing Corporations’ Canada Greener Homes Loan initiative still offers up to \$40,000.00 at 0% interest, the competitiveness of Better Homes Kingston’s offering will be significantly reduced. However, assuming Council approved incentives are made available through the program, demand may be sustained, when combined with the expert support of the Energy Coach, and well-defined process, including information resources and customized web-portal developed for the program.

Four financial scenarios are presented in Exhibit C – Monetary Options for Better Homes Kingston Extension, showing the program capital budget (including loans, incentives, and rebates, and excluding program operating costs), and the overall financial impact of program subsidization for Councils consideration. For each scenario, three options are listed for total projects completed per year, with 100 for a low yield outcome, 150 as the most likely outcome based on program trends, and 200 as a high yield outcome. These options are provided as it is uncertain how many projects will be completed due to changes in program offerings. Assuming 150 projects per year are completed, all achieving the highest incentive level with 100% of the current incentives being offered, and all qualifying for a \$600 rebate for the cost of home energy assessments, the cost to the city would be approximately \$812,115.00. This total of subsidization is also shown for 50% of current incentive averages, as well as 25% and 0%.

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Considerations for program cost recovery through the creation of a fee-for-service model, a detailed audit was completed, accounting for program operating costs, time per applicant, and net profit / loss for the same three outcomes as the above, being 100 projects completed, 150 projects completed, and 200 projects completed. The financial analysis accounts for costs from the Service Level Agreement with Sustainable Kingston who administer the Energy Coaching Services and key program administration tasks, and other fixed costs such as software licensing for the programs CRM and data reporting dashboard, and homeowner portal, and future marketing costs.

From this audit, assuming that 150 projects will be completed, the average cost to participate, is \$1,615.79. As the economies of scale increase, the per project administrative cost is reduced, with a cost per applicant of \$1,211.84 with the 200 projects completed outcome. This amount can be split between an upfront administrative cost to recover operating costs, and an interest-rate rider to offset opportunity cost. Balancing the upfront cost to participate in the program, and the additional interest being tacked on to the existing cost of borrowing to maintain an offering perceived as valuable by homeowners is critical, and a wide array of potential options is being considered. As the cost of borrowing is already high, it is thought that a lower interest-rate rider, with a moderately higher upfront administrative fee will lead to greater adoption. However, as interest rates continue to change, and program operating costs potentially fluctuate, this exact balance will shift, and final recommendations will be presented to Council in Q3 2025.

### **Equity Considerations**

To ensure the Better Homes Kingston Program continues to be accessible for the low-moderate income homeowners, it is proposed that several additional considerations be made to enhance program equity.

An update will be made to align the income thresholds used by the program to qualify participating homeowners for additional support with the standard used across City services through the Municipal Fee Assistance Program (MFAP). Recently subject to a comprehensive review and approved in [Report Number 24-095](#), the MFAP is the most comprehensive municipal discount program in Canada, with a simple access process and the widest range of programs and service of any municipality. In aligning with MFAP, eligible Better Homes Kingston participants will gain access to an enhanced equity stream of the program, as well as expanding access and awareness to the many additional benefits of MFAP, of which less than half of eligible households are currently accessing. As MFAP income thresholds are updated annually, the Better Homes Kingston program will adopt these updates to ensure accessibility is maximized for low-moderate income homeowners.

It is estimated that up to 20% of participants, or 30 of 150 projects per year could be eligible for the equity stream, with the total cost to subsidize the participation of low-moderate income homeowners in the program coming to approximately \$55,000.00. This cost includes the rebate

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for the required home energy assessments, and comprehensive support from the Energy Coach at no cost to the applicant.

As the cost of a home energy assessment is a clear barrier to entry for the program, and as the standard \$600.00 offered by numerous programs in Ontario (Canada Greener Homes Grant, HER+, Better Homes Kingston etc.) was originally devised several years ago, low-income households would be eligible for a rebate of \$800.00, which comes closer to the true cost of these assessments.

Finally, to overcome the barriers associated with cash flowing major capital projects associated with home energy retrofits, 75% of the loan amount would be disbursed upfront to eligible homeowners, reducing the need for bridge financing from other sources, which typically carries interest.

As previously discussed in Information Report Number EITP-24-001report (Exhibit A), for those very low-income households, who are unable to take on loan financing without guaranteed net savings, the Climate Leadership Division is collaborating with Housing and Social Services staff in partnership when delivering the [Kingston Frontenac Renovates Program](#). The Kingston Frontenac Renovates Program offers eligible homeowner’s forgivable loans and grants for home repairs, with eligibility based on household income and home value assessment. We will continue to collaborate with Housing and Social Services to connect participants Better Homes Kingston and Kingston Frontenac Renovates to additional resources available.

**Climate Risk Considerations**

To date, the Better Homes Kingston program will continue to reduce GHG emissions at the Community level, and with the potential for an adaptation & resiliency focused stream, may offer financing to support, wind, precipitation, and extreme temperature focused upgrades for Kingston homes.

**Existing Policy/By-Law**

By-Law 2021-23, “A By-Law to Authorize the Undertaking of Energy Efficiency and Water Conservation Works on Private Residential Property as Local Improvements under the Better Homes Kingston Program (BHKP)”.

**Notice Provisions**

None required

October 8, 2024

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**Financial Considerations**

To continue the Better Homes Kingston program, \$60,500.00 is required to operate the program from the end of the pilot Q3 2025 to the initiation of the program's expansion planned for Q1, 2026. This will be reflected in the Climate Leadership Division 2025 capital budget.

**Contacts:**

Julie Salter-Keane, Manager, Climate Leadership, 613-546-4291 extension 1163

Soren Christianson, Project Manager, Climate Leadership, 613-546-4291 extension 1325

**Other City of Kingston Staff Consulted:**

Lana Foulds, Director, Financial Services, 613-546-4291 extension 2209

Christine Patton, Financial Analyst, Financial Services, 613-546-4291 extension 2287

**Exhibits Attached:**

- Exhibit A Information Report to Environment, Infrastructure & Transportation Policies Committee Report Number 24-001
- Exhibit B Information Report to Council Report Number 24-155
- Exhibit C Monetary Options for Better Homes Kingston Extension



**City of Kingston**  
**Information Report to Environment, Infrastructure & Transportation Policies**  
**Committee**  
**Report Number EITP-24-001**

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<b>To:</b>	<b>Chair and Members of the Environment, Infrastructure &amp; Transportation Policies Committee</b>
<b>From:</b>	<b>Paige Agnew, Commissioner, Growth &amp; Development Services</b>
<b>Resource Staff:</b>	<b>Julie Salter-Keane, Manager, Climate Leadership</b>
<b>Date of Meeting:</b>	<b>December 12, 2023</b>
<b>Subject:</b>	<b>Potential to Extend the Better Homes Kingston Program</b>

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**Council Strategic Plan Alignment:**

Theme: 2. Lead Environmental Stewardship and Climate Action

Goal: 2.2 Support climate action and sustainability for residents, businesses and partners.

**Executive Summary:**

Council's 2023-2026 Strategic Plan [2.2.3 A](#) includes a commitment to evaluate and report on the potential to extend the Better Homes Kingston program beyond the initial four years. The purpose of this report is to provide details on the feasibility to expand the program including options for recapitalizing the program, the creation of a fee for service model for the program to ensure long-term feasibility, and other programmatic changes under consideration, including support for low-income homeowners.

The four-year program with funding from the Federation of Canadian Municipalities (FCM), Community Efficiency Financing (CEF) program is currently in its pilot-phase and is intended to operate from 2022-2025. The Better Homes Kingston program launched on April 11, 2022, and has received the targeted 500 registrations at this time with an additional 54 added through the waitlist. The year 1 annual report ([Report Number 23-166](#)), provided a comprehensive update on the program to date, including the numerous key performance indicators (KPIs), identified in [Report Number EITP-21-007](#), in order to evaluate program progress.



**Information Report to Environment, Infrastructure & Transportation Policies Committee**

**Report Number EITP-24-001**

**December 12, 2023**

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Better Homes Kingston is performing extremely well, with all loan funding currently allocated to projects, with new applicants being processed from the waitlist when funding becomes available. More than one hundred and twenty-five (125) projects have been completed to date, achieving more than double the target of an average GHG emissions reduction of 30% per home (63%+).

Continuation of the program beyond the initial four years is proposed to be included in the City's 15-year capital plan, with financing options to be provided including offering competitive interest rate loans using the same local improvement charge (LIC) mechanism as the pilot.

Staff will report back to the Environment, Infrastructure & Transportation Policies Committee in Q3 2024, with the final program changes and financial considerations for phase two of the program, including the required loan financing to be provided by the City, details of the fee-for-service model for program cost recovery, and options for continued incentives.

**Recommendation:**

This report is for information only.

Information Report to Environment, Infrastructure & Transportation Policies Committee

Report Number EITP-24-001

December 12, 2023

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**Authorizing Signatures:**



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**Paige Agnew, Commissioner,  
Growth & Development Services**



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**Lanie Hurdle, Chief  
Administrative Officer**

**Consultation with the following Members of the Corporate Management Team:**

Jennifer Campbell, Commissioner, Community Services



Neil Carbone, Commissioner, Corporate Services

Not required

David Fell, President & CEO, Utilities Kingston

Not required

Peter Huigenbos, Commissioner, Major Projects & Strategic Initiatives

Not required

Brad Joyce, Commissioner, Infrastructure, Transportation &  
Emergency Services

Not required

Desirée Kennedy, Chief Financial Officer & City Treasurer



Information Report to Environment, Infrastructure & Transportation Policies Committee

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December 12, 2023

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**Options/Discussion:**

**Program Overview and Background**

Council's 2023-2026 Strategic Plan [2.2.3 A](#) includes a commitment to evaluate and report on the potential to extend the Better Homes Kingston program beyond the initial four years. Launched on April 11, 2022, the Better Homes Kingston program is intended to operate until September 2025, with funding provided by the Federation of Canadian Municipalities (FCM), Community Efficiency Financing (CEF), and the City. The program offers access to loan financing (i.e. attached as Local Improvement Charges to the participating property and arranged for loan repayment on property tax bills), incentives and free ongoing energy coach support.

Since the launch of Better Homes Kingston, more than 125 projects have been completed, achieving an average greenhouse gas (GHG) emissions reduction of 63%+. Program interest has been sustained, with ongoing applications to join the program waitlist being submitted on a weekly basis. To date, 554 applications have been received, with 98 of these applications being removed or voluntarily withdrawing from the program, and 9 being found ineligible.

As outlined in [Report Number EITP-21-007](#), the long-term program goal to retrofit 25 – 50% of Kingston's pre-1991 construction one-family homes by 2040 achieving an average carbon reduction impact of 30% per home, requires ongoing access to loan capital, to continue beyond the pilot period. This requires a transition to an alternative source of financing, which could include City of Kingston financing, third-party financing through utility providers, other financial institutions, or private capital investment.

Earlier this year, staff undertook a comprehensive review of the program process, intended to identify opportunities for streamlining, and efficiency, to enable the long-term scale up of the program. Resulting from this review, numerous operational enhancements were made, including the development of new information resources, a new program guide video, and improvements to the Better Homes Kingston Portal, in a continuous effort to scale. As these ongoing efficiencies are realized, the average timeline for the completion of projects is being reduced, with current applications proceeding at a faster rate than earlier participants, with less human-capital being spent on average per applicant.

**Potential to Extend the Program beyond the Four-Year Funded Program**

One of the most innovative and impactful aspects of the program is the Energy Coaching Services, offered through a Service Level Agreement with Sustainable Kingston. The Energy Coaching Services team offers free, ongoing home energy expertise and administrative support, to ensure participants maximize their impact, cost effectiveness of their project and complete them in the most expedited timeline possible. These services allow for one-on-one personal support for all program participants at no-cost, allowing for precise attention to detail when planning projects, considering the unique characteristics of each home and homeowner

Information Report to Environment, Infrastructure & Transportation Policies Committee

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participating in the program. The Energy Coach help participants to understand their home energy assessment results, assist with detailed planning of their retrofit projects, including support sourcing quotes from contractors, and meeting participants at their level of need. For some, this means providing high-level overviews of the program, and for others it requires ongoing comprehensive support.

Beyond Energy Coaching Services, the programs performance threshold system incentivises participants to achieve deep energy retrofits, with a particular focus on GHG emissions reduction. From the 2022 Community Greenhouse Gas Emission Inventory (Report Number 24-009), programs that assist homeowners with the expenses of enhancing home energy efficiency and transitioning away from natural gas (as well as fuel-oil and propane) are critical, as home heating represents over 48% of the community's energy sector emissions, making it a priority in the pursuit of emission reductions. The Canadian Climate Institutes report, [\*Heat Pumps Pay Off: Unlocking lower cost heating and cooling in Canada\*](#), demonstrates that air-source heat-pump systems are the lowest cost-option for home heating and cooling for the majority of Canadian households, over the lifetime of the equipment.

However, while fuel-switching from natural gas to an air-source heat-pump system significantly reduces GHG emissions, and more modestly reduces energy consumption (particularly for homes that did not previously have air-conditioning), as well as being the lowest cost heating and cooling option over the lifetime of equipment, the energy cost savings associated specifically with natural gas fuel-switches are significantly less likely to result in a debt-to-savings ratio of 1:1 when compared with fuel-oil or propane furnaces. This means that the cost incurred and repayment of financing for natural gas to heat-pump projects is marginally higher than the cost-savings resulting from them (regardless of the consistent result of GHG emissions, energy, and related cost savings), and so continuing to offer incentives for deep energy retrofits will lead to the greatest ongoing uptake and program impact.

When considering financing sources to extend the program beyond the pilot, maintaining a competitive interest rate, and accessing sufficient capital necessary to support the program at scale is imperative. Moving beyond the program pilot, transitioning program administration costs, including Energy Coaching services, to a fee for service model, will allow the program to achieve long-term feasibility through cost recovery. Furthermore, ensuring continued access to funding is important, so the program does not lose momentum, and local Energy Advisors and contractors do not lose engagement with the program due to decreased demand, which has been a common occurrence due to the periodic boom and bust cycle that home energy efficiency programs have historically followed.

In consultation with internal departments, as well as other Municipalities in the FCM CEF community of practice, several financing options have been investigated to continue to deliver Better Homes Kingston program beyond the 4 years, including municipal debentures, accessing syndicated private capital funding through FCM, and internally financing the program.

**Information Report to Environment, Infrastructure & Transportation Policies Committee**

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Staff have concluded that the most efficient and equitable financing option to extend Better Homes Kingston beyond the four-year pilot period, is that the City continues to offer competitive interest rate loans, utilizing the same local improvement charge (LIC) mechanism as the pilot. This option will allow Better Homes Kingston to operate with the lowest possible interest rate for homeowners, and to sustain uptake and impact.

Through the creation of a fee for service model, homeowners would pay for the administrative cost to operate the program, including administrative functions performed by the City, and Energy Coaching Services offered by the program service delivery partner, Sustainable Kingston, through the established service level agreement (SLA).

The form of a fee for service model can vary, with either an upfront administrative fee, an interest rate rider, or a hybrid of both, with their own distinct pros and cons. A one-time upfront fee would provide quick cashflow from the start of phase two of the program but can be seen as a barrier to participation. Alternatively, an interest rate rider can be instituted, where a nominal interest rate is added-on in addition to any lending rate attached to the financing, to recoup administrative costs over the life of the financing. This option is perceived as less of a barrier to participation, as it is paid over a longer period (up to 20 years), but results in less upfront cashflow, and can also come at a higher cost to the applicant. A hybrid of the two options could also be instituted, balancing the pros and cons of each.

While financing can be offered by the City, and operating costs can be recouped from participants, if incentives are to be retained, they will require continued subsidization. At the completion of the pilot, FCM will not longer provide the grant funding currently enabling the City to offer performance-based incentives to homeowners. To continue to drive deep impact for projects completed under Better Homes Kingston, Council may consider funding some level of continued incentivization. Based on participants responses to the mandatory homeowner survey, which was presented in the year 1 annual report ([Report Number 23-166](#)), as well as the debt to savings ratio analysis offered in this report, and ongoing homeowner feedback, it is clear that incentives are a significant motivator for participants.

### **Program Changes for Scale and Efficiency**

While the program has seen consistent demand, with momentum building from launch, the aggressive program milestones remain a primary goal of the pilot and achieving them remains the focus before program expansion takes place.

Despite comprehensive support, home energy retrofit projects are complicated and time-consuming, and project completion timelines can vary greatly, from as little as 3-5 months, to over a year depending on the availability of equipment and required services.

**Information Report to Environment, Infrastructure & Transportation Policies Committee**

Report Number EITP-24-001

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Table 1 below outlines the four-year FCM funded program milestones:

#	Key Milestones	Actual Start Date	Actual Completion Date	
M1	Program Start-up and Soft (test) Launch	25 Projects completed	April 11, 2022	April 10, 2023
M2	Year 1 Implementation	125 Projects Completed	April 11, 2022	April 10, 2023
M3	Year 2 Implementation	150 Projects Completed	April 11, 2023	April 10, 2024
M4	Year 3 Implementation	200 Projects Completed	April 11, 2024	April 10, 2025
M5	Program Wrap-up	Perform evaluation, identify succession plan and final reporting	April 11, 2025	September 30, 2025
<b>Total Projects to be Completed 500*</b>				

The programs performance threshold system, requiring and incentivizing significant GHG emissions reductions, and other program requirements such as the need to receive proactive funding approval, attain itemized quotes from contractors, and undergo comprehensive energy coaching support all enhance the program, and lead to the significant impacts that have been achieved in the pilot so far. However, as the program continues to scale, it is necessary to balance efficiency and strong oversight, while allowing more projects to be completed year over year. Already, many small program enhancements have been made to streamline the process and ensure participants can receive approval quickly.

As projects are completed, staff are continuously looking at process improvement. The following outlines some of the changes that are being considered for when the program continues beyond the four-year pilot period.

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1. Quote requirement changes - Through the simplification of quote requirements, participants may receive quotes more quickly, requiring less back and forth with contractors, allowing for expedited funding approval.
2. Introduction of Energy Concierge or Retrofit Planning Service - homeowners could enter into an agreement with Sustainable Kingston, who could then be authorized to act more autonomously, significantly expediting project completion timelines, and even paying contractors directly (numerous other programs across Canada and the USA, such as [SwitchPACE](#) have instituted this arrangement), reducing the administrative burden for the City to make payments to homeowners, who then pay contractors, thereby reducing timelines.
3. Minimum loan amounts - By establishing a minimum amount of loan financing (e.g. \$10,000.00), the City could limit the inclusion of low cost projects, which still have to follow the same Energy Coaching support and administrative process when being registered as LIC's, and therefore result in a higher administrative cost relative to their total project cost and impact.

### Equity Considerations

Beyond the pilot, important changes are being considered to retain and enhance Better Homes Kingston's equity considerations, to support low-income homeowners to complete home energy retrofit projects. It is proposed that Energy Coaching Services would remain free to all income qualified candidates, with the upfront cost of the required home energy evaluation being paid directly by the City, to remove this barrier to entry. The Better Homes Kingston program currently follows the same income thresholds as the provincially funded [Kingston Frontenac Renovates Program](#). It is proposed that a more inclusive household income threshold could be established, following best practices from other home energy efficiency programs in Canada, such as two-times the low income cut-offs (LICOs) used by the [Alberta's Home Upgrades Program](#).

Specific marketing will be completed to identify and attract homeowners who have a high home energy cost burden, defined as those households that spend 6% or more of their after-tax income to pay for their home energy consumption (in some cases high home energy cost burden can surpass 10-15% of after-tax income). However, many Kingston residents who experience high home energy cost burden do not own their homes and are therefore limited by the improvements they can make. Support targeting renters will be examined, and Better Homes Kingston will remain open to rental properties, provided they meet the determined eligibility criteria for the program.

Through the energy coaching services provided by Sustainable Kingston, qualifying homeowners are being supported to receive other third-party funding from existing programs such as [The Oil to Heat Pump Affordability Program](#), offered by the Government of Canada.

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With the launch of the Canadian Climate Institute's [Heat Pump Calculator](#), it is demonstrated that heat pump systems have crossed the threshold as the most affordable home heating (and cooling) option for most homes in Ontario, and as costing data becomes more reliable, it would be ideal to be able to provide highly accurate cost-savings estimates, and eventually even guaranteeing a 1:1 debt-to-savings ratio, where the total cost of financing, including all program fees and the cost of borrowing, are equal to or less than the achieved energy cost savings, similarly to the Town of Bridgewaters home energy program supported by [Clean Energy Financing](#).

For those very low-income households, who are unable to take on loan financing without guaranteed net savings, the Climate Leadership Division is collaborating with Housing and Social Services staff on a proposed partnership when delivering the [Kingston Frontenac Renovates Program](#). The Kingston Frontenac Renovates Program offers eligible homeowner's forgivable loans and grants for home repairs, with eligibility based on household income and home value assessment. The program currently provides funding for emergency heating system repairs, completing approximately five heating system projects per year. It is proposed that the City could offer subsidization for projects, where a fossil fuel-based heating system is at end of life, to install a heat-pump system, providing low-carbon heating and cooling. This integration could be implemented easily, as the program already has defined criteria and operating procedures, not requiring the Better Homes Kingston process to be undertaken. This partnership with Housing Services would amount to approximately less than \$100,000 per year subsidization and would guarantee the lowest-income households receive support to install the most efficient and low-carbon heating systems, at the appropriate end of life of the fossil fuel-based systems (primarily natural gas furnaces).

### Next Steps

Staff will report back to the Environment, Infrastructure & Transportation Policies Committee in Q3 2024 with the final program changes and detailed financial considerations for phase two of the program, including the required loan financing, details on available interest rates, specifics of the fee-for-service model for program cost recovery, and options for continued incentives to be offered.

### Existing Policy/By-Law:

By-Law Number 2021-23, "A By-Law to Authorize the Undertaking of Energy Efficiency and Water Conservation Works on Private Residential Property as Local Improvements under the Better Homes Kingston Program.

### Notice Provisions:

None



**Information Report to Environment, Infrastructure & Transportation Policies Committee**

**Report Number EITP-24-001**

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**Accessibility Considerations:**

None

**Financial Considerations:**

Staff are reviewing options to extend the Better Homes Kingston Program through capital financing, offering competitive interest rate loans, and utilizing the same local improvement charge (LIC) mechanism as the pilot. The estimated impact is projected to be \$5.3 million for 200 projects. City financing is the most efficient and equitable option, following the standard capital project financial planning process, and allowing Better Homes Kingston to operate with the lowest possible interest rate for homeowners, and to sustain uptake and impact. A fee-for-service model will be instituted, allowing program cost recovery through an upfront fee or interest rate rider charged to participating homeowners. In order to continue incentivising deep energy retrofits, it is proposed that the City could continue to subsidize some level of cash incentives, with a range of options.

The table below outlines the current Better Homes Kingston Program shared program capital commitments, as outlined in Report Number [Report Number EITP-22-001](#).

	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Totals</b>
<b>Program loans to participating homeowners</b>	\$2,500,000	\$3,750,000	\$5,250,000	\$1,000,000	\$12,500,000
<b>Program operations and homeowner incentives (including in-kind)</b>	\$1,613,750	\$1,613,750	\$1,613,750	\$1,613,750	\$6,455,000
<b>Total Program Funding</b>	<b>\$4,113,750</b>	<b>\$5,363,750</b>	<b>\$6,863,750</b>	<b>\$2,613,750</b>	<b>\$18,955,000</b>
<b>FCM loan portion</b>	\$2,000,000	\$3,000,000	\$4,200,000	\$800,000	\$10,000,000
<b>City of Kingston loan portion</b>	\$500,000	\$750,000	\$1,050,000	\$200,000	\$2,500,000

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<b>FCM grant portion for program operations</b>	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$5,000,000
<b>City of Kingston grant portion (including in-kind)</b>	\$363,750	\$363,750	\$363,750	\$363,750	\$1,455,000
<b>Total Program Funding</b>	<b>\$4,113,750</b>	<b>\$5,363,750</b>	<b>\$6,863,750</b>	<b>\$2,613,750</b>	<b>\$18,955,000</b>

**Contacts:**

Julie Salter-Keane, Manager, Climate Leadership, 613-546-4291 extension 1163

Soren Christianson, Project Manager, Climate Leadership, 613-546-4291 extension 1325

**Other City of Kingston Staff Consulted:**

Lana Foulds, Director, Financial Services, 613-546-4291 extension 2209

John Henderson, Housing Program Administrator, Housing & Social Services, 613-546-4291 extension 4976

**Exhibits Attached:**

None



**City of Kingston  
Information Report to Council  
Report Number 24-155**

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**To:** Mayor and Members of Council  
**From:** Paige Agnew, Commissioner, Growth & Development  
Services  
**Resource Staff:** Julie Salter-Keane, Manager, Climate Leadership  
**Date of Meeting:** June 4, 2024  
**Subject:** Better Homes Kingston Program – Year 2 Annual Report

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**Council Strategic Plan Alignment:**

Theme: 2. Lead Environmental Stewardship and Climate Action

Goal: 2.2 Support climate action and sustainability for residents, businesses and partners.

**Executive Summary:**

The Better Homes Kingston program launched on April 11, 2022, and has now completed its second year of operations, with 199 individual projects completed to date. Pursuant to By-Law Number 2021-23, “A By-Law to Authorize the Undertaking of Energy Efficiency and Water Conservation Works on Private Residential Property as Local Improvements under the Better Homes Kingston Program”, the Better Homes Kingston Program offers no-interest loans with up to a twenty-year term, applied as a Local Improvement Charge (LIC) to applicable properties through a Property Owner Agreement (POA) and authorizes loan repayment on property tax bills. In 2023, 115 LIC special charge by-laws were passed by Council, an additional 60 LIC by-laws will be placed on the June 18, 2024 agenda for consideration of Council. Information on completed projects is disclosed publicly and can be viewed on the [Open Data Kingston Portal](#).

The four-year program with funding from the Federation of Canadian Municipalities (FCM), Community Efficiency Financing (CEF) program is currently in its pilot-phase and is intended to operate from 2022-2025. During this period the program continues to incrementally scale the number of projects completed each year, while developing strong program infrastructure, with wrap-up and evaluation taking place in 2026.

**Information Report to Council**

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Council's 2023-2026 Strategic Plan includes a commitment to evaluate and report on the potential to extend the Better Homes Kingston program beyond the initial four years. Staff reported to the Environment, Infrastructure & Transportation Policies Committee in Q4 2023 ([Report EITP-24-001](#)) on the long-term viability of the program to meet the twenty-year goal of retrofitting 25 - 50% of Kingston's existing pre-1991 constructed one-family homes by 2040, achieving an average greenhouse gas (GHG) emissions reduction impact of 30% per home as well as funding options. Staff will report back to EITP in Q4 2024 with details on the planned extension of the program.

The purpose of this report is to provide Council with the second-year annual report on the progress of the program, providing an overview of the program's development, financial commitments, and impact. The key performance indicators (KPIs) identified in [Report Number EITP-21-007](#) are presented, as well as the program's current funding position. An overview of the results of the FCM CEF homeowner survey completed by all participants as they complete the program is also presented (Exhibit A).

The program is performing well, with funding being fully allocated to completed and pending projects. To date, 199 projects have been completed, with 133 projects completed during Year 2, corresponding to a GHG reduction of 13851.4 tonnes over their lifetime, achieving more than double the target of an average GHG emissions reduction of 30% per home (68%), and evidenced by the high customer satisfaction scores in the FCM CEF survey of 94% (Exhibit A).

**Recommendation:**

This report is for information only.

Information Report to Council

Report Number 24-155

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**Authorizing Signatures:**



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**Paige Agnew, Commissioner,  
Growth & Development Services**



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**Lanie Hurdle, Chief  
Administrative Officer**

**Consultation with the following Members of the Corporate Management Team:**

Jennifer Campbell, Commissioner, Community Services	Not required
Neil Carbone, Commissioner, Corporate Services	Not required
David Fell, President & CEO, Utilities Kingston	Not required
Peter Huigenbos, Commissioner, Major Projects & Strategic Initiatives	Not required
Brad Joyce, Commissioner, Infrastructure, Transportation & Emergency Services	Not required
Desirée Kennedy, Chief Financial Officer & City Treasurer	Not required

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### Options/Discussion:

Launched on April 11, 2022, the Better Homes Kingston Program was designed to offer a one-stop-shop for Kingston homeowners, residing in single-family homes (detached houses, semi-detached houses, and row houses) to reduce their home's energy use, and improve water conservation, with a particular focus on GHG emissions reductions. The program offers access to loan financing (i.e. attached as a Local Improvement Charges to the property and arranged for loan repayment on property tax bills), incentives and free ongoing support. A key feature of the program is its ability to stack with other home energy efficiency programs – most notably the former Canada Greener Homes Grant Program, Enbridge Home Efficiency Rebate+ (HER+) Program and the ongoing CMHC Canada Greener Homes Loan initiative – allowing for the maximization of available funding to drive deep energy retrofits, which are commonly defined as reducing on-site energy use by 40% or greater.

The program operates with a performance threshold system, which requires all eligible projects to have a minimum GHG emissions reduction potential of 20% (measured in tonnes), or a 20% energy consumption reduction (measured in kilowatt hours kWh) for already electrically heated homes. The program offers incentives tied to the following performance levels:

- 20% to 25% reduction in emissions or electricity consumption = \$1,000
- 26% to 30% reduction in emissions or electricity consumption = \$3,000
- Greater than 30% reduction in emissions or electricity consumption = \$5,000

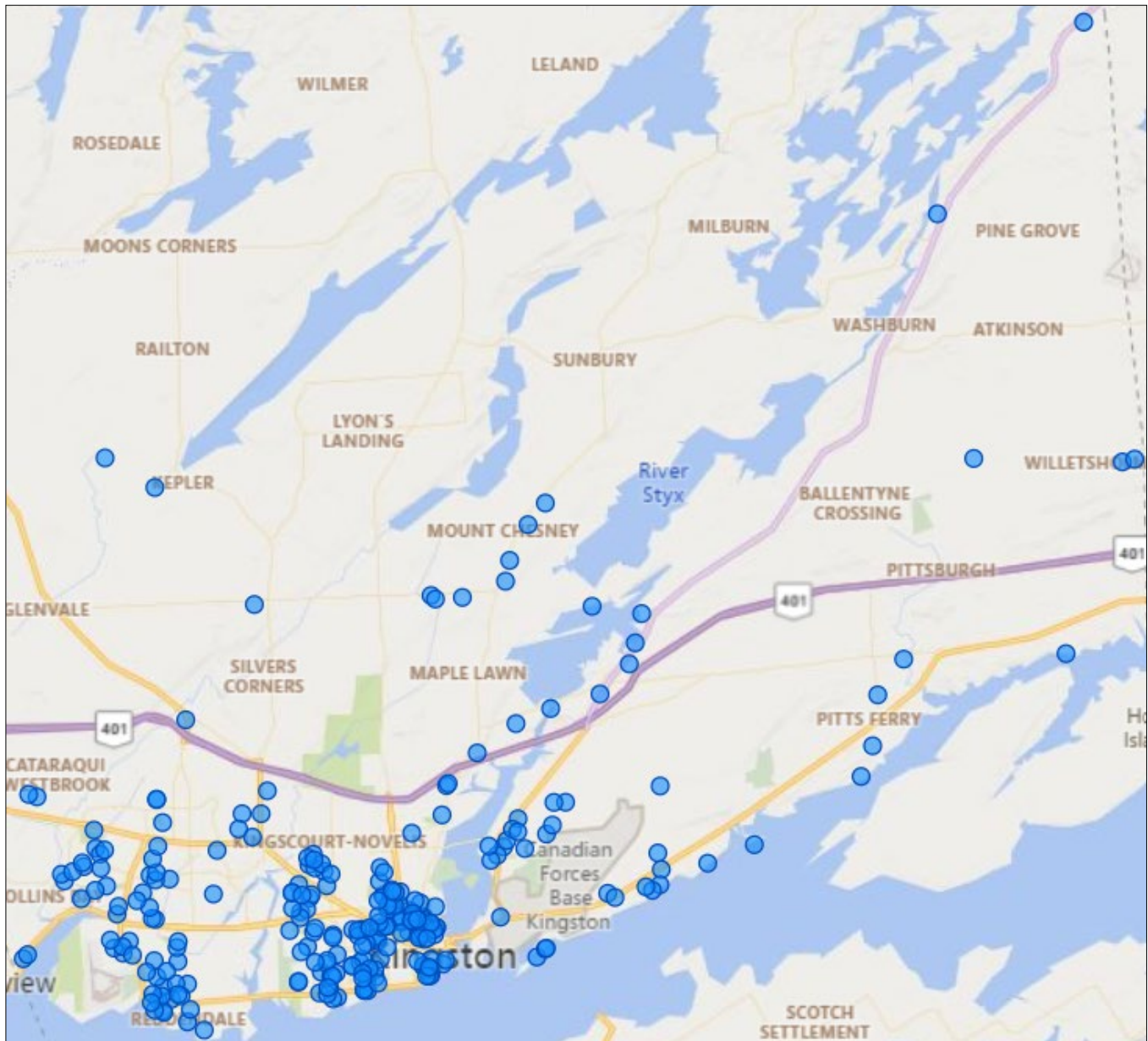
This performance threshold system is innovative and relatively unique in the home-energy retrofit program landscape across Canada. It allows for enhanced flexibility for homeowners to find the most impactful combination of retrofits for their home, leading to significant impact, when compared with a measure-based system (i.e. HER+). The program follows the Natural Resources Canada (NRCAN) EnerGuide Rating System, which gives homeowners a *consumption-based rating of their home's energy use – measured in gigajoules per year (GJ/year)*, as well as a total measure of GHG emissions in tonnes per year. Reductions tied to individual actions are outlined through a pre- and post-retrofit home energy assessment, conducted by a NRCAN Registered Energy Advisor.

To date, the program has received 608 applications (plus one test application). Applications were suspended on November 8, 2022, to ensure program funding was not over-allocated. Thirty-one (31%) of the applicants did not continue through the program, and as some allocated funding has become available due to participants either not utilizing their maximum eligible loan amounts, or dropping out of the program other reasons, small cohorts have been admitted from the waitlist to balance the efficient processing of new applicants, while avoiding the risk of over-allocating funding. To continue the momentum for the targeted 500 projects within the pilot phase of the program, the waitlist has been onboarded expeditiously, with less than a one month wait time currently.

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Figure 1 - Map of Program Registrations Received to date – Year 1 and 2



As shown in Figure 1, a map of the location of all 608 program registrations received from April 2022 to May 2024.

### Program Milestones

The intent of the Better Homes Kingston program is to establish a long-term residential retrofit strategy that stimulates related market development so that the Better Homes Kingston program is available for the next ten to twenty years to reach its goals.



**Information Report to Council**

**Report Number 24-155**

June 4, 2024

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The four-year FCM funded program milestones are as follows:

#	Key Milestones		Actual Start Date	Actual Completion Date
<b>M1</b>	<b>Program Start-up and Soft (test) Launch</b>	25 Projects completed	April 11, 2022	April 10, 2023
<b>M2</b>	<b>Year 1 Implementation</b>	125 Projects Completed	April 11, 2022	April 10, 2023
<b>M3</b>	<b>Year 2 Implementation</b>	150 Projects Completed	April 11, 2023	April 10, 2024
<b>M4</b>	<b>Year 3 Implementation</b>	200 Projects Completed	April 11, 2024	April 10, 2025
<b>M5</b>	<b>Program Wrap-up</b>	Perform evaluation, identify succession plan and final reporting	April 11, 2025	September 30, 2025
<b>Total Projects to be Completed 500*</b>				

Currently, 199 projects have been completed, with 133 of these projects being completed during Year 2, averaging 2.5 completed projects per week. Loans are paid back through property tax bills via the municipal Local Improvement Charge (LIC) mechanism. To date, 115 LIC special charge by-laws have been passed, with an additional sixty LIC by-laws to be placed on the June 18<sup>th</sup> agenda for consideration of Council. Information on completed projects is disclosed publicly and can be viewed on the [Open Data Kingston Portal](#).

Currently, seventy-six additional projects are in progress with executed funding agreements, and the remaining participants are in the earlier stages of the process. Through ongoing communication with FCM's Better Homes Kingston Project Officer, it is likely that the program can receive a short extension, allowing for flexibility to continue the momentum to reach the target of completing approximately 500 projects by the end of the pilot period.



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### Annual Reporting on Key Performance Indicators

The KPIs identified in [Report Number EITP-21-007](#) are presented below with analysis. As these KPIs were created prior to the program launch, some necessary alterations have been made due to practical program design and implementation decisions. Where KPIs have been altered, specific justification is provided. The following analysis includes 199 projects in aggregate (sixty-six included from Year 1, and 133 from Year 2).

To measure progress of program implementation against the programs goal and objectives the following KPIs are being monitored:

#### Output Indicators:

**1. Number of home energy evaluations completed as part of retrofit program:**

- 361 pre-retrofit home energy evaluations completed.
- 202 post-retrofit home energy evaluations completed.

**2. Total GHG (tonnes) and energy reduction opportunities (GJ) identified within evaluations:**

For clarity, these values show the potential GHG emissions and GJ reductions for all projects in aggregate if the homeowners completed all measures outlined in their EnergyGuide Evaluation Renovation Upgrade Reports.

- Total GHG (tonnes) Reduction Opportunities Identified within Evaluations per Household: **Average of 4.2 tonnes or aggregate of 837.1 tonnes.**
- Total Energy (GJ) Reduction Opportunities Identified within Evaluations per Household: **average of 59.6 GJ or aggregate of 11862 GJ.**

**3. Financing allocated to retrofit projects (total \$) between April 2022 and May 16<sup>th</sup>, 2024:**

<b>Program Finance Overview</b>	
<b>Average Actual Project Cost</b>	<b>\$33,254.52</b> *difference from Average Actual Project Funding from Better Homes Kingston due to projects that accessed third-party funding programs.
<b>Financing Allocated to Projects</b>	<b>\$6,641,410.00</b> *Maximum Eligible Funding for all Approved Applications or Projects in Process
<b>Actual Loan Expenditure</b>	<b>\$ 4,418,479.00</b>
<b>Actual Incentive Expenditure</b>	<b>\$ 934,746.00</b>
<b>Actual Rebate Expenditure</b>	<b>\$ 8,006.00</b> *up to \$600 towards cost of Mandatory Home Energy Evaluation Reports
<b>Average Actual Project Funding</b>	<b>\$ 26,275.12</b> *excludes Incentive only recipients Loan: \$21,488.64 Incentive: \$4,697.21

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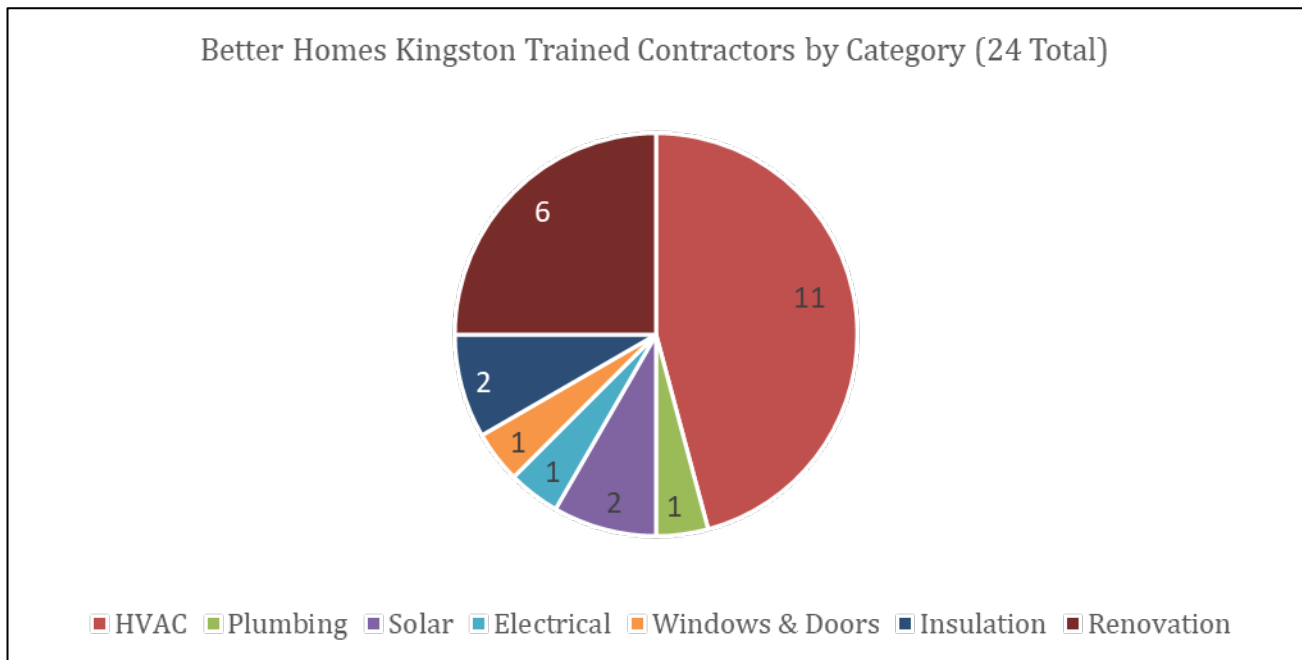
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- 4. **Number of Contractors and Registered Energy Advisors trained to support Better Homes Kingston:** To date, no additional Registered Energy Advisors have been trained explicitly to support Better Homes Kingston.

**Figure 2 – Number of Contractors Trained as part of Better Homes Kingston totalling twenty-four companies.**



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**Outcome Indicators**

- 1. % of household energy (GJ) and GHG emissions (tonnes) reduced via retrofits on average per home:**

Average GHG % reduction per Home	Average GJ % reduction per Home
<b>68%</b>	<b>43.7%</b>
<p>The actual average GHG emissions reduction of <b>68%</b> is more than double the goal of 30% per home. While the average GJ reduction per home is still significant at <b>43.7%</b>, factors such as the increased use of electricity for air-conditioning from an air-source heat-pump where the homeowner previously did not have air-conditioning can be attributed to this difference. This is also a reflection of the program’s primary goal of GHG emissions reductions.</p>	

- 2. Total household energy (GJ) and GHG emissions (tonnes) reduced per year for all program participants:** Household Energy (GJ) has been added for enhanced analysis.

Total GHG (tonnes) Reduced Per Year	Total GHG (tonnes) Reduced Over Project Life
<b>759.1</b>	<b>13851.4</b>
<p>The total GHG emissions (tonnes) reduced per year is <b>759.1</b>, multiplied by the average project life of 18.2 years equals a cumulative reduction of <b>13851.4</b> tonnes.</p>	
Total Household Energy (GJ) Reduced Per Year	Total Household Energy (GJ) Reduced Over Project Life
<b>11,641.5</b>	<b>211,875.3</b>
<p>The actual total household energy (GJ) reduction is <b>11,641.5</b>, averaging 58.5 GJ per project, multiplied by the average project life of 18.2 years equals a cumulative reduction of <b>211,875.3</b>.</p>	

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**Figure 3 – Greenhouse Gas Emissions (tonnes) Reductions for Year 1, Year 2, and Combined:**

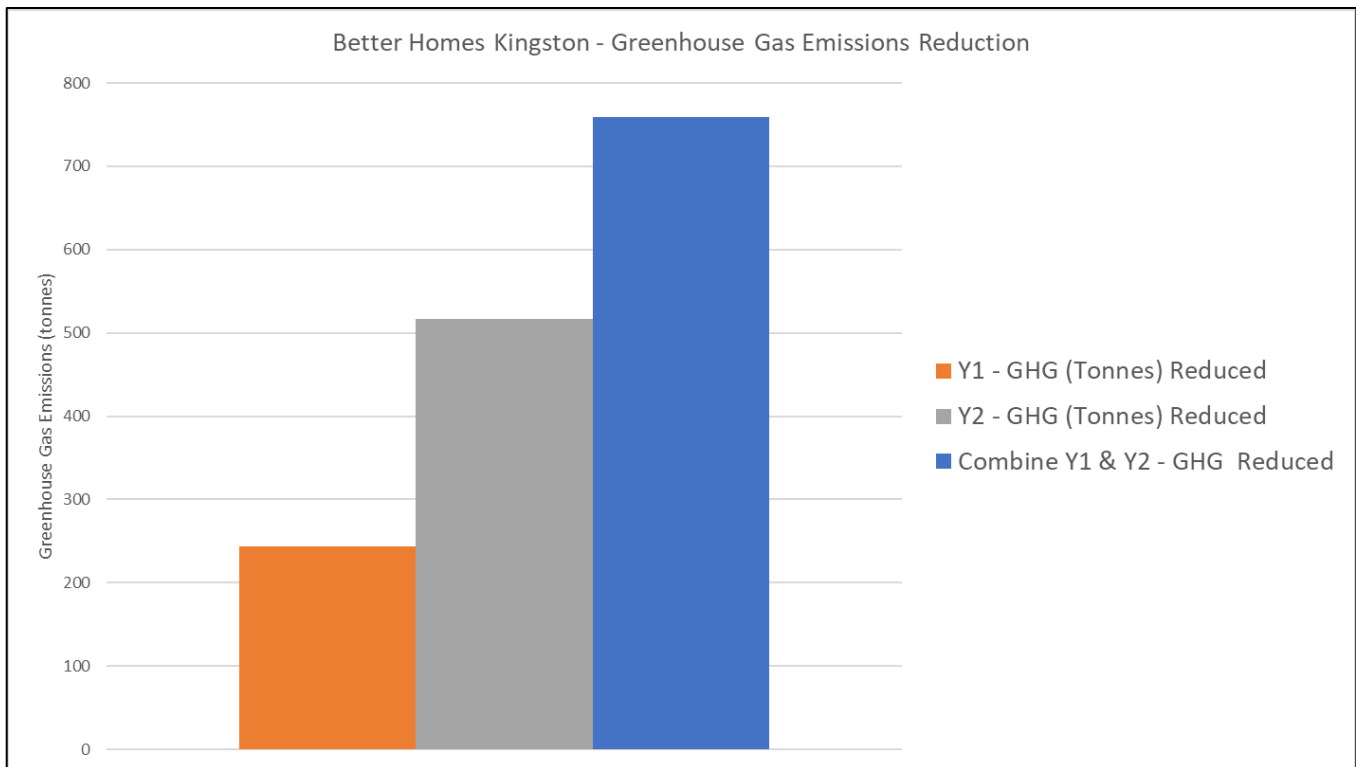


Figure 3 shows total annual GHG emissions (tonnes) reductions for each year, as well the combined total for both years (759.1 tonnes).

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**Figure 4 – Household Energy (GJ) Reductions for Year 1, Year 2, and Combined:**

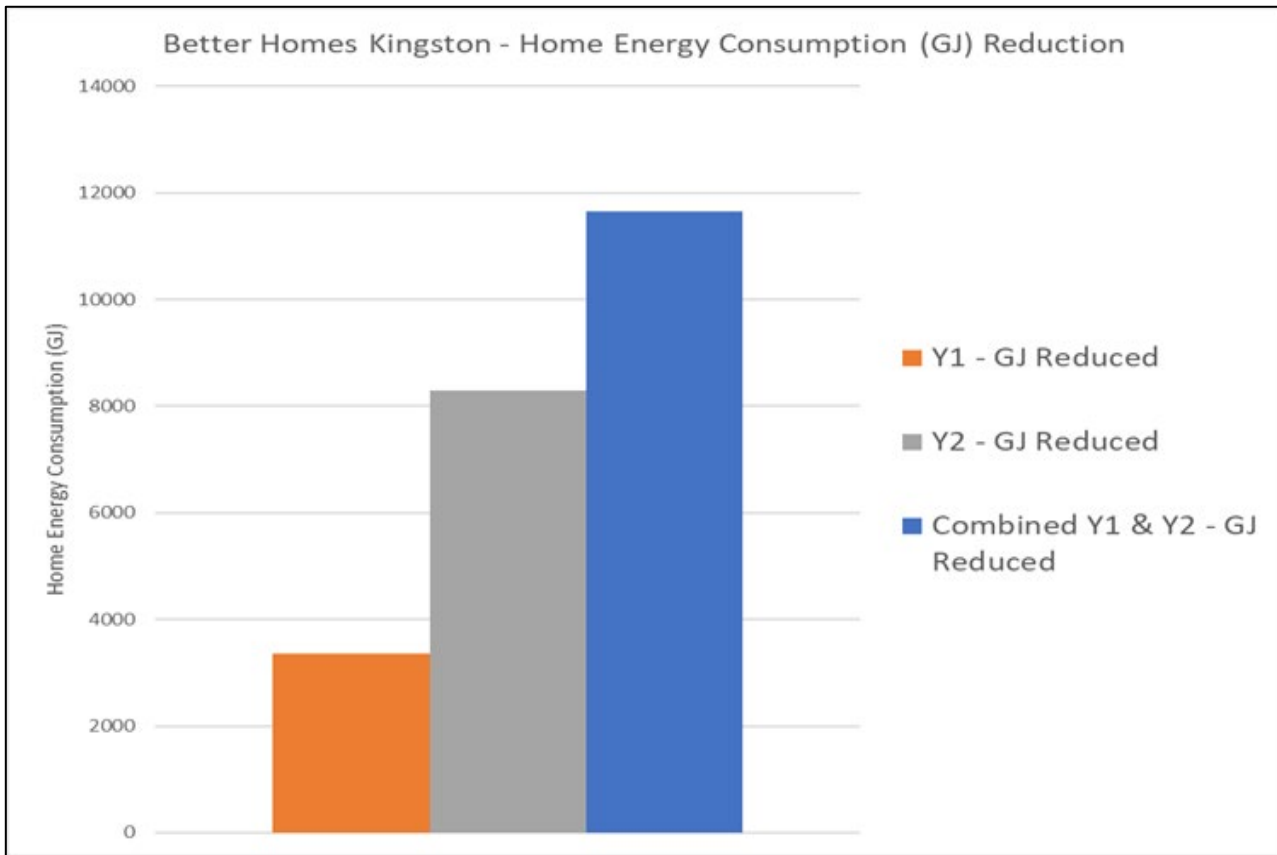


Figure 4 shows total annual household energy (GJ) reductions for each year, as well the combined total for both years (11,641.5).

**3. Ratio of Municipal incentive cost versus cumulative GHG reduction during life of equipment (\$/tonne):**

Incentive Amount (\$)/Per Tonne Reduced Over Project Life	Total project cost (\$)/Per Tonne Reduced Over Project Life	Average Incentive Amount Per Project
\$67.48	\$477.76	\$4697.21

Incentives are a significant factor in driving deep-energy retrofits. This analysis suggests the relatively low average incentive cost for the City to stimulate one tonne of GHG emissions reductions. While it is not a direct comparison as the City does not own the emissions

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reductions associated with Better Homes Kingston (i.e. through directly controlled assets such as an electric bus), relative to the Federally regulated [Output-Based Pricing System](#) (OBPS), with the \$80 cost per tonne of carbon emissions for 2024 (\$15 increase per year), incentive spend for the City is stimulating a cost effective reduction over the project lifecycle. This demonstrates that current levels of incentives may be sufficient to drive significant capital investment, leading to sustained GHG emissions reductions. This does not consider additional incentives provided by other levels of Government.

### Utility Bill KPIs

Utility bill analysis and verification is an ongoing focus for the Better Homes Kingston program, however, as the second year of the program has just concluded, there is currently not sufficient data (at minimum one full year before and at least one full year after project completion), to show meaningful analysis. There have been practical challenges procuring usable data, given that the program is collecting this data from individuals, who often share it in various formats, complicating the analysis. This analysis will be available either before or during the program pilot wrap-up reporting, estimated to be completed in Q3-Q4 2025. At this time, the following KPIs will be reported:

1. Average annual utility cost savings per household (\$);
2. Savings to Investment Ratio (SIR) of retrofits implemented (\$ invested: \$ of all energy related savings including capital cost avoidance for longer lasting equipment).

Detailed utility bill analysis is a method to measure the impact of the BHK program related to energy consumption and utility cost of the participants. It involves collecting and analysing monthly utility bills from multiple providers, such as electricity, natural gas, fuel-oil and propane for participating households before and after their retrofit projects. The analysis can reveal the actual energy savings and cost savings achieved by the program, compared to the modelled reductions derived from the EnerGuide Rating System. To conduct detailed utility bill analysis, the following steps are being taken:

1. Collection of utility bills from participants for at least two years before and up to five years after the Project Completion Date.
2. Utility data is then anonymized, processed, and then weather normalized using the program RETScreen Expert, a powerful analysis software developed by NR. The output is then visualized in a dashboard that is integrated with other program data.
3. The result shows the actual reduction in energy consumption and cost savings. These results can be compared against the estimated savings provided by the EnerGuide Rating System to verify actual reductions, and cost savings. This analysis will allow the program team to draw conclusions regarding the effectiveness and benefits of the Better Homes Kingston program, as well as the opportunities and challenges for improving the program design and delivery.

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**Other KPIs**

1. **Loan defaults/arrears (% of the number of loans and total \$ borrowed):**
  - N/A
2. **Customer Survey:**
  - 94% Customer Satisfaction Rating

**Additional program information:**

**Figure 5: Number of Common retrofits by Category - Completed**

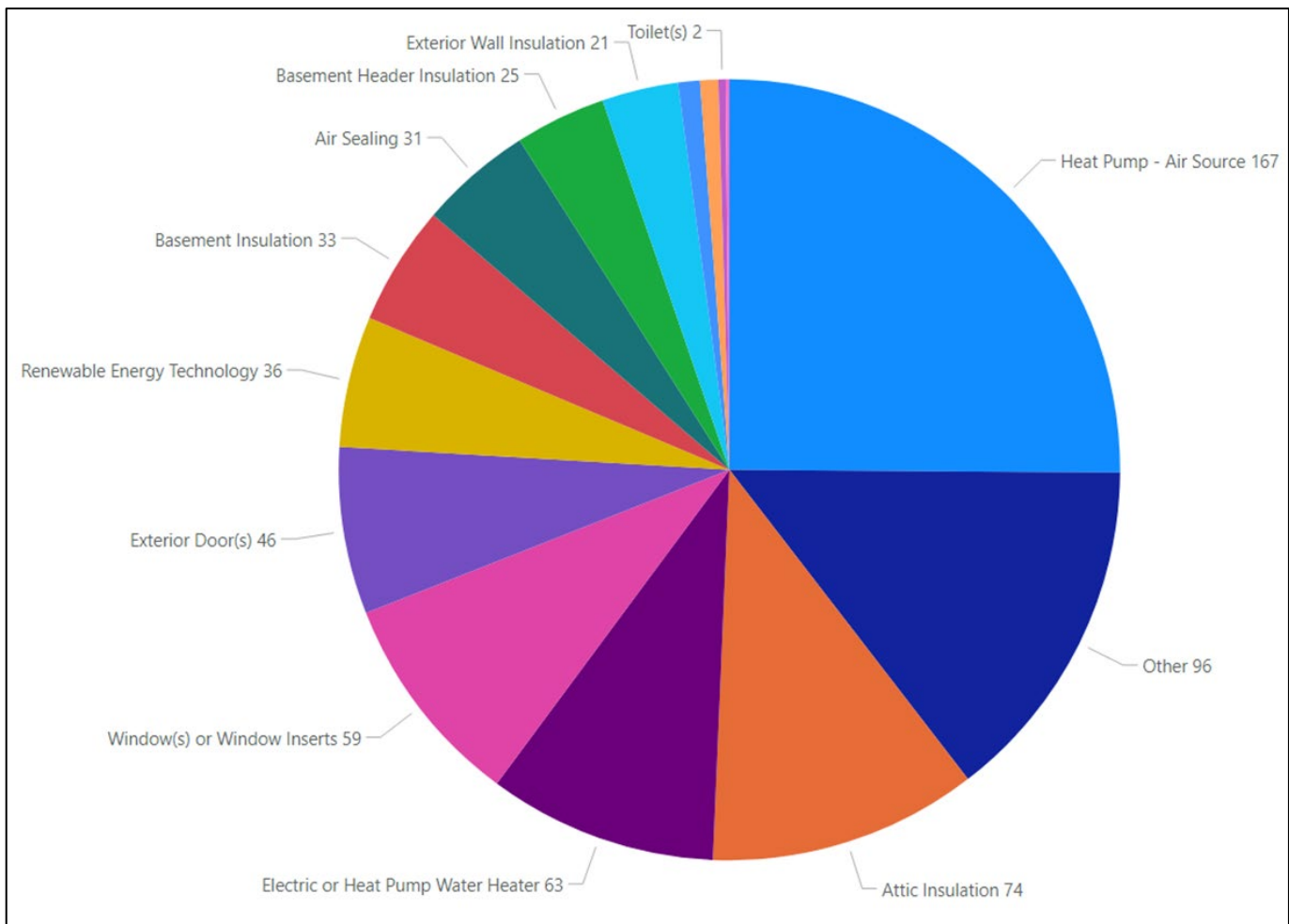


Figure 5 shows the number of commonly completed retrofits by category, with the “Other” category expanded by sub-category in Figure 6.



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**Figure 6: Number of “Other” Common retrofits by Category - Completed**

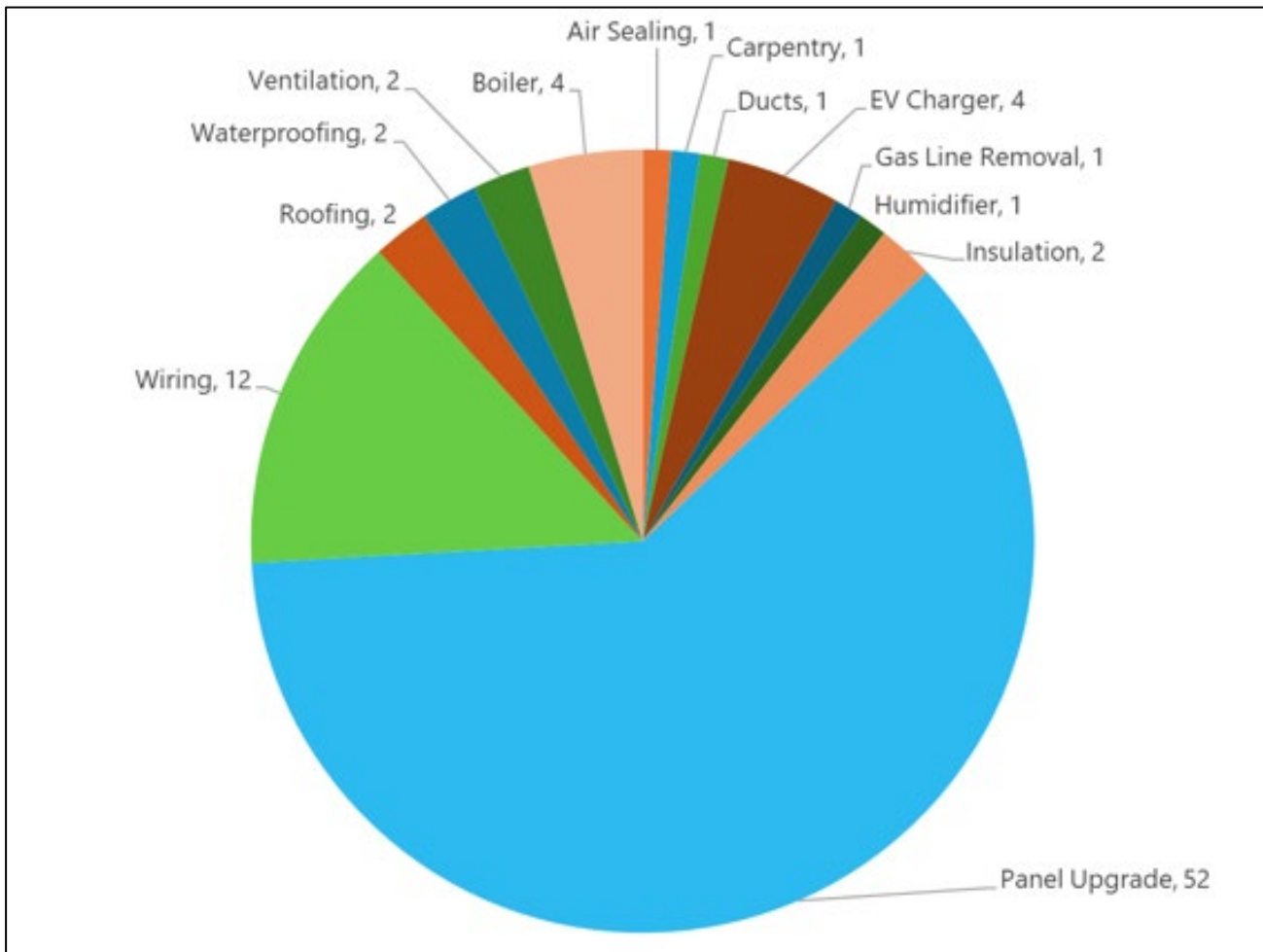


Figure 6 shows the “Other” category from Figure 5 expanded by sub-category. Notably, panel upgrades are the majority of “Other” category retrofits.

### **FCM CEF Homeowner Survey Findings**

The FCM CEF Homeowner Survey (Exhibit A) is mandatory for all CEF funded programs, and captures the homeowner’s experience with CEF programs nationally, with a semi-annual prize draw to incentivize homeowners to complete it. The survey is a mandatory requirement for all Better Homes Kingston program participants and is completed at the end of the process before final loan and incentive payments are made. While the survey is mandatory, the administrative oversight is conducted by FCM, and it is not possible for City staff to monitor if every participant completed the survey. The survey report is provided twice per year by FCM, with the last update being received as of November 2023, with 124 submissions included in the report.

Highlights of the CEF Better Homes Kingston Homeowner Survey show a sustained positive customer experience through year 2. Most respondents (94%) are satisfied with support from

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program staff throughout the home upgrade process, with a similar majority (89%) being satisfied with financing made available to them for home upgrades.

Resoundingly, 97% of participants found the Energy Coaching Services to be helpful (Extremely helpful – 50%, Very helpful – 39%, Moderately helpful – 8%).

Overall, 71% of participants are very satisfied with the program, with 28% being satisfied (99% total). Furthermore, 86% of participants would be very likely to recommend the program to a friend, neighbour or colleague, with 11% being likely to do so.

In depth on-going analysis of the survey reports is conducted to support continuous improvement and allow for appropriate iterations to be made to maximize the outcomes of the program with a focus on consistent, positive customer experience going forward.

**Climate Risk Considerations**

To date, the Better Homes Kingston program will reduce 13851.4 tonnes of GHG emissions at the Community level over the 18.2-year average lifetime of the 199-home energy retrofit projects completed. This impact could be more than double by the end of the pilot phase (Q2 2025).

**Existing Policy/By-Law**

By-Law Number 2021-23, “A By-Law to Authorize the Undertaking of Energy Efficiency and Water Conservation Works on Private Residential Property as Local Improvements under the Better Homes Kingston Program”.

**Financial Considerations**

	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Totals</b>
<b>Program loans to participating homeowners</b>	\$2,500,000	\$3,750,000	\$5,250,000	\$1,000,000	\$12,500,000
<b>Program operations and homeowner incentives (including in-kind)</b>	\$1,613,750	\$1,613,750	\$1,613,750	\$1,613,750	\$6,455,000
<b>Total Program Funding</b>	<b>\$4,113,750</b>	<b>\$5,363,750</b>	<b>\$6,863,750</b>	<b>\$2,613,750</b>	<b>\$18,955,000</b>

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<b>FCM loan portion</b>	\$2,000,000	\$3,000,000	\$4,200,000	\$800,000	\$10,000,000
<b>City of Kingston loan portion</b>	\$500,000	\$750,000	\$1,050,000	\$200,000	\$2,500,000
<b>FCM grant portion for program operations</b>	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$5,000,000
<b>City of Kingston grant portion (including in-kind)</b>	\$363,750	\$363,750	\$363,750	\$363,750	\$1,455,000
<b>Total Program Funding</b>	<b>\$4,113,750</b>	<b>\$5,363,750</b>	<b>\$6,863,750</b>	<b>\$2,613,750</b>	<b>\$18,955,000</b>

**Contacts:**

Julie Salter-Keane, Manager, Climate Leadership Division, 613-546-4291 extension 1163

Soren Christianson, Project Manager, Climate Leadership Division, 613-546-4291 extension 1325

**Other City of Kingston Staff Consulted:**

None

**Exhibits Attached:**

Exhibit A     FCM CEF Homeowner Survey Report – Better Homes Kingston



# CEF Homeowner Program

## The Better Homes Kingston Program

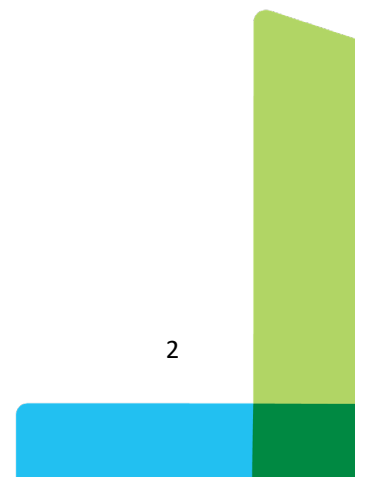
### Kingston Survey report

Impact Research and Performance

November 2023

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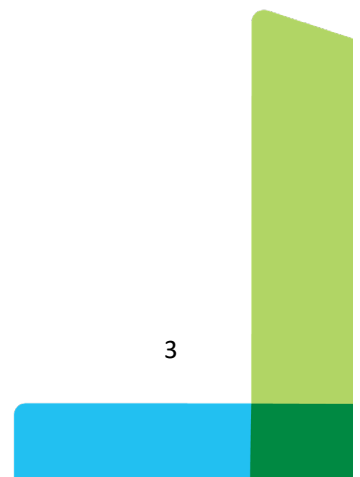
# Introduction

As part of the Better Homes Kingston Program, a survey is sent to all participants who have completed their project. This report presents the data collected through **November 22, 2023**. This report also includes demographic data.

Tables with statistics and data for each question are available in the appendix.

## Participation

- The Kingston’s survey was administered online using the survey tool, Qualtrics.
- **124** participants completed the survey.



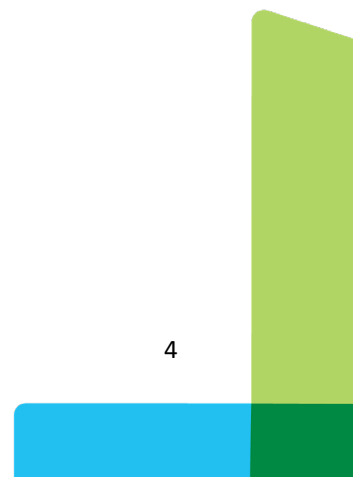
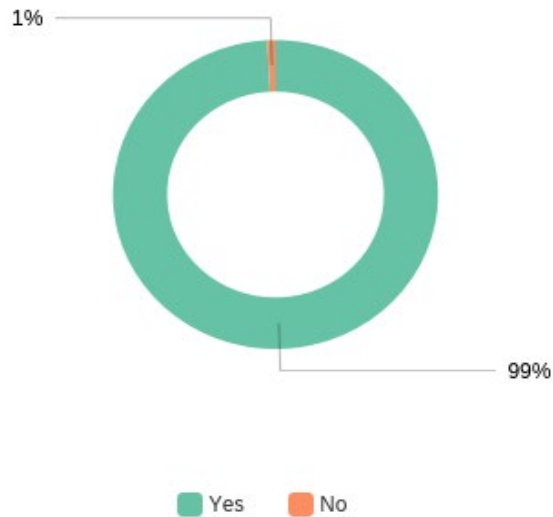
# Results

This section outlines the detailed findings ordered by question.

## Screening questions

### Has an energy advisor completed a post-renovation EnerGuide evaluation at your home?

Most of the respondents (99%) have an energy advisor completed a post-renovation EnerGuide evaluation at their home.



## Homeowner experience – Service offering

### What is your level of satisfaction with the following services you accessed through your local program?

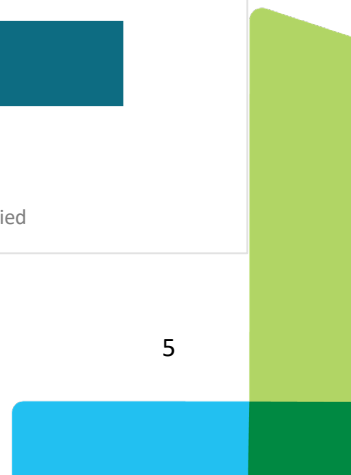
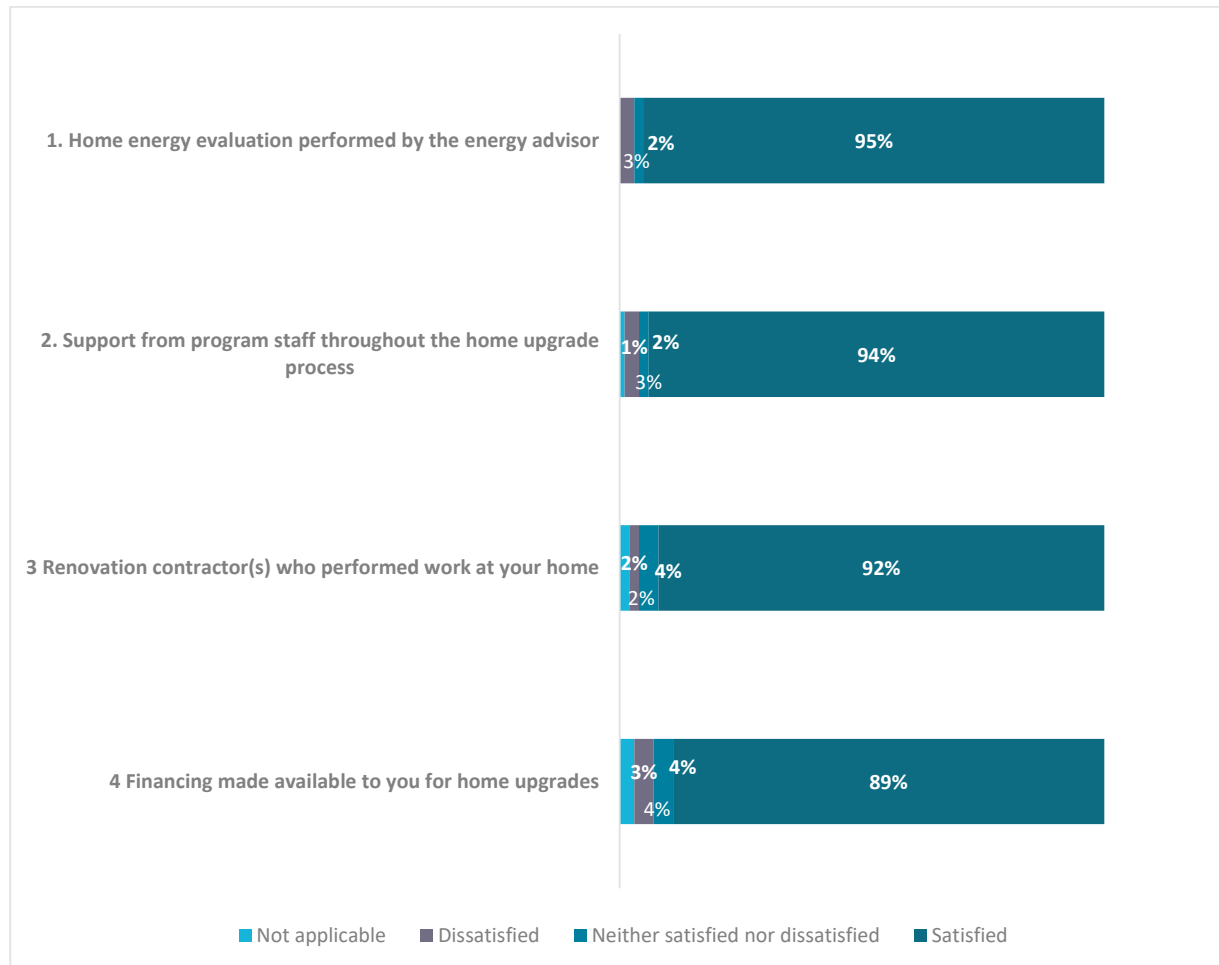
Overall, the respondents are satisfied with the services they accessed through their local program.

Most of the respondents (95%) are satisfied with the home energy evaluation performed by the energy advisor.

Most of the respondents (94%) are satisfied with support from program staff throughout the home upgrade process.

Most of respondents (92%) are satisfied with renovation contractors who performed work at their home.

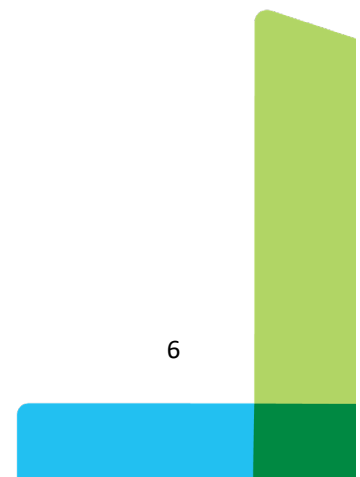
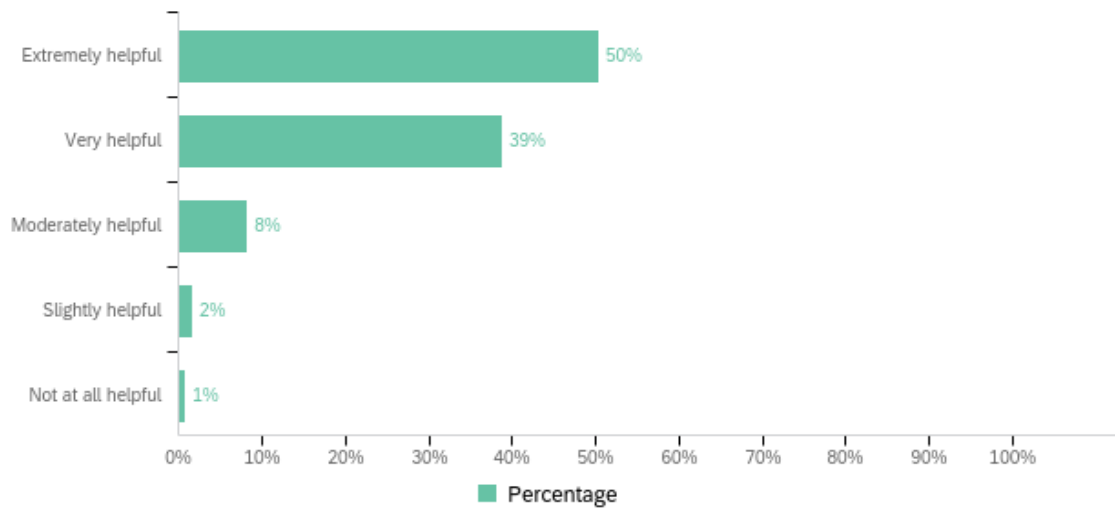
Most of the respondents (89%) are satisfied with financing made available to them for home upgrades.





### How helpful did you find the Energy Coach services to be throughout your participation in the Better Homes Kingston Program?

Overall, most of the respondents (97%) found Energy Coach services to be helpful throughout their participation in the Better Homes Kingston Program, among whom 50% extremely helpful, 39% very helpful and 8% moderately helpful.



## Homeowner experience – Value proposition

Below you'll see a list of things that may have affected the outcome of your home energy project. Please rank them in order from the factor that had greatest impact on the successful completion of the project to the one that had the least.

Over four in ten respondents (45%) ranked “Financing made available to them through their financial institution, utility company or municipality” as number 1.

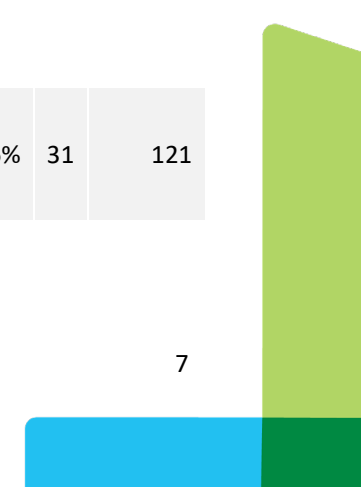
Many respondents (32%) ranked “Assistance with understanding and applying for available incentives rebates” as number 2.

Three in ten respondents (36%) ranked “Customer care provided by program staff” as number 3.

Many respondents (36%) ranked “Variety of upgrades available through the program” as number 4.

About half of the respondents (53%) ranked “Having a list of contractors to choose from” as number 5.

#	Question	Rank 1		Rank 2		Rank 3		Rank 4		Rank 5		Total
1	Customer care provided by the program staff	21%	25	26%	31	30%	36	18%	22	6%	7	121
2	Assistance with understanding and applying for available incentives/rebates	29%	35	32%	39	25%	30	12%	15	2%	2	121
3	Having a list of contractors to choose from	2%	2	7%	8	15%	18	24%	29	53%	64	121
4	Financing made available to me through my financial institution, utility company or municipality	45%	54	17%	20	15%	18	10%	12	14%	17	121
5	Variety of upgrades available through the program	4%	5	19%	23	16%	19	36%	43	26%	31	121



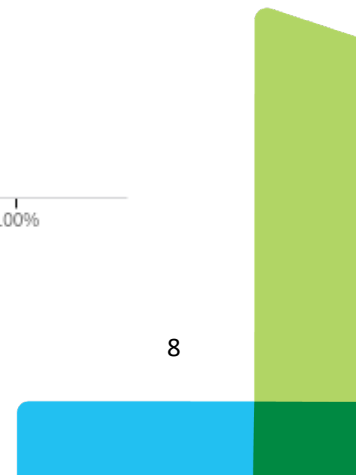
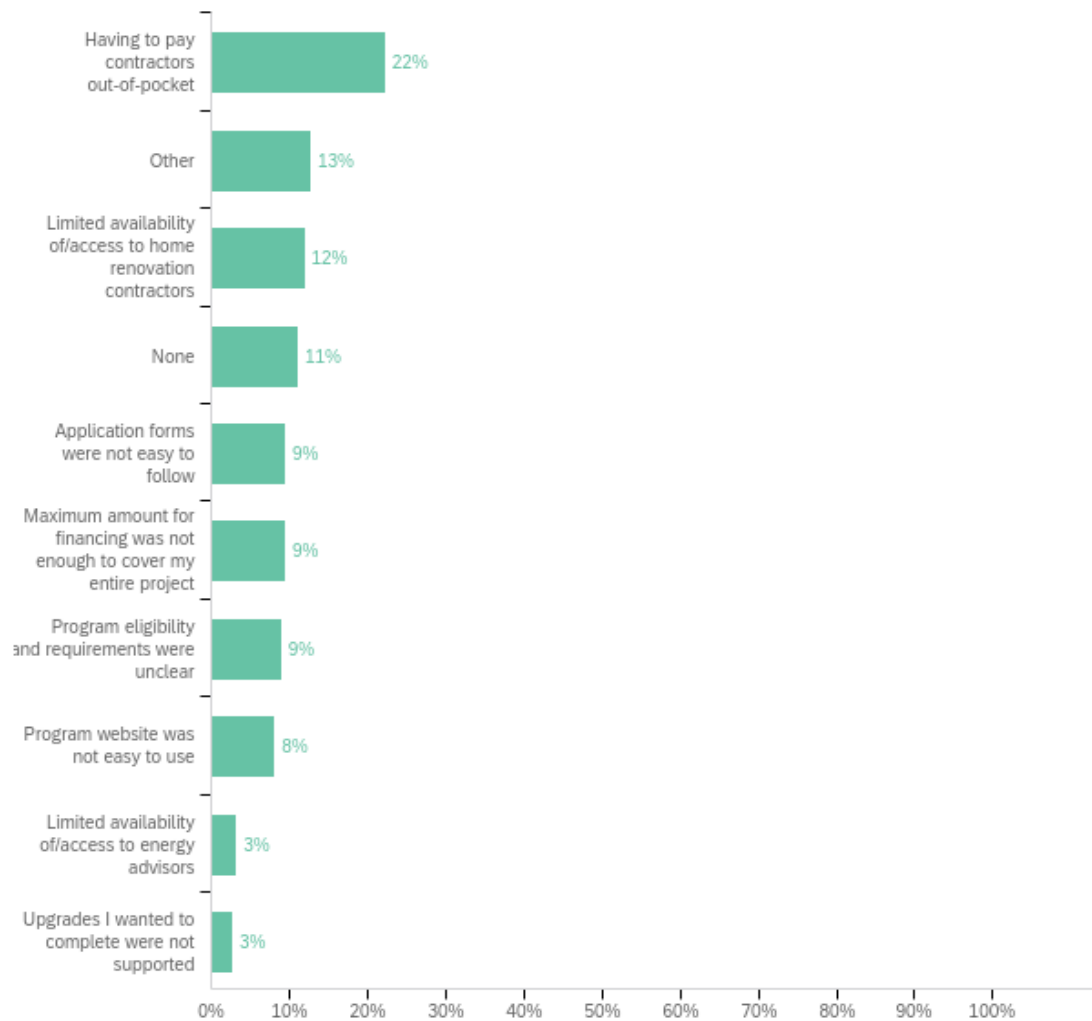
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## Homeowner experience – Challenges

Which of the following challenges or barriers, if any, did you face during your home energy upgrade project? Select up to three options. (If you experienced more than three challenges, please just tell us what the three biggest challenges were.)

The three biggest challenges that respondents have faced when accessing home energy upgrades are the followings:

- having to pay contractors out-of-pocket (22%),
- Limited availability of access to home renovation contractors (12%),
- Applications forms were not easy to follow; (9%).

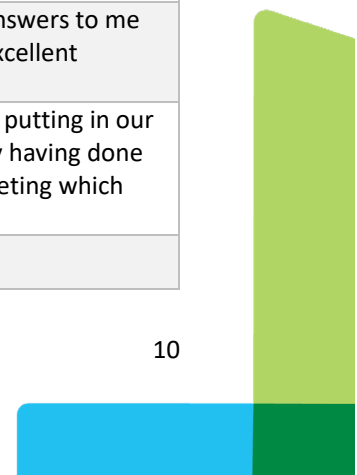


Additional comments on barriers and challenges were provided as follows:

- The process is exhausting and time intensive.
  - Wait time for final energy audit
  - Challenges with staff turn over with our Install/Contractor
  - Federal government's lack of information in further supporting our funding needs
  - Long wait time period for email responses/ between filing the official application and the final signing of the Property Owner Agreement
  - Difficult wording on application form and emails
  - Length of time for energy audit reports to be reviewed and approved.
  
- Slow response time from contractors and the city
- Contractors delays
- Computer challenges for senior
- Difficulty with Greener Homes website portal
- More upgrade and cost than anticipated

Other - Text
At this time, I am pretty satisfied with the install/heat pump-electric furnace retro-fit, but quite honestly the process was exhausting and felt very challenging in many ways. Seemed that we encountered obstacles with each step - 1/ original energy audit company (Clear Result) choosing to leave residential market and having to scramble to find a new company to do our final audit 2/Challenges with staff turn over with our Install/Contractor - which lead to false starts and some reassessment of the best equipment choice for our home's Heat Pump system 3/ Federal government's lack of information in further supporting our funding needs. Honestly, it was my neighbors and family on our street who were the key in sticking with the program and sharing information to make the process and paperwork less daunting in getting the project completed. The process was very time intensive, but we are happy that we have invested in a future of a lower carbon footprint for our home.
Wait time for final energy audit
Related was slow response times from contractors. There was also an issue with city being slow to issue a permit.
A bit difficult knowing who did geothermal work; solar contractors busy
Computer challenges for seniors
Contractors took over a year to get to the project
survey system did not allow us to only choose two options
Contractor delays
Getting responses from contractors generally
Why have to choose 3 if one answers "none"?
since the money allotted for my project will not be released until the final approval , much of the funds have been placed on my line of credit gaining interest

Difficulty with the Greener Homes website portal
The GHG reduction target required more upgrades and associated costs than I had anticipated.
Inability to obtain additional portions of the loan after one of our two projects was completed (2nd project not completed until 8 months later)
Contractors willingness to fill out such detailed estimates
That's it!
Please select at least 3 choices?
There were a lot of steps and a lot of details to keep straight. And lots of delays. At times I felt like I was juggling many things in the air all at once.
Long wait times for email responses between energy coach and myself delaying start date until late fall
The time period between filing the official application and the final signing of the Property Owner Agreement took an exceedingly long time. I felt we had been forgotten. Now the work is done, and all is good.
none
Contractor really helped us navigate
Forms were a little difficult; transition from NRC's GHG to Enbridge HER+ has delayed completion of project. Paperwork through City of Kingston was extensive *but* very easily managed with staff/energy advisor help.
Sometimes the wording on applications or in emails was hard to follow.
Frustrating when contractors cannot perform work in a timely way. Window installer was booked up for 10 months.
understanding the GHG reduction criteria
A couple small issues with contractors but those were easily resolved.
We didn't have any barriers but because the survey requires me selecting 3, I chose 'other'.
Length of time for energy audit reports to be reviewed and approved.
Carrying the cost of the upgrade until financing was paid to me.
only challenge was paying out of pocket
I tried to do this 2 years ago and could not find enough information or get consistent answers to me questions from the Federal Program. The Better Homes Kingston program provided excellent support and made it all possible.
Cedric did not have the forms completed to review at our meeting. He then held off on putting in our application until we "confirmed" with him that we wanted to go ahead, despite already having done that. It set things back by weeks. To confirm we needed to have another scheduled meeting which had no apparent new information or utility.
Communication and Organization of the BHK mailbox and responses.



## Social benefits

### How much of an improvement have you experienced in your home after completing energy efficiency upgrade(s)?

When it came to energy cost savings, about four in ten (48%) respondents have experienced improvement, while 19% indicated less and no improvement, 33% too soon to be tell.

For reduction in energy used, over six in ten (66%) respondents have experienced improvement while 12% reported less and no improvement and 22% too soon to be tell.

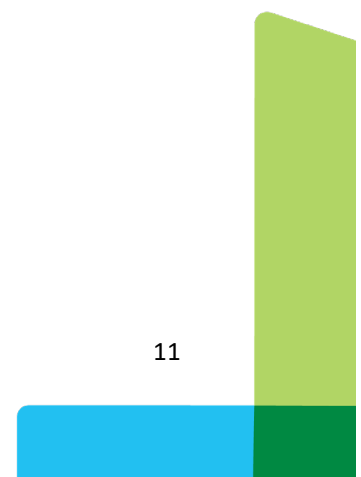
In terms of sense of durability and security, most of the respondents (72%) have experienced improvement while 13% indicated less and no improvement. On the other hand, a few respondents (8%) indicated that it was too soon to tell.

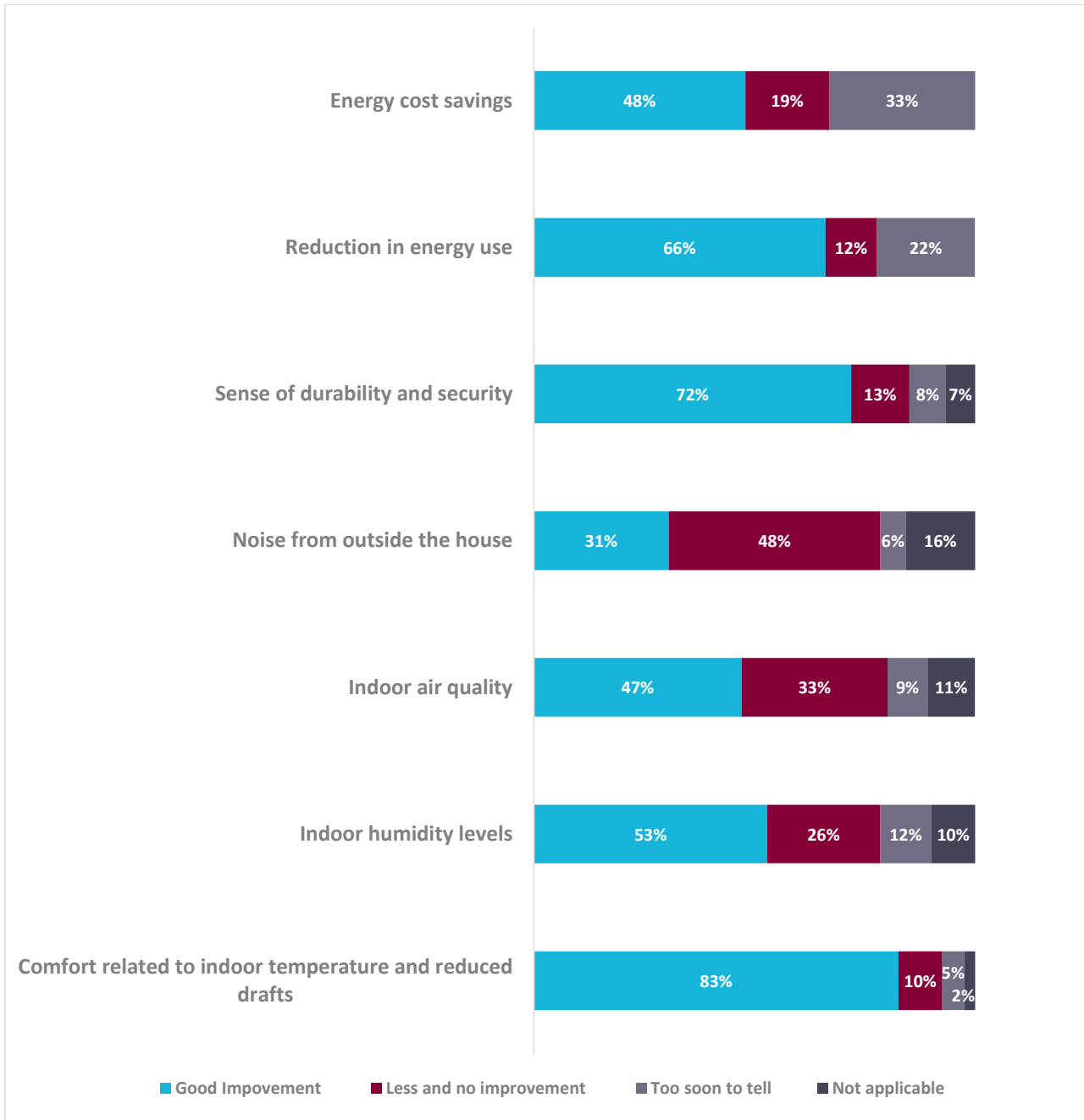
When it comes to noise from outside the house, the majority of the respondents (48%) have not experienced any improvement at all, while 6% reported less and no improvement. More than two in ten respondents (31%) have experienced improvement.

For indoor air quality, over four in ten (47%) respondents have experienced improvement while 33% indicated less and no improvement. On the other, a few respondents (9%) indicated it was too soon to tell.

For indoor humidity levels, five in ten (53%) respondents have experienced improvement while 26% indicated less and no improvement. On the other hand, a few respondents (12%) indicated it was too soon to tell.

As for comfort related to indoor temperature and reduced drafts, over eight in ten respondents (83%) have experienced improvement while 10% indicated less and no improvement. A few respondents (5%) indicated it was too soon to tell.





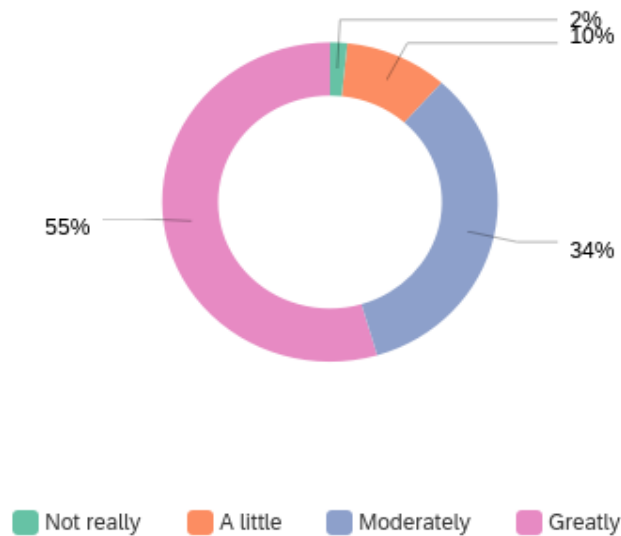
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## Capacity building and behaviour change

### Do you feel that you know more about energy efficiency and renewable energy after participating in your local program?

Most of the respondents (89%) reported that they know more about energy efficiency and renewable energy after participating in their local program. Half of the respondents (55%) reported great increase of knowledge, 34% reported moderate increase and 10% a little increase.

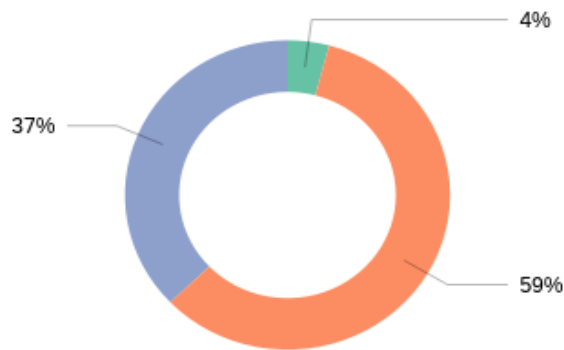




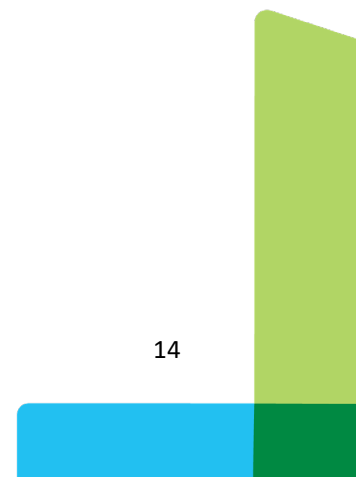
## Financing trade-offs and alternatives

If you had not received the financing from your local program to cover the cost of energy efficiency or renewable energy upgrades, would you have still completed this work?

Over half of the respondents (59%) would have completed fewer or less costly upgrades. Over three in ten respondents (37%) indicated they would not have done any upgrades. A few respondents (4%) reported they would have completed these upgrades regardless.

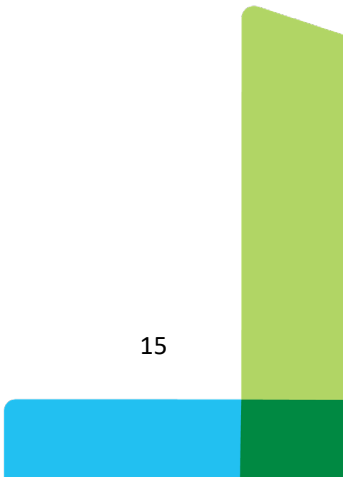
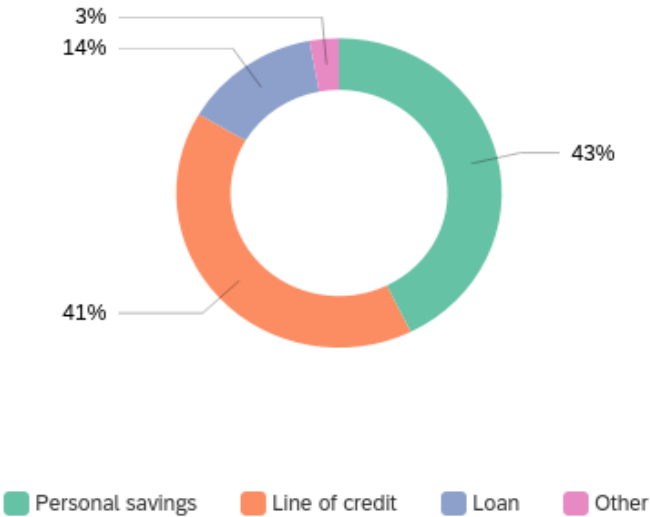


- Yes, I would have completed these upgrades regardless
- Yes, but I would have completed fewer or less costly upgrades
- No, I wouldn't have done any upgrades



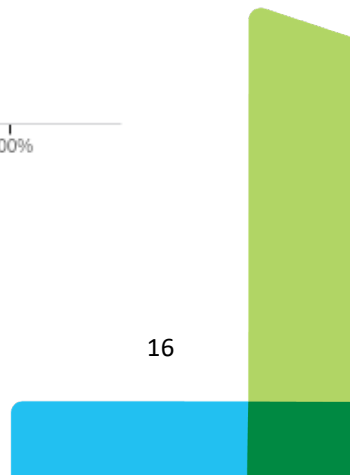
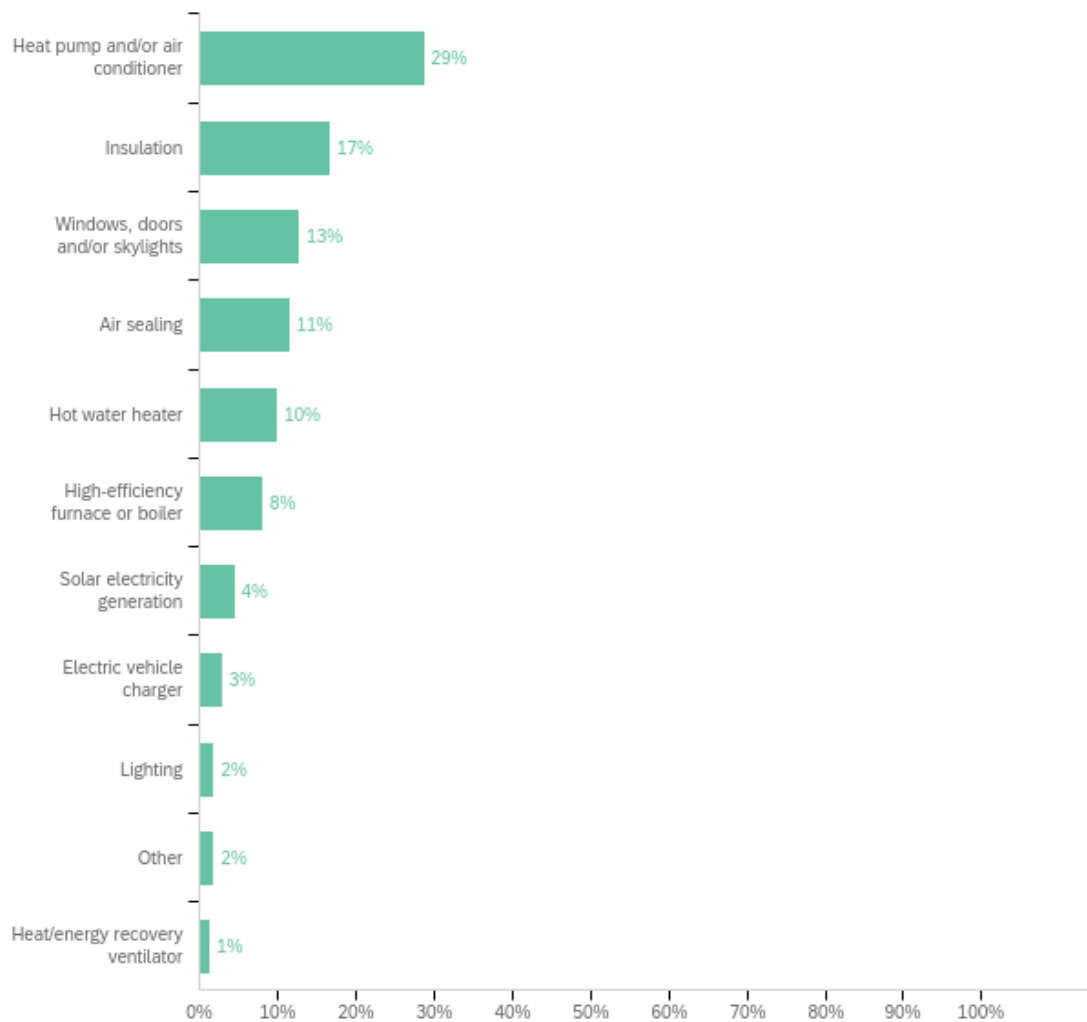
**How would you have financed these upgrades without the local program?  
(Please select all that apply)**

Over four in ten respondents (43%) would have financed these upgrades with personal savings. Four in ten (41%) would have financed through the line of credit while 14% would have taken a loan and 3% home refinancing.



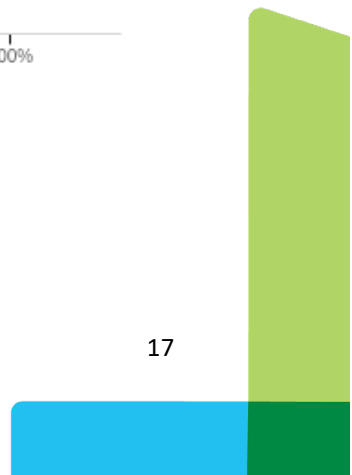
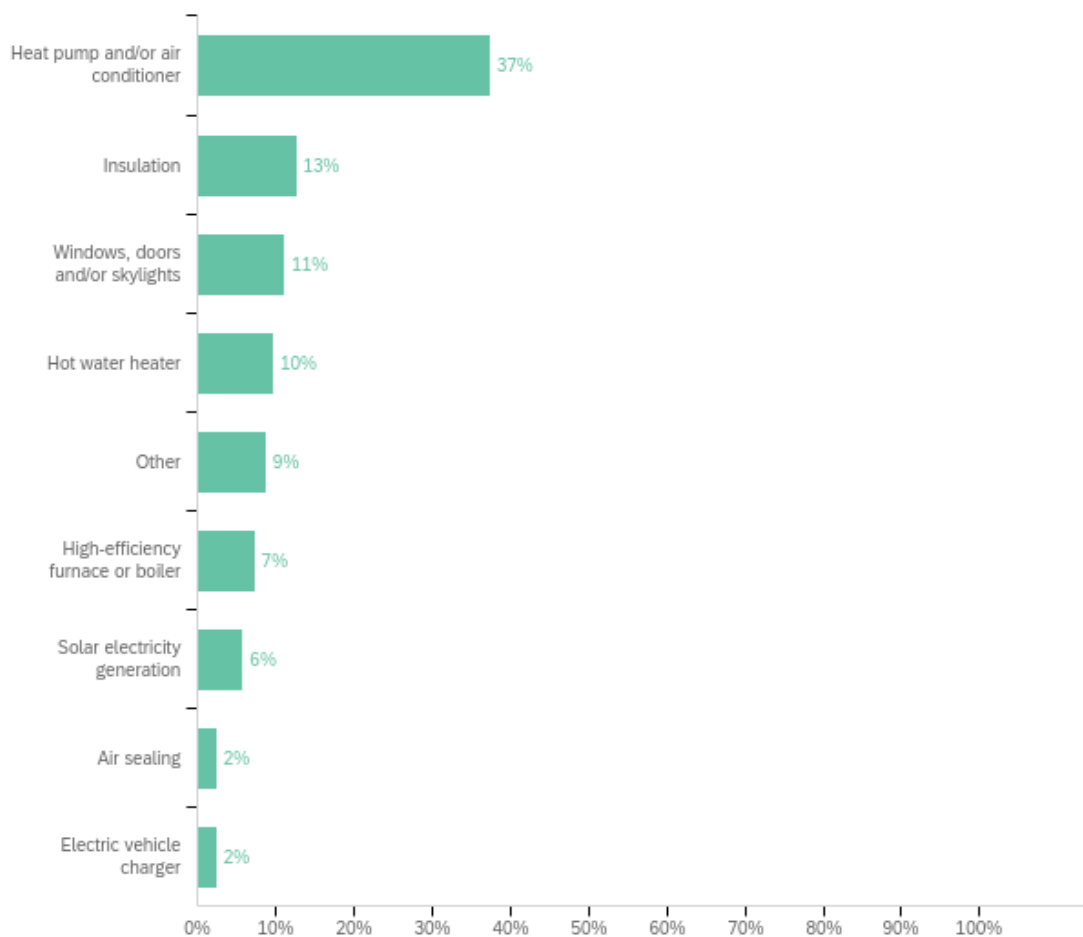
**Which improvements did you make to your home? (Please select all that apply)**

Almost one in three (29%) respondents improved their heat pump and/or air conditioner, while 17% improved their insulation. More than one in ten (13%) improved windows, doors and/or skylights while 11% improved air sealing. The remaining improved their hot water heater (10%), high-efficiency furnace or boiler(8%), solar electric charger (4%), electric vehicle charger (3%), lighting (2%), heat/energy recovery ventilator (1%). A few respondents (2%) indicated that they upgraded their electrical panel, Heat pump hot water heater and installed new roof, solar panels and car charger.



**Did you make any improvements to your home that you would not have considered without your local financing program? (Please select all that apply)**

Almost four in ten respondents (37%) improved their heat pump and/or air conditioner that they would have not considered without their local financing program. Respondents made improvements in their insulation (13%), in their windows, doors and/or skylights (11%), their hot water heater (10%), 7% in high-efficiency furnace or boiler, in solar electricity generation (6%), in air sealing (2%) and in Electric vehicle charger (2%). A few other respondents (9%) indicated that they made improvements in their electrical panel upgrades, heat pump hot water heater, smart thermostat, electric furnace with a hot water radiator set up.



## Overall satisfaction

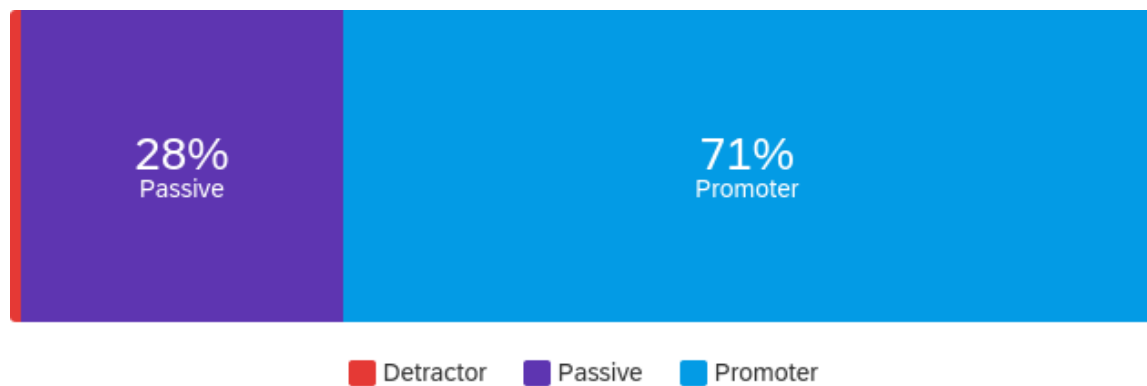
### Overall, how satisfied are you with Better Homes Kingston Program?

The Net Promoter Score (NPS) is **70%**

Promoters (scale points 9 and 10): Promoters (71%) are respondents who are very satisfied with the program.

Passives (scale points 7 and 8): Passives (28%) are respondents who are generally satisfied participants but lack the enthusiasm of promoters.

Detractors (scale points 0 to 6): Detractors (1%) are respondents who are dissatisfied with the program.



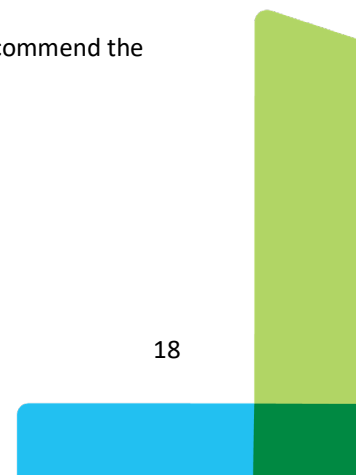
### Overall, how likely are you to recommend the Better Homes Kingston Program to a friend, neighbour or colleague?

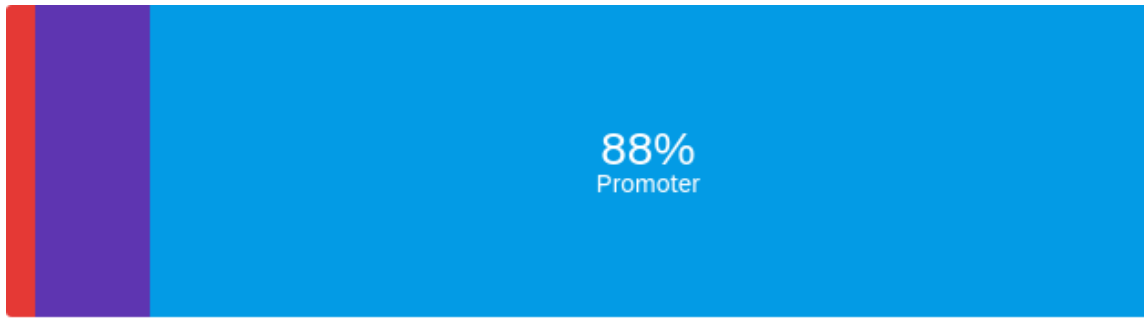
The Net Promoter Score (NPS) is **86%**

Promoters (scale points 9 and 10): Promoters (88%) are respondents who are very likely to recommend the program to a friend, neighbour or colleague.

Passives (scale points 7 and 8): Passives (10%) are respondents who are likely to recommend the program to a friend, neighbour or colleague but lack the enthusiasm of promoters.

Detractors (scale points 0 to 6): Detractors (2%) are respondents who are unlikely to recommend the program to a friend, neighbour or colleague.





■ Detractor   
 ■ Passive   
 ■ Promoter

**Is there any additional feedback you would like to provide? Please tell us anything else about your experience with your local program that you would like to share.**

Thanks for all the help and the financing to make it possible!
Great program
Maybe screen the contractors on the list more strictly.
Appreciated the support provided by the BHK team.
Energy Coach Team and City Staff extremely helpful in managing the program and the Federal program
Everyone we had contact with from the City of Kingston and Sustainable Kingston was remarkable! They were quick to respond, extremely helpful, and gave us a much better understanding of energy efficiency, our home, and what options were available. We could not be happier with the Better Home Kingston initiative!
We are very glad about the program, it has improved our living a lot in many ways. We have shared with others whenever there's a chance, hope it will continue to help others. Thank you very much.
Great experience. Definitely a learning curve but the team was very knowledgeable, responsive, and patient throughout the process!
Great program and service. Very appreciative.
Advisors were great!
Our experience with the program has been excellent and we are very appreciative of the ongoing and accessible support offered by the program staff.
The Better Homes Heat Pump Retrofit Program felt like a very long and complicated process, but feels at this time that it was very much worth the effort. In general, we are very satisfied with our upgrades and piece of mind in reducing our carbon footprint at the present time and into the future years.

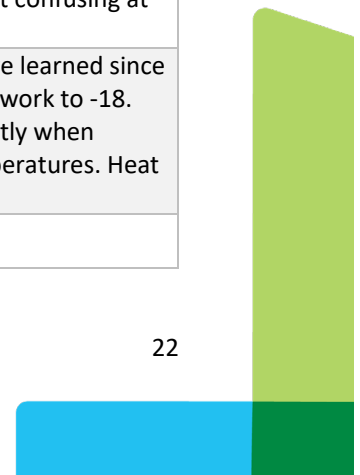
19

confusion between applying in two places .... federal and local..
I was very lucky that my windows contractor mentioned the program when he came to give me a quote. I wasn't aware of it.
Well done, glad that Kingston had such a program. Nice touch with Energy Coaches to guide us through the maze.
Incredible job! Thank you for being so supportive!
The advice from the energy coach and from the energy audit person didn't always align, which made it confusing at the end as we were trying to tie everything up
The program works well. however i think basing the \$ available on the Mpac assessment may be wrong may want to look at other factors as in this case 17k was less then a 3rd of the upgrades completed.
This is a great program which allowed me to make energy efficient upgrades to my home which I otherwise would not have been able to put in place. The energy advisors were very helpful as was the energy auditor who assessed my home. Everyone was very professional and I would not be able to have lived in my home during the heat wave without the changes I made.
Thank you for the good work. The support from staff was great. The only major flaw is the out of pocket part which means it is not accessible to everyone. I was only able to do it with help.
The time it took to complete this was long and stressful at times. As we needed to coordinate all projects around the same time to avoid high financial charges. Coordination of multiple contractors is extremely difficult. If we could have had payment available for each project upon completion, that would have relieved some stress. Also, communications between energy advisor, energy coach and myself seemed to be a little disconnected. I found I needed to reach out to individually at times to complete similar tasks. This was not made clear to me at a few steps in the process. Overall, it has been a great success. Thank you all so much.
Additional information on the repayment and amortization of the loan would be greatly useful. At present I am still unclear on the details of the repayment amount, and any conflict or interaction it may play with my regular biweekly mortgage payment who pay my property taxes on my behalf.
ECM contractors were diligent, excellent and had great business ethics.
The list of contractors trained for the program was helpful as a starting point, but even then I had to re-request invoices from them as they did not contain all the required information.
We were very happy with the program and would like to thank all of the City staff and energy coaches that run it. As a comment on this survey, I note that I encountered a couple of issues that could affect the results generally: the questions regarding challenges/disadvantages that we faced (if any) does not allow you to choose "none" as an option - you have to select at least three to progress. The question that allows you to rank how significant the improvements are (big improvement, very big improvement, - or something similar to that) does not display the full options without having to scroll across the embedded box. I almost missed the options beyond "big improvement" and expect others might also. I was using an up-to-date Chrome browser with scale at 100%. Thanks!
thanks to Wes for all his help through the process!
Really excellent program. I did not initially consider solar (just wanted to replace existing ancient geothermal HP) but the consultation (that I was skeptical about) was extremely helpful (and not at all pushy) and assisted in us understanding the value/possibility of solar. Since then we have also changed one of our cars to electric to get full value out of system and are considering doing the same (at least plug in hybrid) with 2nd vehicle. Also interested in the future in hybrid hot water heater in place of gas. Thanks for your help!

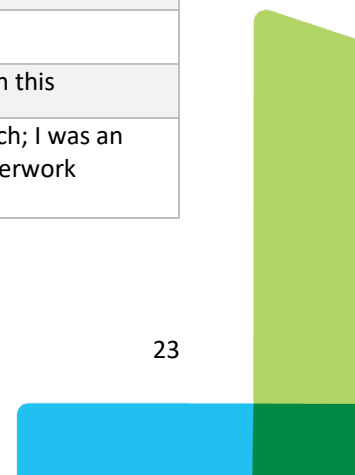
great program, very satisfied.
I had the heat pump installed and then insulation blown in to the crawl space. A couple of weeks later I had a heat pump issue. If anyone else does this same work, they should be told to change the filter in the furnace immediately afterward.
I recommended this to others who followed through
Everything was great, and the advisors were top notch
One of the questions asked us about what improvements we noticed, but we had a new furnace installed and are not able to assess the outcome now - during the summer months.
Wes Kerr was excellent. Very client-focused and patient. HomSol was a challenge to book post evaluation. Navigating rebates was difficult. Still unclear how to proceed. I think HomeSol does it for me. Overall, a good program and zero interest is a huge incentive.
While the complexity of the program is understandable, having to proceed through multiple layers of administration is somewhat frustrating.
great job!
Not ideal being unable to qualify for loans if any work had started or payments made,
It was awesome
I loved this experience and our family benefited greatly. I wondering if improvements could be made to make the process more accessible for individuals who might have limits to the up-front financial requirements?
Because the program was new, there were a lot of missteps in terms of clarity about what steps I needed to take and how long it would all be. I had a lot of unnecessary meetings at the beginning, and the timeline and required steps were very unclear all throughout. Because I was also communicating with several different parties, I heard different things about what was required. I feel like I was an early applicant through the program and it seemed like a trial run. I hope it'll be smoother for others now going forward. I think the biggest hurdle with this program is that in order to partake you need to already have the resources available to cover all the costs yourself (i.e. personal savings, or access to funding). I think the program could be more clear that the onus is on the applicants to figure it all out themselves, and that the real benefit here is to relieve the long term burden of paying out interest on big loans. The program seems to be presented as a huge opportunity to support people who can't afford upgrades, but really it should be said that you will have to take on big loans and pay out interest for the duration of a pretty lengthy bureaucratic process (possibly a year+), but then you'll be able to pay off your loans. It needs to be more clear what applicants will have to pay out of pocket in terms of interest for how long before the process is complete. I get that it's not the same for every project, but even a worst cast scenario would help us to plan.
It was great
I did this survey before having a chance for a long term evaluation of effectiveness of improvements made,
Great project and very happy with the strong support and of course the funding. So glad we were auto take this on and be aboard with the city and Sustainable Kingston
Support staff (Energy Coaches)at SustainableKingston were very knowledgeable and helpful. Not sure yet about NRC Greener Homes.
I wish there was an area where home owners/renovators could discuss contractors and find people for specific upgrades.



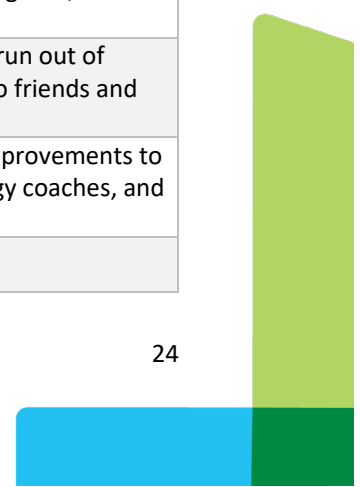
I was kind of disappointed, after choosing and completing the top 2 recommendations for enviromental/energy savings that were suppose to bring about the most change and savings. The changes in the pre-assessment and post-assessment numbers seemed to be quite small. These changes didn't or haven't made much of a difference for the cost.
The support for the Better Homes Kingston program was great. We also applied for the Enbridge HER+ program and the Greener Homes Canada program. The Greener Homes program in particular was more difficult to navigate. It would have been helpful to have support across all programs.
Difficult to obtain financing in time to cover costs
Quick turn around time on document submission and approvals to move to the next steps in the renovation project.
It would be helpful if those administering local program also had more experience with the federal programs.
This was a very helpful incentive program and I really appreciate the funds - they helped greatly. The energy coaches were good and I could not have done it without them - there are a lot of considerations and paperwork to navigate - their help was very needed.
It would have been nice to have the ability to match loan payments with completion of work during the various stages of the program. In this case, our heat pump was installed in September, however the solar was not installed until May so we had to carry the cost of the heat pump and various installments towards the solar out of pocket.
Amazing job Soren, Cedric and team
Service providers are very knowledgeable and accessible, contrary to the federal program which is a nightmare to deal with. The one difficulty with the kingston program is the requirement to access it through the federal program.
Overall, a very good program. Support staff were excellent. We would not have made these upgrades without this program, so we are certainly grateful for it.
I found the staff very supportive, at times when I was overwhelmed with the paperwork.
More staff provided as advisors would have been helpful. At times access to this was difficult and created more delays. When accessed they were very helpful but clearly understaffed.
I worked with Wes Kerr and he was an extremely useful resource for understanding what was available to me, expected grants/funding, how to proceed with the National program etc.
This has been a great experience and we have happily shared our experience with other community members! I will be forwarding a more detailed reply shortly.
Our situation was unique in that the furnace quit just after we were approved for the program. We were extremely pleased that Better Homes allowed us to go ahead with the program which involved the installation of a heat pump and propane furnace (hybrid). Fortunately, it was not during an extended cold snap and we were able to get at least the propane furnace going in good time. Our Energy Coach was very helpful and easily accessible during the project. Steps were a bit confusing at time, but good overall.
I would have liked more information about heat pumps before buying one. Things I have learned since buying a Bosch heat pump. All Cold Climate heat pumps do not work to -28, some only work to -18. "Bosch" Heat pumps operate much differently than a regular furnace, they run constantly when outside temperatures drop below -10. Heat pumps are slow to regulate home air temperatures. Heat pumps vibrate and make a lot of noise compared to a natural gas furnace.
More advertising for program would have been helpful



It was great
I fully realize that at times during the process, I was somewhat annoying with my constant questions, and confusion. The people involved were very patient with me. I believe that the Kingston programme is a great add-on to the federal programme, and the personnel involved were very helpful. Communication with the federal programme was very unsatisfactory. Communication with the Kingston programme was excellent
Everything about the program went well except for the initial applications to get the program started. I had 2 zoom chat meetings with Cedric last spring and he was very knowledgeable and helpful. Whoever else I was dealing with submitting quotes and all the required documents before I could start the program was not as helpful. I would wait 3 or 4 weeks at times before I would have to email again to ask what else was required of me before I could start the work. This delayed the start date to late October and considering the amount of work that needed to be completed our furnace and heat pump did not get installed until January. I already removed the baseboard heaters in order to instal the duct work so needless to say with only our wood stove the house was on the chilly side.
Excellent program, I'm glad I participated
I already mentioned the long wait period in getting the initial go-ahead in place, but otherwise, everyone was helpful and friendly. It seems the final payment will be forthcoming shortly, which is good because some contractors are small businesses and they are accustomed to being paid once is completed. They also require a 50% down payment. As it happens, we only had one contractor with this issue, but I just feel that aspect was a challenge.
The energy coach was extremely helpful in walking through the program, discussing evaluating more complicated upgrades such as solar panel installation, and navigating the process. This knowledge I found in much more limited amounts when it came to the vendors and Energy Advisor, and it was very helpful to have the coach.
The form "notice to proceed" needs the language changed asap. It is not permission to proceed with renovations, so is the INCORRECT LANGUAGE to use on the form. Request to proceed would be more accurate. Our windows were not covered due to they did not meet the standard of the program even though they are high efficient windows this was not explained before hand and lead to an expensive mistake. The whole thing took a year this was completely unacceptable. The whole time I was paying interest on a loan as I had to take out a loan because this program left me hanging. I would only recommend this program to someone who could afford to pay the whole thing on their own as I have low confidence in the ability of the government employees to do their jobs properly, competently or quickly. But. that's obvious because if they could, they wouldn't be working for the government would they.
The program is not very senior friendly, relying on technology many seniors do not have or know how to use. The number of steps involved in the process is overwhelming.
Team at BHK extremely helpful.
The Team at Better Home Kingston has been great to deal with
Amazing program and you run it exceptionally well. Thank you for your support through this
I was very appreciative of the support of Soren the manager and Cedric the energy coach; I was an early applicant and they were very responsive and helped me through the process/paperwork extensively.



<p>Not really though, I found that the survey questions were a little restrictive. In the section about improvements that we may have noticed, it is too early to tell in many of the questions or N/A would have made better sense that "no improvement".</p>
<p>I very much appreciated my conversations with the Energy Coach. He was promptly available to answer my many queries, and seemed genuinely interested in my efforts and the outcome. There was no pressure, and lots of support.</p>
<p>Nothing to add</p>
<p>The portal didn't work well, but it was nicer just to email with my Energy Coaches anyways. The most confusing part was how to GHG reduction would be calculated, but Cedric talked me through that during our online meeting. Also, booking an online meeting with the coach was a bit confusing; at one point I needed to email to get the link.</p>
<p>Overall we are very thankful for the program and the staff was very kind and helpful. Unfortunately, when we started it looked like our upgrade would qualify us for the full 5000. In the end we only qualified for 1000. It is hard to go into a project and make financial plans when you really don't know how much will be covered. Also there is a big push for solar. In the meeting it sounded like solar could really be a viable option with a loan. Even with the loan solar is still (at least for our life and budget) prohibitively expensive.</p>
<p>Very smooth process with the guidance from the Energy Advisors!</p>
<p>Very much needed program but may not be easily navigated by many seniors.</p>
<p>My sense, from this experience, is that heating contractors in Kingston are still relatively unfamiliar with heat pump technology. One contractor we contacted didn't seem to understand the technology very well at all. The one we used had to come back three times to replace parts that didn't seem to work. In the end, all is working as it should, but it took some trial and error, it appears.</p>
<p>None, fantastic program!</p>
<p>We have recommended the BHK program to all of our friends because we had such a positive experience with the energy coaches, the amount of funding made available by the City, and the speed in which our file was handled. WELL DONE&amp;gt;</p>
<p>We qualified for the maximum loan amount, which was great! We found it a bit challenging to juggle the various project timelines and billing dates to avoid having to pay out of pocket for long periods of time. Being able to access funds by project would have helped with this issue (understanding that it is more tracking on the back end). Being able to access funds for solar panels would also be great (I'm not sure if we can re-qualify for the government program now that we've done our heat pump). It also wasn't clear to us at first that our home would qualify, we thought it was a program only for older homes.</p>
<p>We always talked with very knowledgeable and caring people. Very helpful in walking us through the whole process and finding ways to assist us financially. We would not have done this upgrade, had we not had support from the city.</p>
<p>We feel the Better Homes Kingston team is outstanding! This is likely why the city has run out of money more quickly than expected; all the participants are raving about the program to friends and neighbours!</p>
<p>Now that the first round of applications has gone through the process, I'd like to see improvements to the information provided on the program website based on feedback from users, energy coaches, and the program manager.</p>
<p>All good</p>



Excellent program!! Coaches so helpful and incentives inspired us to do more with energy conservation. We are very happy with the program!!! Well done!!

Soren and the team was simply excellent at helping us navigate through the program. They were always available to answer the phone, respond to calls, and help us understand how to make the applications and the next steps. I think this is absolutely crucial (a number of helpful staff to deal with in person) because the administration burden of the grant program is quite high and, at times, disorientating. I have thought about it, and while the instructions might be made a little bit clearer, the truth is that when dealing with this kind of bureaucracy there is no easy way. I also understand why there are numerous steps because of legal and city requirements. You are also limited by the City of Kingston website design, which is not amazing. Overall, full marks (A+), because without your support, the experience would have been very hard. You made it easy and congrats to you. I have two small suggestions. The first is that you ask the City to set you up with an automatic response that assigns a tracking number of emails sent. At times, I sent in documents, and were not sure if they had been received; I believe we chatted about the size of the files being blocked by the email program. If I had received a ticket number, I think, it would have been easier to follow up on this and not where in the processing stage it was at. The second tip is that you'll notice on this qualtrics survey (I am reading it in Firefox on a laptop) at one point, there are about 10 options, from very unsatisfied to extremely satisfied, I think, but if one misses the scroll across (as many users will) the 'extremely satisfied' (It might be 'extremely big improvement,' I can't recall) radial button doesn't appear. If people miss this it might crush some of your results, so you might want to make it so that all the options appear at once, without scrolling. Thanks again for this excellent and important service.

It would be helpful to have a flow chart of the process from beginning to end and final payment.

Great work, thank you very much. Here are some thoughts: (1) We still face is that we still have to pay the monthly service fees for gas despite having capped the gas connection. It would be great if Utilities Kingston would drop those charges. (2) We would love to have solar panels but cannot afford them after our retrofit. It would be great if there was a solar company that installs solar panels on your home for no money down, and the house owner pays a monthly rate for the clean energy those panels produce. I think there are some options now available (e.g. <https://freeontariosolar.com/>) and I will start looking into it. I recommend that you help disseminate such information.

The mayor should not have to sign all loan agreements.

No thank you

This was a wonderful program! We are very grateful to the City of Kingston for this opportunity. A special thank you to Cedric for all of his assistance.

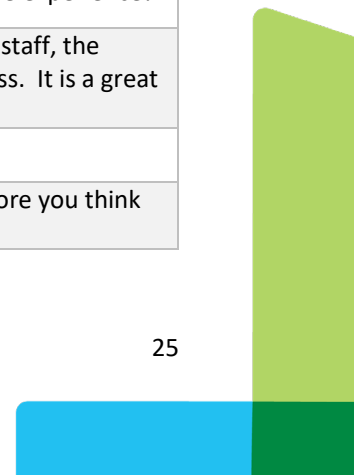
I have a line of credit that I paid the contractor out of. Without a line if credit I could not have done this. There is a long delay from paying the contractors until reimbursement. Maybe this would be a barrier to others who want to be part of this program.

Can't say enough good things about the program and the team that runs it. Very positive experience!

Inspite of the initial flood of interest in your program and difficulty getting and training staff, the program is doing an excellent job of supporting applicants throughout the whole process. It is a great initiative and makes us proud to live in Kingston. Thank you.

Extremely knowledgeable staff, Very quick return on any inquiries/clarifications needed,

You need time to embark on these upgrades so it pays to plan ahead and start well before you think you have to.



Website did not function or provide forms as instructed. Relied heavily on Energy Coach sessions to obtain forms, receive guidance, and instruction along the way. Energy Coach provided an immense amount of help in achieving project completion. Ran into a handful of administrative issues throughout, however in time these were successfully resolved. Thanks again!

Overall I was grateful for the help and money, though I think the number and length of the meetings was excessive.

Understanding energy use of your home is quite technical and navigating the available funding for energy retrofits can be complicated. Energy retrofits are expensive and the current supply chain challenges have driven costs up significantly. I am so proud that my City offers this type of financing and incentive program and that they provide the services of an Energy coach but I think this whole process is still very daunting. It would be good to provide additional resources for people who cannot easily grasp the technical concepts or afford the energy retrofits.

I think there should always be an incentive part of the program; third-party funding is important as well, but a bit of incentive really helps.

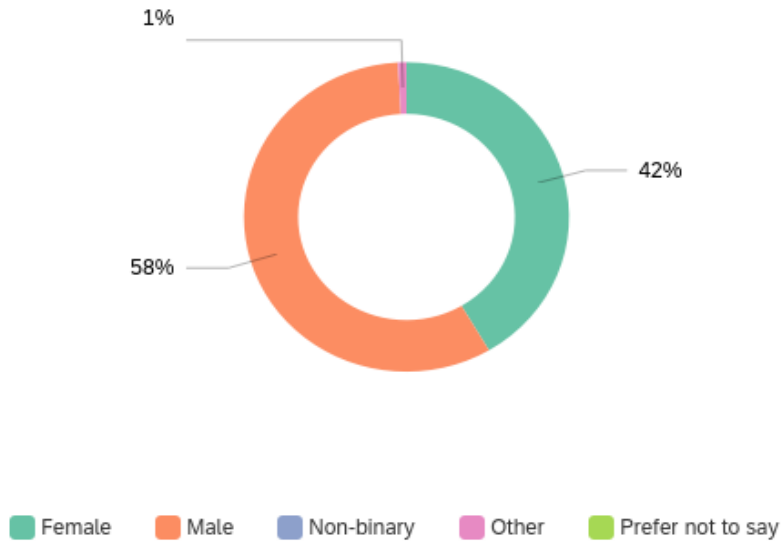
Carefully read emails and attachments. Do not auto reply without understanding what client's are asking. Is there a way on your end that you are tracking client's progress? I have a friend at the early stages of the program and is also struggling with how her questions are answers.

great programme. I would have reduced the maximum amount available for an interest free loan from \$40K so more people could access the programme.

## Demographics

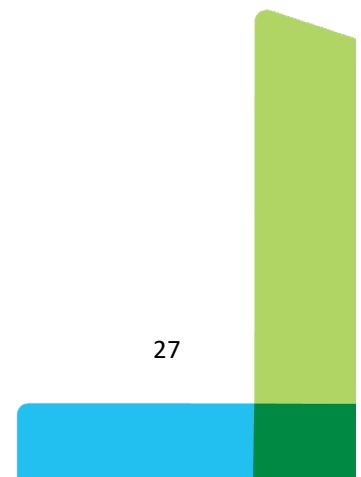
### Which of the following best describes your gender?

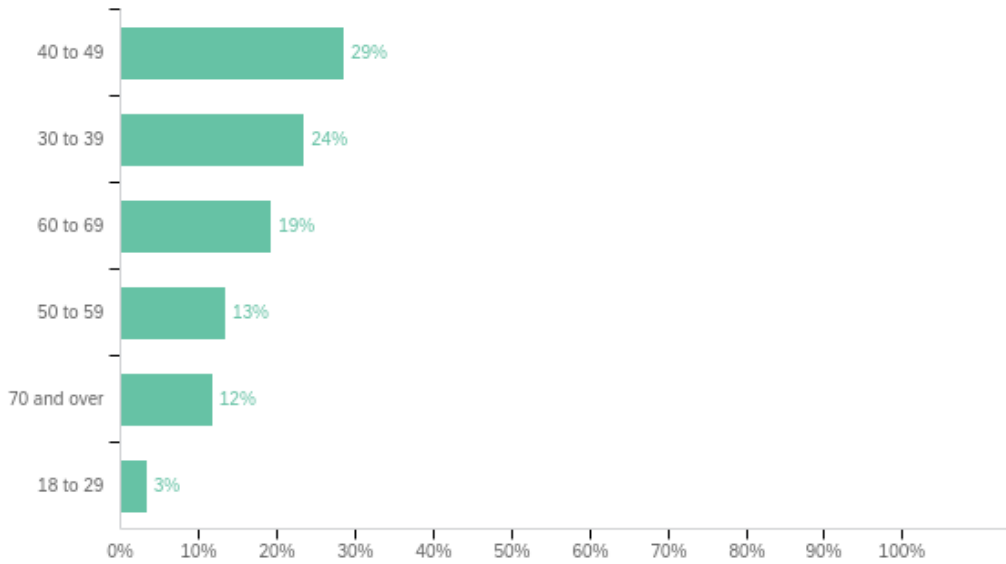
Over half of respondents (58%) describe their gender as male. About four in ten respondents (42%) describe their gender as female.



### What is your age range?

Two in ten respondents (24%) ranged their age from 30 to 39 years, while 29% respondents reported their ages range from 40 to 49 years. Another two-tenths (19%) ranged their age from 60 to 69 years while 13% aged from 50 to 59 years old, 12% from 70 and over. A few respondents (3%) aged from 18 to 29 years old.

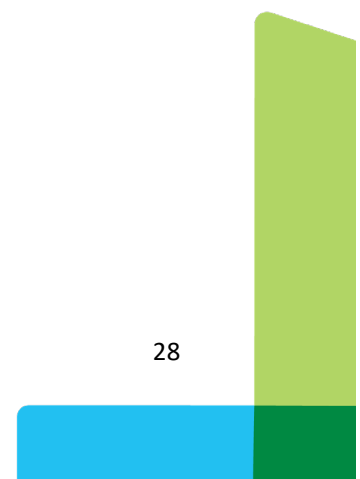


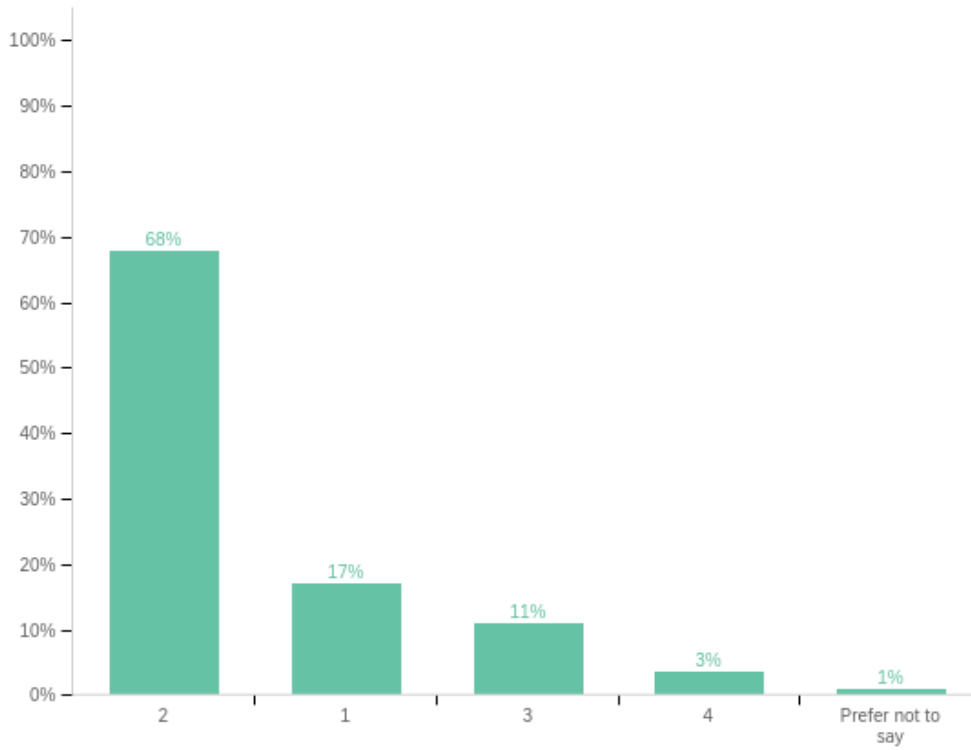


**Including yourself, how many people currently live in your household?**

**A. Adults 18 and older**

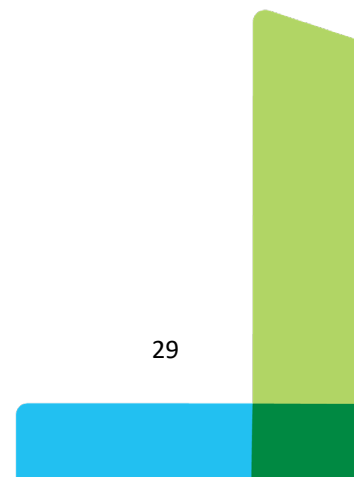
Seven in ten respondents (68%) have 2 adults of 18 years and older currently living in their households, while 11% respondents have 3 adults living in their household. On the other hand, over one in ten respondents (17%) have 1 adult living in their household while 3% have 4 adults living in their household.



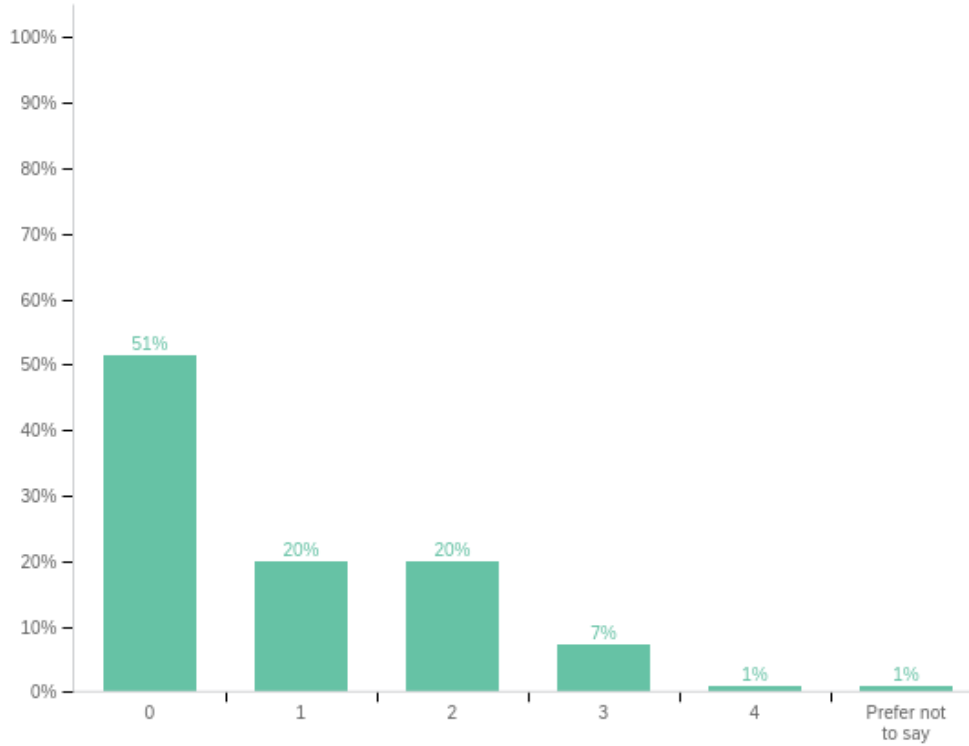


B. Children under the age of 18

Half of respondents (51%) reported they have no children under the age of 18 currently living in their household, while (20%) have 1 child, 20% reported 2 children. A few respondents (3%) reported 3 children while a few other (1%) reported 4 children living in their household.

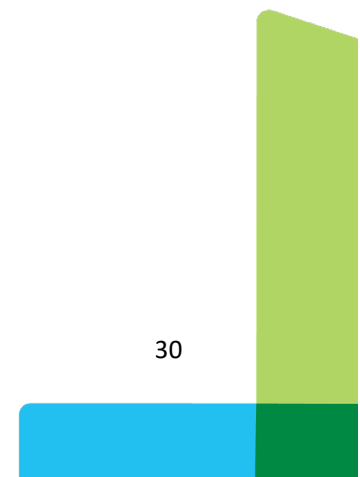


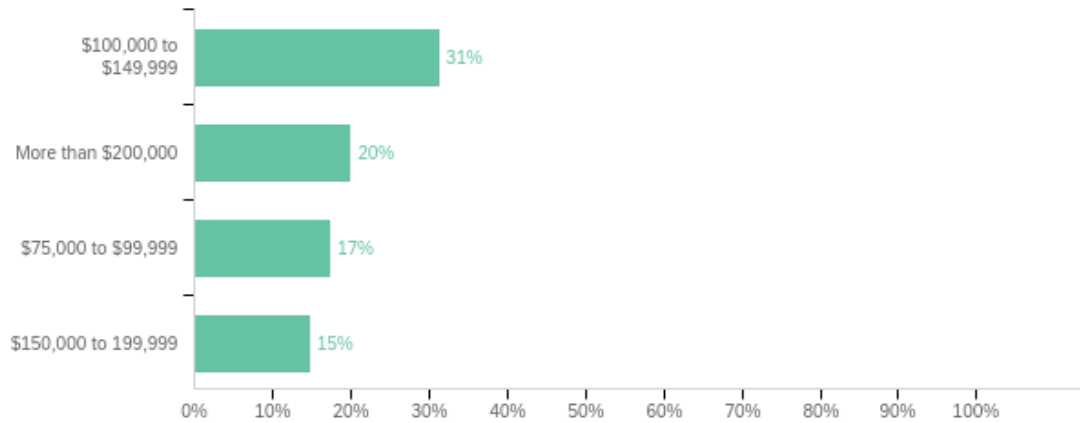




**Please select the category that best describes your total household income last year before taxes.**

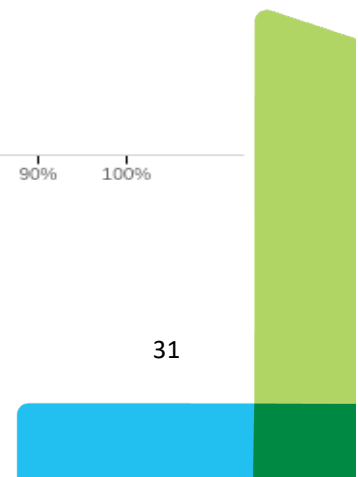
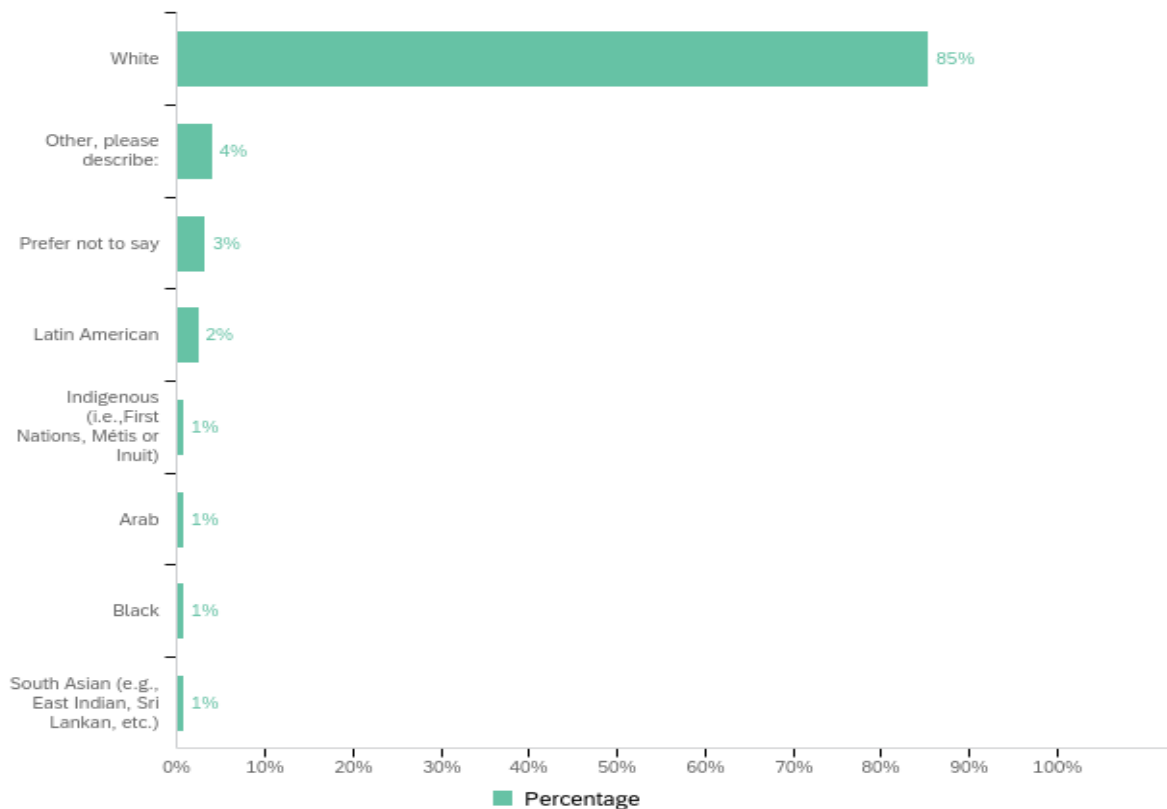
One quarter of respondents (31%) describe their total household income from \$100,000 to \$149,999 while 17% reported household income from \$75,000 to \$99,999 last year before taxes. On the other hand, over a third of respondents (35%) reported a household income from \$150,000 to more than \$200,000.





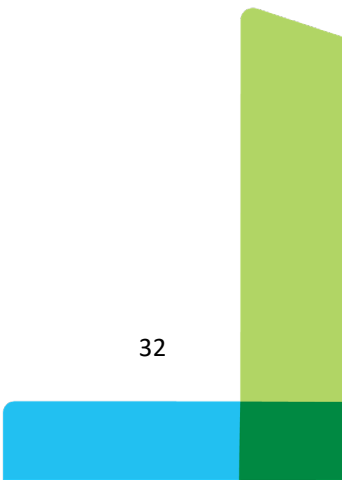
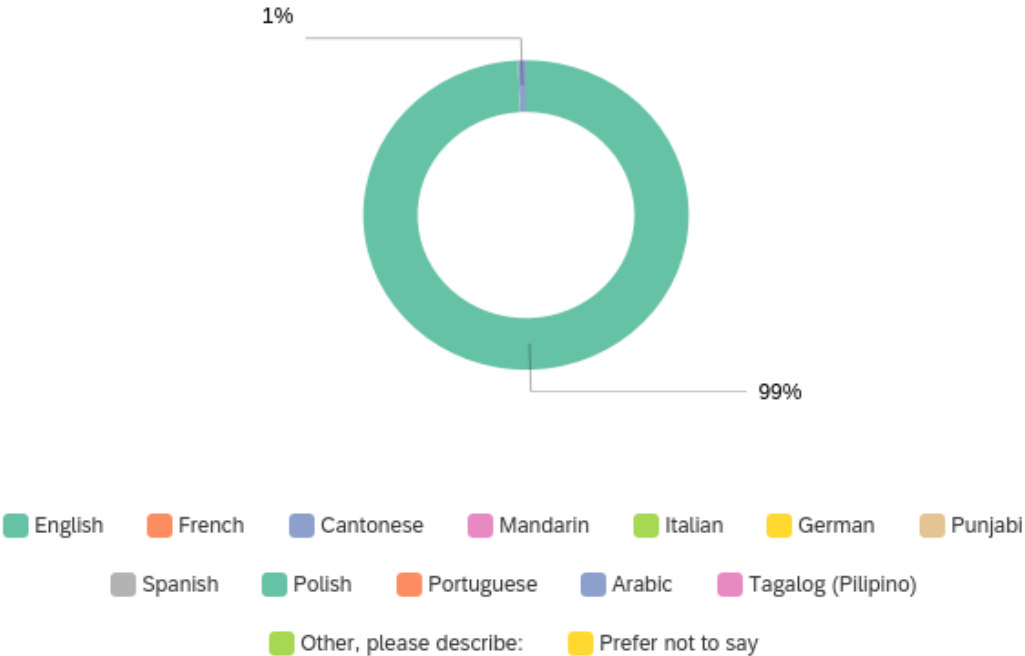
**Which of the following best describes your ethnicity?**

Most of the respondents (85%) are white, while 4% described themselves as German, Irish, English, French Canadian, Jewish and Caucasian European. The remainder (6%) describes equally their ethnicity as Indigenous (1%), Arab (1%), Black (1%) and South Asian (1%).



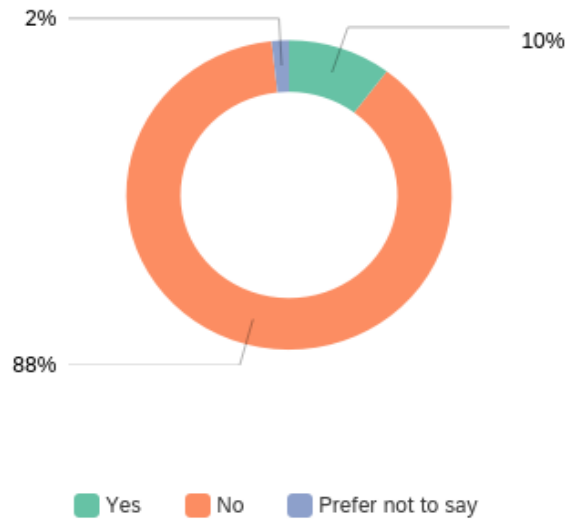
**What is the language in which you prefer to receive information regarding home energy upgrades?**

Most of the respondents (99%) prefer to receive information regarding home energy upgrades in English.



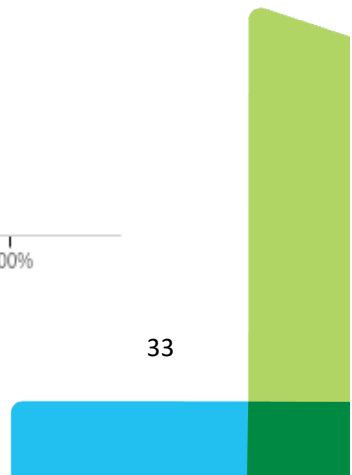
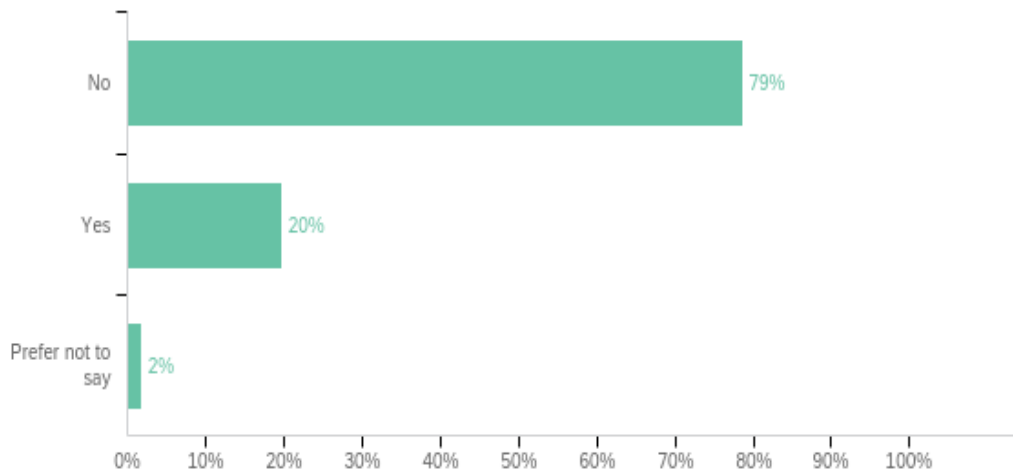
**Do you identify as a person with a disability?**

About eight in ten respondents (88%) do not identify themselves as a person with a disability, while 10% identify as a person with a disability and 2% prefer not to say.



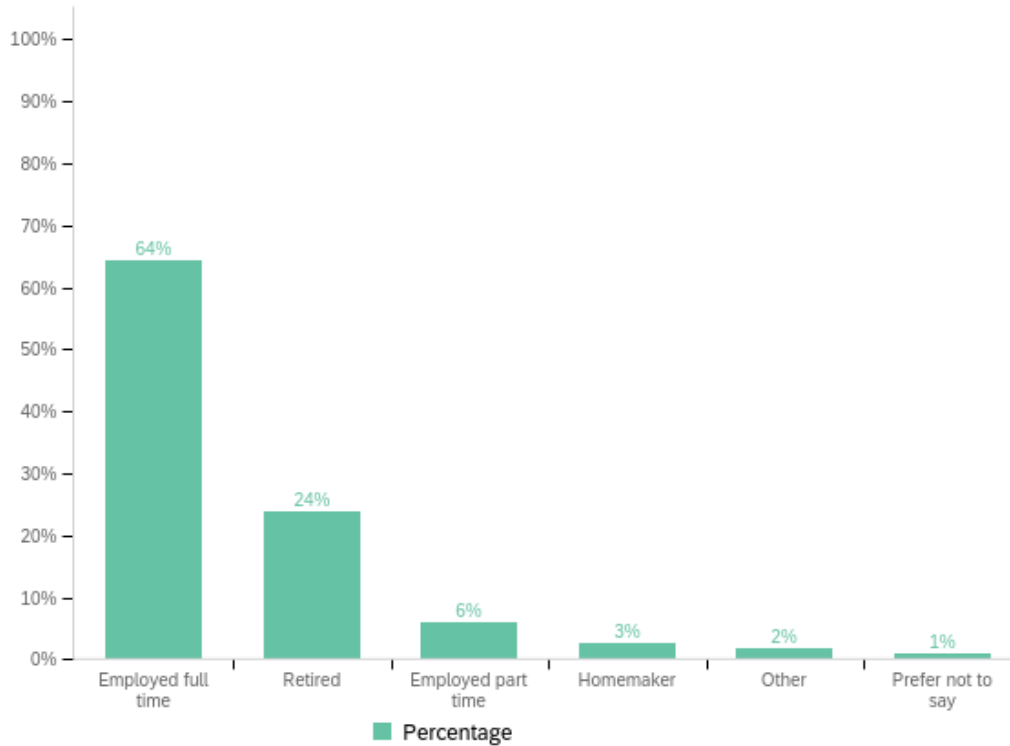
**Are you now, or have you ever been, a landed immigrant in Canada? (Persons who are either Canadian citizens by birth or non-permanent residents are not landed immigrants.)**

About eight in ten respondents (79%) are not landed immigrant, while 20% identified as landed immigrant.



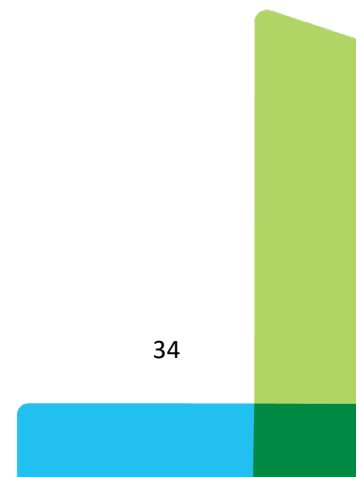
**Which of the following best describes your current employment status?**

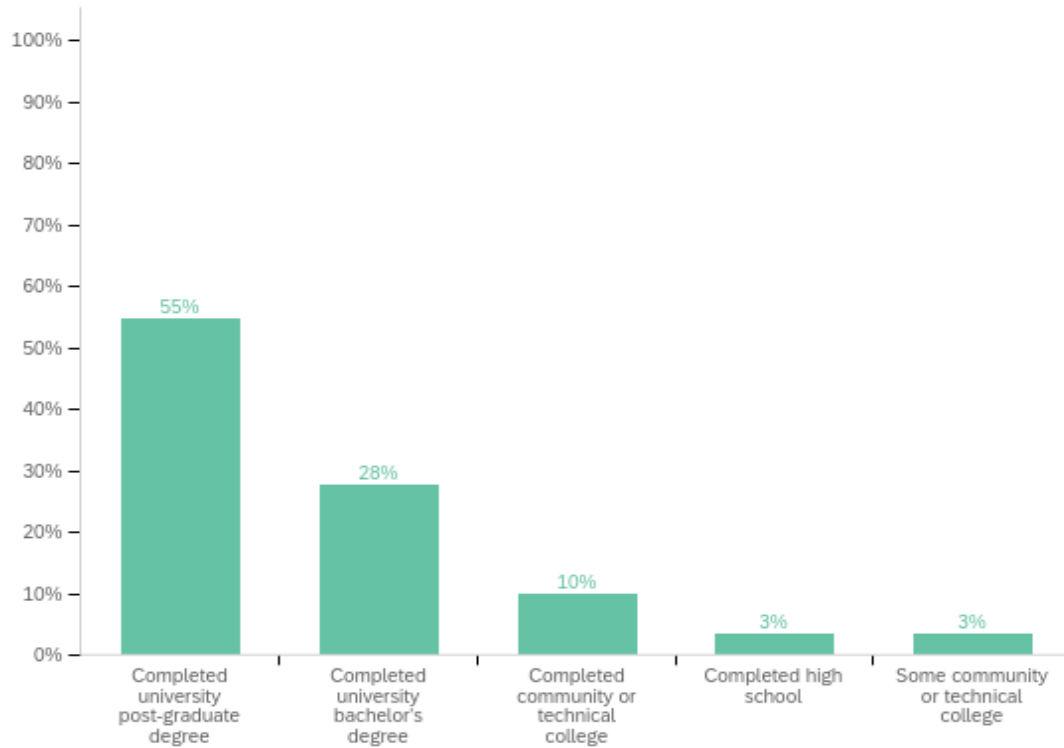
Six in ten respondents (64%) are employed full time, while 24% are retired. The remaining respondents (11%) are either employed part-time (6%), homemaker (3%) or other (2%).



**What is the highest level of education you have completed?**

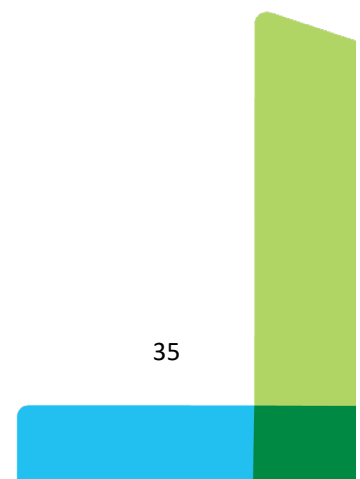
Half of the respondents (55%) completed university post-graduate degree, while 28% completed university bachelor’s degree. Some respondents (10%) completed community or technical college while 3% completed some community or technical college. A few respondents (3%) completed high school.

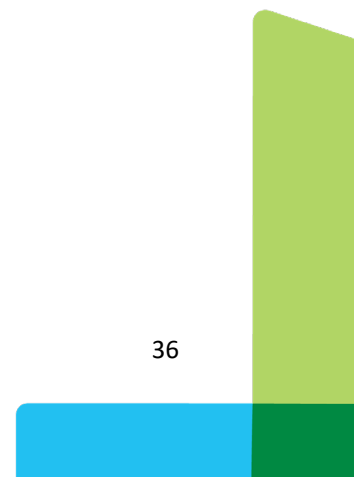
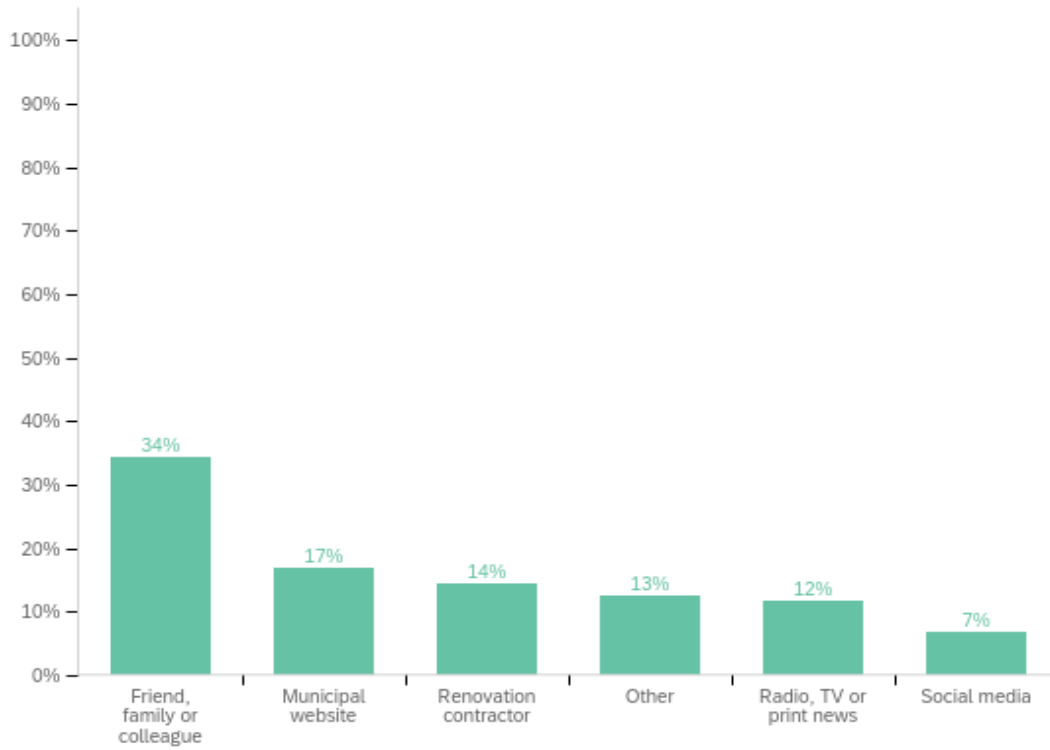




### How did you hear about the local program?

Over three in ten respondents (34%) heard about the local program through a friend, family or colleague, while 17% indicated municipal website and 14% reported renovation contractor. Over one in ten (12%) indicated radio, TV or print news. A few respondents (7%) mentioned social media. Some respondents (13%) heard about the local program through roadside signs, salesman for air-conditioning company and Sustainable Kingston, sign at the Memorial Centre and their neighbourhood.





## Annexes

**Screening question - Has an energy advisor completed a post-renovation EnerGuide evaluation at your home?**

Answer	%	Count
Yes	99%	121
No	1%	1
Total	100%	122

**What is your level of satisfaction with the following services you accessed through your local program?**

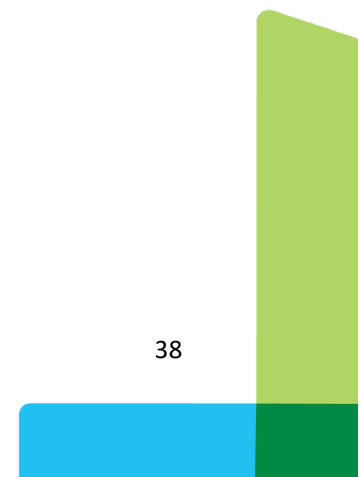
#	Question	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Not applicable	Total
1	1. Home energy evaluation performed by the energy advisor	2% 2	1% 1	2% 3	21% 25	74% 90	0% 0	121
2	2. Support from program staff throughout the home upgrade process	2% 2	1% 1	2% 3	14% 17	80% 97	1% 1	121
3	3. Renovation contractor(s) who performed work at	2% 2	0% 0	4% 5	32% 39	60% 73	2% 2	121



	your home													
4	4 Financing made available to you for home upgrades	2%	2	2%	2	4%	5	18%	2 2	71 %	86	3%	4	121

**How helpful did you find the Energy Coach services to be throughout your participation in the Better Homes Kingston Program?**

#	Answer	%	Count
5	Very helpful	39%	47
3	Slightly helpful	2%	2
2	Not at all helpful	1%	1
4	Moderately helpful	8%	10
19	Extremely helpful	50%	61
	Total	100%	121



Below you'll see a list of things that may have affected the outcome of your home energy project. Please rank them in order from the factor that had greatest impact on the successful completion of the project to the one that had the least.

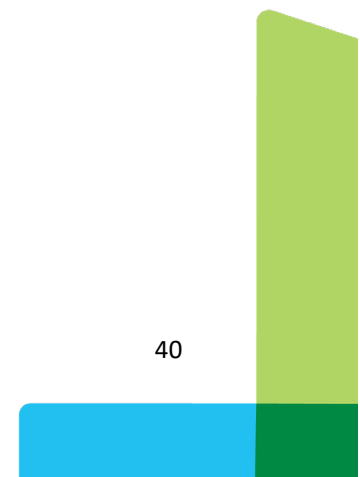
#	Question	1	2	3	4	5	Total
1	Customer care provided by the program staff	21%	25	26%	31	30%	36
2	Assistance with understanding and applying for available incentives/rebates	29%	35	32%	39	25%	30
3	Having a list of contractors to choose from	2%	2	7%	8	15%	18
4	Financing made available to me through my financial institution, utility company or municipality	45%	54	17%	20	15%	18
5	Variety of upgrades available through the program	4%	5	19%	23	16%	19

Which of the following challenges or barriers, if any, did you face during your home energy upgrade project? Select up to three options. (If you experienced more than three challenges, please just tell us what the three biggest challenges were.)

#	Answer	%	Count
3	Upgrades I wanted to complete were not supported	3%	10
7	Program website was not easy to use	8%	30
2	Program eligibility and requirements were unclear	9%	33
10	Other	13%	47
9	None	11%	41

39

4	Maximum amount for financing was not enough to cover my entire project	9%	35
6	Limited availability of/access to home renovation contractors	12%	44
5	Limited availability of/access to energy advisors	3%	12
8	Having to pay contractors out-of-pocket	22%	82
1	Application forms were not easy to follow	9%	35
	Total	100%	369



How much of an improvement have you experienced in your home after completing energy efficiency upgrade(s)?

#	Question	Moderate improvement		Big improvement		Very big improvement		To so on to tel l		No improvement		Slight improvement		Not applicable		Total
1	Comfort related to indoor temperature and reduced drafts	30.58%	37	33.88%	41	18.18%	22	4.96%	6	3.31%	4	6.61%	8	2.48%	3	121
2	Indoor humidity levels	24.79%	30	22.31%	27	5.79%	7	11.57%	14	16.53%	20	9.09%	11	9.92%	12	121
3	Indoor air quality	23.14%	28	13.22%	16	10.74%	13	9.09%	11	19.83%	24	13.22%	16	10.74%	13	121
4	Noise from outside the house	16.53%	20	10.74%	13	3.31%	4	5.79%	7	37.19%	45	10.74%	13	15.70%	19	121
5	Sense of durability and security	28.93%	35	28.93%	35	14.05%	17	8.26%	10	4.96%	6	8.26%	10	6.61%	8	121
6	Reduction in energy use	16.53%	20	31.40%	38	18.18%	22	22.31%	27	3.31%	4	8.26%	10	0.00%	0	121

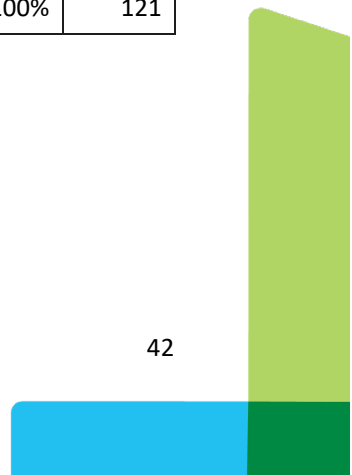
7	Energy cost savings	17.36%	21	20.66%	25	9.92%	12	33.06%	40	9.09%	11	9.92%	12	0.00%	0	121
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**Do you feel that you know more about energy efficiency and renewable energy after participating in your local program?**

#	Answer	%	Count
1	Not really	2%	2
2	A little	10%	12
3	Moderately	34%	41
4	Greatly	55%	66
	Total	100%	121

**If you had not received the financing from your local program to cover the cost of energy efficiency or renewable energy upgrades, would you have still completed this work?**

#	Answer	%	Count
2	Yes, I would have completed these upgrades regardless	4.13%	5
3	Yes, but I would have completed fewer or less costly upgrades	58.68%	71
4	No, I wouldn't have done any upgrades	37.19%	45
	Total	100%	121

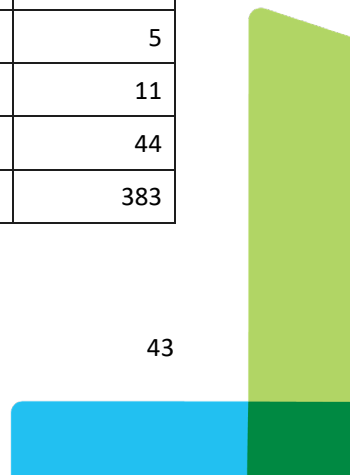


**How would you have financed these upgrades without the local program?  
(Please select all that apply)**

#	Answer	%	Count
1	Personal savings	43%	
4	Other	3%	
3	Loan	14%	
2	Line of credit	41%	
	Total	103	

**Which improvements did you make to your home? (Please select all that apply)**

#	Answer	%	Count
1	Windows, doors and/or skylights	12.79%	49
2	Water conservation	0.00%	0
3	Solar thermal	0.00%	0
4	Solar electricity generation	4.44%	17
5	Other	1.83%	7
6	Lighting	1.83%	7
7	Insulation	16.71%	64
8	Hot water heater	9.92%	38
9	High-efficiency furnace or boiler	8.09%	31
10	Heat pump and/or air conditioner	28.72%	110
11	Heat/energy recovery ventilator	1.31%	5
12	Electric vehicle charger	2.87%	11
13	Air sealing	11.49%	44
	Total	100%	383



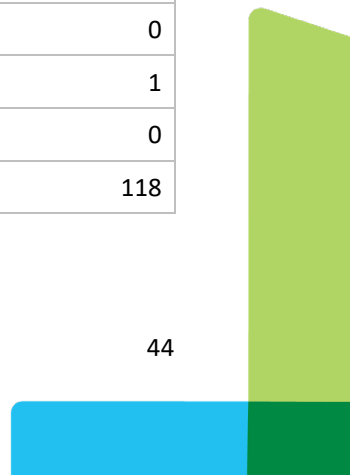
**Did you make any improvements to your home that you would not have considered without your local financing program? (Please select all that apply)**

#	Answer	%	Count
1	Insulation	12.62%	26
2	Air sealing	2.43%	5
3	High-efficiency furnace or boiler	7.28%	15
4	Hot water heater	9.71%	20
5	Heat pump and/or air conditioner	37.38%	77
6	Heat/energy recovery ventilator	0.49%	1
7	Lighting	0.97%	2
8	Windows, doors and/or skylights	11.17%	23
9	Solar electricity generation	5.83%	12
10	Solar thermal	0.00%	0
11	Electric vehicle charger	2.43%	5
12	Water conservation	0.97%	2
13	Other	8.74%	18
	<b>Total</b>	<b>100%</b>	<b>206</b>

**Demographics**

**Which of the following best describes your gender?**

#	Answer	%	Count
1	Female	42%	49
2	Male	58%	68
3	Non-binary	0%	0
4	Other	1%	1
5	Prefer not to say	0%	0
	<b>Total</b>	<b>100%</b>	<b>118</b>

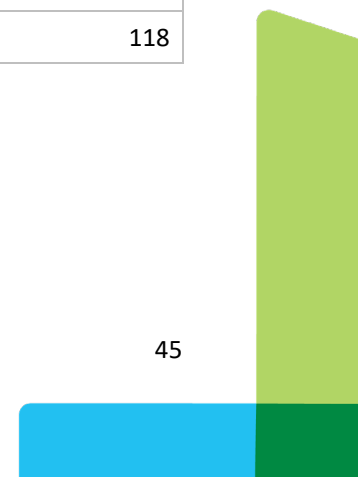


**What is your age range?**

#	Answer	%	Count
1	18 to 29	3%	4
2	30 to 39	24%	28
3	40 to 49	29%	34
4	50 to 59	13%	16
5	60 to 69	19%	23
6	70 and over	12%	14
7	Prefer not to say	0%	0
	Total	100%	119

**Adults at home - Including yourself, how many adults currently live in your household? Adults 18 and older**

#	Answer	%	Count
9	Prefer not to say	1%	1
8	More than 7	0%	0
7	7	0%	0
6	6	0%	0
5	5	0%	0
4	4	3%	4
3	3	11%	13
2	2	68%	80
1	1	17%	20
	Total	100%	118



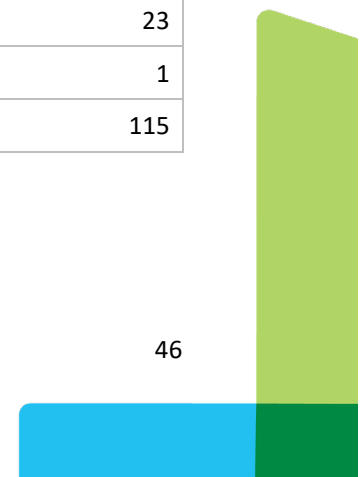


**Children at home - How many children currently live in your household?  
Children under the age of 18**

#	Answer	%	Count
0	0	51%	57
1	1	20%	22
2	2	20%	22
3	3	7%	8
4	4	1%	1
5	5	0%	0
6	6	0%	0
7	7	0%	0
8	More than 7	0%	0
9	Prefer not to say	1%	1
	Total	100%	111

**Please select the category that best describes your total household income last year before taxes.**

#	Answer	%	Count
6	\$150,000 to 199,999	15%	17
5	\$100,000 to \$149,999	31%	36
4	\$75,000 to \$99,999	17%	20
3	\$50,000 to \$74,999	13%	15
2	\$26,000 to \$49,999	3%	3
7	More than \$200,000	20%	23
1	Less than \$26,000	1%	1
	Total	100%	115

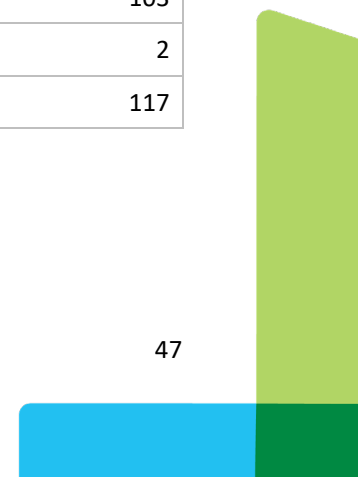


**What is the language in which you prefer to receive information regarding home energy upgrades?**

#	Answer	%	Count
12	Tagalog (Pilipino)	0%	0
8	Spanish	0%	0
7	Punjabi	0%	0
14	Prefer not to say	0%	0
10	Portuguese	0%	0
9	Polish	0%	0
13	Other, please describe:	0%	0
4	Mandarin	0%	0
5	Italian	0%	0
6	German	0%	0
2	French	0%	0
1	English	99%	118
3	Cantonese	1%	1
11	Arabic	0%	0
	Total	100%	119

**Do you identify as a person with a disability?**

#	Answer	%	Count
1	Yes	10.26%	12
2	No	88.03%	103
3	Prefer not to say	1.71%	2
	Total	100%	117



**Are you now, or have you ever been, a landed immigrant in Canada? (Persons who are either Canadian citizens by birth or non-permanent residents are not landed immigrants.)**

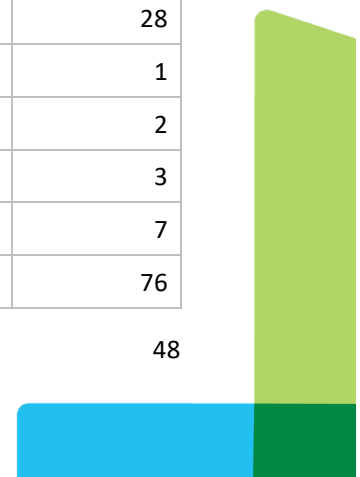
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Are you now, or have you ever been, a landed immigrant in Canada? Persons who are either Canadian citizens by birth or non-permanent residents are not landed immigrants.	1.00	3.00	1.94	0.40	0.16	18

#	Answer	%	Count
1	Yes	20%	23
2	No	79%	92
3	Prefer not to say	2%	2
	Total	100%	117

**Which of the following best describes your current employment status?**

#	Answer	%	Count
4	Unemployed - not looking for work	0%	0
3	Unemployed - looking for work	1%	1
6	Retired	24%	28
8	Prefer not to say	1%	1
7	Other	2%	2
5	Homemaker	3%	3
2	Employed part time	6%	7
1	Employed full time	64%	76

48



	Total	100%	118
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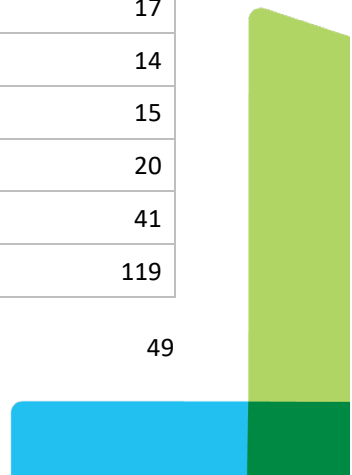
**What is the highest level of education you have completed?**

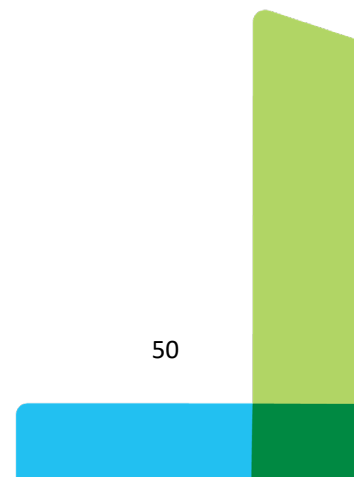
#	Answer	%	Count
1	Elementary school	0.00%	0
2	Some high school	0.84%	1
3	Completed high school	3.36%	4
4	Some community or technical college	3.36%	4
5	Completed community or technical college	10.08%	12
6	Some university	0.00%	0
7	Completed university bachelor's degree	27.73%	33
8	Completed university post-graduate degree	54.62%	65
9	No schooling	0.00%	0
10	Other	0.00%	0
11	Prefer not to say	0.00%	0
	Total	100%	119

**How did you hear about the local program?**

#	Answer	%	Count
1	Social media	7%	8
2	Renovation contractor	14%	17
3	Radio, TV or print news	12%	14
4	Other	13%	15
5	Municipal website	17%	20
6	Friend, family or colleague	34%	41
7	Total	100%	119

49









**City of Kingston**  
**Report to Environment, Infrastructure & Transportation Policies Committee**  
**Report Number EITP-24-021**

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**To:** Chair and Members of the Environment, Infrastructure & Transportation Policies Committee

**From:** Paige Agnew, Commissioner, Growth & Development Services

**Resource Staff:** Julie Salter-Keane, Manager, Climate Leadership

**Date of Meeting:** October 8, 2024

**Subject:** Recommendations for a Comprehensive Car-sharing Pilot Program

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**Council Strategic Plan Alignment:**

Theme: 2. Lead Environmental Stewardship and Climate Action

Goal: 2.2 Support climate action and sustainability for residents, businesses and partners.

**Executive Summary:**

Council's 2023-2026 Strategic Plan includes a commitment to explore and encourage a comprehensive car-sharing program (2.2.4.B). This report provides background and analysis on a comprehensive car-sharing program and recommends that the City enters into an agreement with Communauto, for an expanded car-share pilot program for a period of up to 18 months, starting in Q2 of 2025.

Since 2012, Communauto Inc. (previously Virtue Transportation Systems Incorporated) has been operating in Kingston, with a licensing agreement with the City, for the leasing of two dedicated parking spots in the Springer Memorial Lot, located at 140 Queen Street. The proposed agreement for an expanded car-share pilot will include criteria such as an increase in the number of station-based vehicles and a minimum of one full electric vehicle in the pilot, as a station-based vehicle, ensuring convenient access to charging infrastructure for users.



October 8, 2024

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**Recommendation:**

**That** Council approve a budget amendment for \$20,000 funded from the monies collected from the Cash-in-Lieu of Parking levies to support an expanded car-share pilot program; and

**That** Council authorize the Manager, Licensing, Parking Operations and Policy, in consultation with the Director of Legal Services, to enter into an agreement with Communauto Inc. for the provision of an expanded car-share pilot program for a period of up to 18 months, starting in Q2 2025.



October 8, 2024

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**Authorizing Signatures:**

ORIGINAL SIGNED BY COMMISSIONER

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**Paige Agnew, Commissioner,  
Growth & Development Services**

**p.p.** ORIGINAL SIGNED BY COMMISSIONER

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**Lanie Hurdle, Chief  
Administrative Officer**

**Consultation with the following Members of the Corporate Management Team:**

Jennifer Campbell, Commissioner, Community Services	Not required
Neil Carbone, Commissioner, Corporate Services	Not required
David Fell, President & CEO, Utilities Kingston	Not required
Peter Huigenbos, Commissioner, Major Projects & Strategic Initiatives	Not required
Brad Joyce, Commissioner, Infrastructure, Transportation & Emergency Services	<input checked="" type="checkbox"/>
Desirée Kennedy, Chief Financial Officer & City Treasurer	<input checked="" type="checkbox"/>

**October 8, 2024**

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**Options/Discussion:**

**Background**

To support the Strategic Priority of Council, 2.2.4B explore and encourage a comprehensive car-sharing program, research and analysis was conducted, to evaluate the effectiveness of approaches of other car-share programs in comparable cities across Ontario and beyond. A brief background is provided, highlighting key considerations for the expansion car-sharing in Kingston.

Based on previous analysis including in the Power of Parking: A New Parking Paradigm for Kingston?, each car share vehicle is estimated to replace 5-10 privately-owned vehicles, with other studies suggesting up to 13 or more privately-owned vehicles, with an estimated 30% less GHG emissions than the average personal vehicle. While car-sharing uptake grows, there are numerous additional benefits such as reduced household transportation costs due to reduced vehicles ownership among car-share program members, reduced vehicle kilometres travelled and increased active transportation mode share.

A review of Kingston's own car-share programs was conducted, as well as reviews or consultation with Guelph, Hamilton, London, Toronto, Waterloo, Halifax and Vancouver. Research of other programs included their geographic scope, duration, program modality, and business requirements. Market research of other car-share operators in Ontario was also conducted, although the space is limited, with only a couple competitors.

Since 2012, Communauto Inc. (previously Virtue Transportation Systems Incorporated) has been operating in Kingston, with a licensing agreement with the City, pertaining to the leasing of two dedicated parking spots in the Springer Memorial Lot, located at 140 Queen Street. The license fee for dedicated parking spaces is based on the monthly permit rate of \$112.50 per month, per space, as outlined in the Fees and Charges By-Law Number 2005-10.

It is estimated that in 2024 there are more than 215 members listed in Kingston using Communauto. There are currently 8 Communauto vehicles in Kingston, with 5 traditional gas vehicles, and 3 hybrid vehicles. Communauto has expressed their intention to expand their Kingston fleet in the future. Communauto also leases parking spaces on private property, including commercial and residential spaces. Despite this, Kingston still lacks a truly robust car-sharing market compared to other cities in Ontario.

The current market landscape in Ontario is very limited, with only one other company (Zipcar) operating widely in Ontario, exclusively in the greater Toronto area. The City of Kingston remains open to other proponents entering the market and welcomes car-share providers to reach out if interested. However, from the research conducted, it is resoundingly clear that Communauto has both program flexibility and is operating in the most Cities across Ontario and Canada. This includes numerous comparable small-medium sized cities (Waterloo, Hamilton, Guelph and London). Given their presence in Kingston, their interest in expanding, and overall

**October 8, 2024**

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trend of operational growth across the province, working directly with Communauto is the most direct path forward to expand the car-share program in Kingston.

### **Analysis & Rationale**

Car-share program models can be broken down into two primary categories, being one-way and two-way car-share, also referred to as free-floating and station-based. The one-way or free-floating model allows for the flexibility of picking up a vehicle from a designated space, or larger designated parking zone, and utilizing the vehicle in a one-way trip, allowing for drop-off of the vehicle in second designated space or larger designated parking zone. This allows for enhanced flexibility, and autonomy of users, but requires greater availability of vehicles in a network for the user to have convenient access. The two-way or station-based model requires round-trips, with the start and end in the same fixed location, being either an individual spot or pooling station.

To date, in Kingston, Communauto has only offered two-way or station-based car-share, which is more likely to be utilized for more pre-planned trips. While both models have advantages and disadvantages, it is ideal to offer both options to maximize the uptake and utilization a car-sharing program in Kingston. Both models may have different use cases, and with greater scale and flexibility, usership will likely grow.

While Communauto only operates two-way car-sharing in Kingston, Communauto does operate one-way car-sharing (Communauto FLEX) in other Cities including Hamilton, Toronto, and Montreal. Communauto has indicated that other cities offering one-way car-share have greater market growth. This is also validated by the City of Toronto, showing a trend of year over year demand growth and high utilization since the introduction of free-floating car share. Toronto has worked to increase the number of free-floating vehicles to meet demand. Furthermore, as the scale of the free-floating program has grown, vehicles utilization has increased, with significant reductions in time between use for of free-floating vehicles, averaging less than 10 hours as of April 2023.

While some hybrid vehicles are being used as part of Communauto's current Kingston's car-share fleet, most vehicles are gas vehicles. Other jurisdictions, including Montreal and Toronto also offer electric vehicles (EVs), for both free-floating and station-based streams. While EVs do pose some more logistical challenges compared to gas vehicles or hybrids, due to charging infrastructure availability, and general familiarity with gas vehicles among the driving population, in order to minimize the environmental impact of the program, staff will work with Communauto to include the introduction of at least one EV in a pilot program as a station-based electric vehicle, with a spot reserved that is adjacent to charging station in order to guarantee the vehicle can be readily charged and accessed.

Post-secondary students who are less likely to own a personal vehicle and require less regular access are great candidates for car-sharing programs. Queen's University already has two Communauto vehicles on campus, operating as station-based at the Tindall Field Parking Lot,

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and Queen's University has indicated interest in both expanding the number of vehicles and reserving a space for an EV adjacent to a level 2 charger. St Lawrence College does not have any car-share vehicles on campus but has indicated early interest in dedicating some parking spaces to offer this service on their campus.

While growth of car-sharing has clear environmental benefits, it is imperative for the service to be complementary to the City's existing Transit service. In consultation with Kingston Transit, any pilot program will be designed to integrate and complement existing transit coverage. The [Transit application](#) already allows users to view where available Communauto vehicles are located, with future opportunities for cross-platform integration, allowing car-share vehicles to be reserved. Additional opportunities exist to create bundling of Kingston Transit fares and Communauto services, allowing for a comprehensive transit and transportation solution on a single platform.

All Communauto vehicles, regardless of being parked on public or private lands, are available to any user on the platform, pending reservations and subscription options. This open model lends itself to greater availability and flexibility. Car-share companies need access to numerous public and privately owned parking spaces on many properties in numerous and distributed locations to be viable and to be considered an attractive alternative to vehicle ownership. Communauto's model should enable this access for Kingston residents over time.

### **Pilot Program Recommendations**

Staff have initiated discussions with Communauto; however, no formal agreement has been presented pending Council authorization, and these recommendations should be seen as an initial pilot program scope and are subject to change.

For the pilot, it is proposed that there is an increase in the number of station-based vehicles. Communauto has communicated their intent to increase their station-based fleet in Kingston, before introducing the free-floating model. A free-floating car-share model remains desirable for the City and remains a future goal, with more information to be brought forward to Council when available.

The upper limit of 20 vehicles is proposed for the pilot. The potential to expand outside of the downtown core to the East and West ends will be examined during the pilot. Ongoing monitoring and analysis will take place, with specific business requirements to be included in the agreement with Communauto to ensure issues such as vehicles being left unutilized, as well as a minimum response times in the event of any public complaints received, and detailed usership data (anonymized) being shared with the City, similarly to provisions shared by other cities in Ontario.

Car-share programs usership and fleet availability expand and contract seasonally, with the greatest usership starting in the spring, and spanning until early winter each year. Based on findings from other Ontario cities, an 18-month pilot program is advised, starting in Q2 of 2025,

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to allow Communauto time to procure vehicles, and to launch the program in line with seasonal utilization., The 18-month pilot program will allow for two annual cycles of program operation to allow for updates and improvements to be made throughout.

It is proposed to include a minimum of one full electric vehicle in the pilot, as a station-based vehicle, ensuring convenient access to charging infrastructure for users. Pending availability from Communauto, and operational considerations, more electric vehicles may be introduced during the pilot, as well as the examination of minimum requirements for hybrid vehicles.

### **Promotion and Program Uptake**

To create the most impactful pilot program, it is proposed that the City will provide support at no-cost to Communauto, to inform and promote the comprehensive care-sharing pilot to the public, within existing operating budgets. This will enable the greatest program uptake, and potentially lead to the demand required to stimulate ongoing growth for the program. The launch of a communications campaign focused on the program will align with the Q2 2025 pilot launch, with ongoing collaboration between the City and Communauto to ensure accurate information is shared.

The City's Cash-in Lieu of Parking By-Law (By-Law Number 2022-63 A By-Law to Establish Criteria for Exempting an Owner from Providing Parking Required by the Kingston Zoning By-Law), requires an \$8,000.00 annual per space fee for each Standard Parking Space exempted under requirements in the Kingston Zoning By-Law Number 2022-62). The funds collected under the Cash-in Lieu of Parking By-Law are permitted to be used to support the implementation and operation of car-sharing services or other alternative transportation services that reduce reliance on the private automobile in the City of Kingston and shall only be recommended by the City's Commissioner of Growth and Development Services or their designate through budget approval.

To develop the most comprehensive program, will require significant up-front investment from Communauto, required license fees for Municipal parking spaces may be covered internally during the pilot, utilizing the Cash in Lieu of Parking fund, to incentivise Communauto to invest in the long-term scaleup of Kingston operations. For the pilot, the approximate cost of \$1,476.00 for each station-based vehicle utilizing municipal parking spaces will be internally transferred to offset lost revenues from these spaces, totalling up to \$20,000.00.

### **Public Engagement**

No public engagement was completed to date for this initiative, however a survey to evaluate the effectiveness of the program will be examined prior to the conclusion of the pilot in Q4 2026.

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**Climate Risk Considerations**

With an increase in the number of available car-share vehicles, numerous environmental benefits can be expected including reduced vehicle kilometres travelled, resulting reduced GHG emissions, and increased active transportation mode share. As one car-share vehicle has the potential to reduce between 5-10 personal vehicles, a reduction in community transportation emissions will result as the program scales.

**Indigenization, Inclusion, Diversity, Equity & Accessibility (IIDEA) Considerations**

The expansion of car-sharing will improve access to vehicles for those populations who cannot or choose not to own a personal vehicle.

**Existing Policy/By-Law**

By-Law Number 2010-128 “A By-Law to Regulate Parking”.

By-Law Number 2022-63 “A By-Law to Establish Criteria for Exempting an Owner from Providing Parking Required by the Kingston Zoning By-Law”.

By-Law Number 2005-10, “A By-Law to Establish Fees And Charges to Be Collected By the Corporation Of The City Of Kingston”

There will be consideration of future updates to, including the potential creation of a new parking permit category car-share vehicles, and other potential updates to designated parking zones and parking violations.

**Financial Considerations**

The monies collected from the Cash-in-Lieu of Parking levies will be utilized to offset the City’s parking revenues, enabling the City to forgo fees associated with the proponent leasing parking spaces within Municipal parking lots during the pilot program, with a total value of up to \$20,000.00. No payments will be made to any proponent.

**Contacts:**

Julie Salter-Keane, Manager, Climate Leadership, 613-546-4291 extension 1163

Soren Christianson, Project Manager, Climate Leadership, 613-546-4291 extension 1325

**Other City of Kingston Staff Consulted:**

Laird Leggo, Manager, Licensing, Parking Operations and Policy, Licensing & Enforcement Services

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Lana Foulds, Director, Financial Services

Christopher Norris, General Manager, Transit Services

**Exhibits Attached:**

None