

Town of Aurora Environmental Advisory Committee Meeting Agenda

Date: Monday, May 12, 2025

Time: 7 p.m.

Location: Holland Room, Aurora Town Hall

Meetings are available to the public in person and via live stream on the <u>Town's YouTube channel</u>. To participate, please visit <u>aurora.ca/participation</u>.

Pages

- 1. Call to Order
- 2. Land Acknowledgement
- 3. Approval of the Agenda
- 4. Declarations of Pecuniary Interest and General Nature Thereof
- 5. Receipt of the Minutes
 - 5.1 Environmental Advisory Committee Meeting Minutes of February 24, 2025

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- 1. That the Environmental Advisory Committee meeting minutes of February 24, 2025, be received for information.
- 6. Delegations
- 7. Matters for Consideration
 - 7.1 Memorandum from Program Manager, Energy and Environment; Re: Home Energy Retrofit Program Feasibility Study Update

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(Presentation to be provided by Janice Ashworth, Senior Consultant, Dunsky Energy and Climate Advisors)

- 1. That the memorandum regarding Home Energy Retrofit Program Feasibility Study Update be received; and
- That the Environmental Advisory Committee comments regarding Home Energy Retrofit Program Feasibility Study Update be received and referred to staff for consideration and

further action as appropriate.

- 8. Informational Items
- 9. New Business
- 10. Adjournment



Town of Aurora

Environmental Advisory Committee

Meeting Minutes

Date: Monday, February 24, 2025

Time: 7:00 p.m.

Location: Holland Room, Aurora Town Hall

Committee Members: Councillor Ron Weese (Chair)

Victor Carvalho

Shun Chen Jason Cheng Angela Daust Leta Dayfoot Alain Godin Denis Heng

Ken Turriff (Vice Chair)

Other Attendees: Councillor Wendy Gaertner

Natalie Kehle, Analyst, Energy and Climate Change Will Stover, Analyst, Energy and Climate Change

Ishita Soneji, Deputy Town Clerk

1. Call to Order

The Chair called the meeting to order at 7:02 p.m.

Introductions were made around the table.

1.1 Appointment of Committee Vice Chair

Moved by Angela Daust Seconded by Jason Cheng

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1. That Ken Turriff be appointed as Vice Chair of the Environmental Advisory Committee for a two-year term (2025-2026).

Carried

2. Land Acknowledgement

The Committee acknowledged that the meeting took place on Anishinaabe lands, the traditional and treaty territory of the Chippewas of Georgina Island, recognizing the many other Nations whose presence here continues to this day, the special relationship the Chippewas have with the lands and waters of this territory, and that Aurora has shared responsibility for the stewardship of these lands and waters. It was noted that Aurora is part of the treaty lands of the Mississaugas and Chippewas, recognized through Treaty #13 and the Williams Treaties of 1923.

3. Approval of the Agenda

Moved by Alain Godin
Seconded by Leta Dayfoot

That the agenda as circulated by Legislative Services be approved.

Carried

4. Declarations of Pecuniary Interest and General Nature Thereof

There were no declarations of pecuniary interest under the *Municipal Conflict of Interest Act, R.S.O. 1990, c. M.50*.

5. Receipt of the Minutes

5.1 Environmental Advisory Committee Meeting Minutes of December 16, 2024

Moved by Ken Turriff Seconded by Angela Daust

1. That the Environmental Advisory Committee Meeting Minutes of December 16, 2024, be received for information.

Carried

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6. Delegations

None.

7. Matters for Consideration

7.1 Memorandum from Program Manager, Energy and Environment; Re: Project Introduction to the Home Energy Retrofit Loan Program Project

Janice Ashworth, Senior Consultant, Dunsky Energy and Climate Advisors provided a presentation regarding the Home Energy Retrofit Loan Program for Aurora including background information on the current Town initiatives, the objective of the program, current market barriers, proposed financing options for consideration, stakeholder engagement efforts, and the next steps and timelines.

The Committee discussed and provided suggestions on various aspects of the program including: (1) target audience and accessibility of the program to diverse and representative segment of homeowners; (2) community engagement and awareness including means to inform residents through different avenues besides social media and involvement of alternate stakeholders such as real estate agents and financial advisors; (3) program design and prioritization such as focus on pre-1980 homes; (4) integration with existing programs to align municipal efforts with existing initiatives; and (5) legal and policy considerations.

There was further discussion regarding the importance of return on investment for homeowners to ensure the suggested energy retrofits are financially viable, the need for green building incentives for new construction projects and using similar size municipalities as comparators in the study. The Committee expressed concerns and sought further clarification on the Town's liability in recommending the noted financing options.

It was noted that the Committee's feedback would be incorporated into refining the study and be brought back to a future meeting for further input.

Moved by Leta Dayfoot Seconded by Ken Turriff Environmental Advisory Committee Meeting Minutes February 24, 2025

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- 1. That the memorandum regarding Project Introduction to the Home Energy Retrofit Loan Program Project be received; and
- 2. That the Environmental Advisory Committee comments regarding Project Introduction to the Home Energy Retrofit Loan Program Project be received and referred to staff for consideration and further action as appropriate.

Carried

8. Informational Items

None.

9. New Business

None.

10. Adjournment

Moved by Ken Turriff Seconded by Jason Cheng

That the meeting be adjourned at 8:44 p.m.

Carried



100 John West Way Aurora, Ontario L4G 6J1 (905) 727-3123 aurora ca

Town of Aurora Memorandum Planning and Development Services

Re: Home Energy Retrofit Program Feasibility Study Update

To: Environmental Advisory Committee

From: Natalie Kehle, Program Manager Energy and Environment

Date: May 12, 2025

Recommendation

- 1. That the memorandum regarding Home Energy Retrofit Program Feasibility Study Update be received; and
- 2. That the Environmental Advisory Committee comments regarding Home Energy Retrofit Program Feasibility Study Update be received and referred to staff for consideration and further action as appropriate.

Background

Addressing greenhouse gas emissions from Aurora's residential building sector was identified as a critical emissions strategy in the Aurora Community Energy Plan (CEP). Emissions from homes represent the biggest source of emissions at 37%, primarily due to natural gas use for space and water heating.

Currently, around 1% of Aurora homes are, on average, completing energy retrofits annually, based on 2023 to 2024 EnerGuide data. To meet Town 2050 targets of 80% greenhouse gas reduction from 2018, approximately 3% of homes each year are required to perform deep retrofits that achieve a substantial reduction in energy usage, typically by 50% or more. Deep energy retrofits have been historically difficult to achieve due to social and economic barriers. The upfront costs of renovations are a major barrier to action.

Analysis

The feasibility study aims to assess the market conditions, co-benefits, financial options and services available to the community and determine if a volunteer deep energy

retrofit program is the right fit for Aurora. The study also explores financing options for a loan program. The Federation of Canadian Municipalities (FCM) Green Municipal Fund (GMF) is supporting this project through their Community Efficiency Financing (CEF) grant.

The Town retained the consulting services of Dunsky Energy and Climate Advisors to support the development of the study. The project kicked-off in December 2024 with the study completion date planned for June 2025. The project consists of the following elements:

- 1. Stakeholder Engagement (completed), which included identifying relevant stakeholders and seeking input throughout the project, including from:
 - Town staff from the following teams:
 - Engineering and Capital Delivery
 - Finance
 - o Building
 - Planning
 - o IT Services GIS
 - Community Services Sports and Recreation (Diversity Equity and Inclusion)
 - o Community Services- Seniors Centre
 - Town Environmental Advisory Committee
 - External stakeholders including:
 - York Region staff
 - Other local municipalities
 - Enbridge Gas
 - Alectra Utilities
 - Aurora residents
 - Aurora's Senior Centre
 - Building Industry and Land Development Association BILD
 - Local financial institutions
- 2. Project Background (completed), which assembled relevant information to assess a home energy retrofit program, financing options and community benefits.
- Program Approach (completed), with an understanding of Aurora's context, this stage of the project recommends how to proceed with a detailed program design for a local efficiency program, as well as identify financing models best suited for Aurora.
- 4. Final Report and Presentation (in-progress). The draft study is presented to Town Council, scheduled for June 10th Committee of the Whole.

A second phase of the project is provisionally planned to develop a detailed program design and implementation plan upon Council endorsement of the feasibility study. The second phase of the project identifies potential program champions, cost implications and roles and responsibilities.

Attachments

1. Attachment 1 - Presentation Home Energy Retrofit Program Feasibility Study Update



Aurora Home Energy Retrofit Loan Program Feasibility Study

Update for the EAC

May 2025



Introduction

Today's objectives



- 1. Give and update on the Feasibility Study
- **2. Discuss** the recommendations and seek input on the study report
- **3. Inform next steps** on the remaining budget for the study

Home Energy Retrofit Loan Program

A program to increase the rate and depth of energy and emissions reductions through retrofits of low-rise homes. The program aims to fill gaps of existing programs and meet needs of Aurora residents.



Primary Objective



Reduce GHG emissions



Secondary Objective



Enable broad participation

Introduction

Why are Home Energy Upgrades a Priority?



THE OPPORTUNITY



The scale of home energy upgrades needed to meet Aurora's 80% emissions target is significant.

Although Aurora's housing stock is relatively new with most of the low-rise homes constructed after 1980 - homes still account for 37% of all emissions in the community, primarily due to natural gas use for space and water heating.

THE CHALLENGE



However, there is currently minimal home energy retrofit activity.

Currently, around 1% of Aurora homes are, on average, completing energy retrofits annually, based on EnerGuide data between 2023 - 2024. Retrofits need to be 4% annually and GHG focused to meet targets (~800 units/yr)

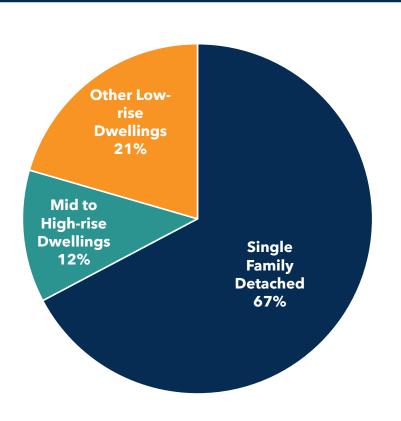
Main barriers reported by homeowners are knowledge of solutions and upfront costs.

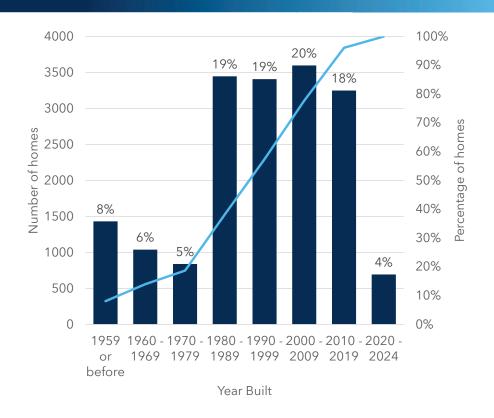
Agenda

Introduction	19:00 – 19:05
Local Context	19:05 – 19:20
Program Model Options & Discussion	19:20 – 19:55
Next steps	19:55 – 20:00
	Local Context Program Model Options & Discussion

Dwelling Types and Ages



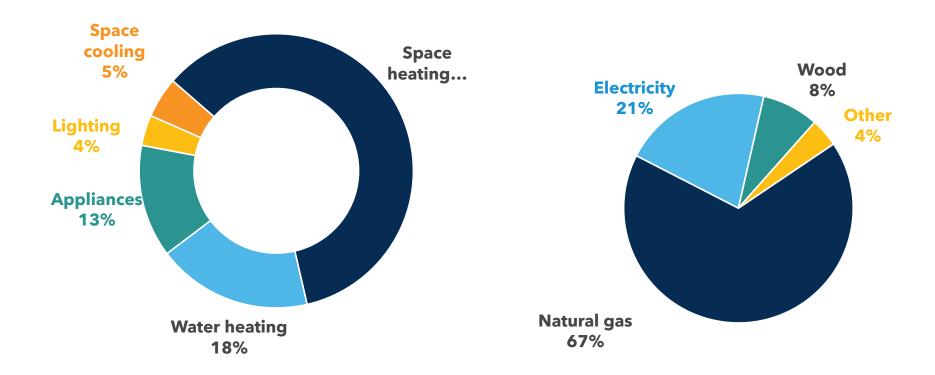




Most homes are low-rise, detached, >1980

Energy Use in Homes

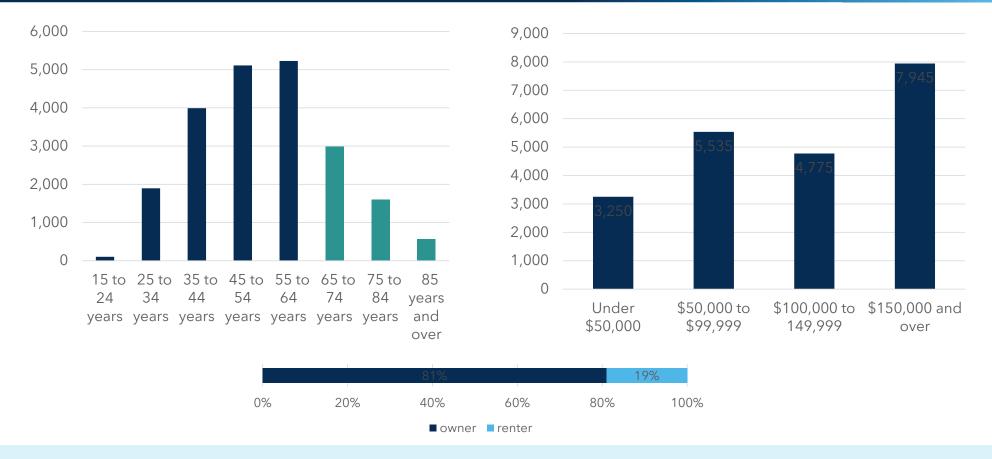




Most energy (and emissions) in homes is from space & water heating with natural gas.

Homeowner Age, Income, Tenure, and Nationality

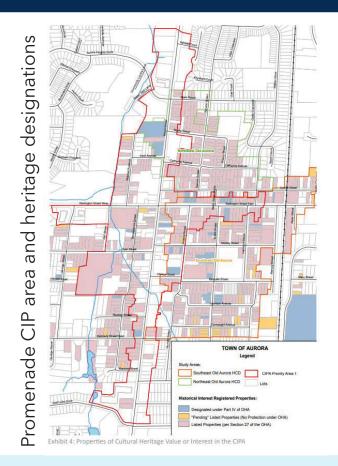


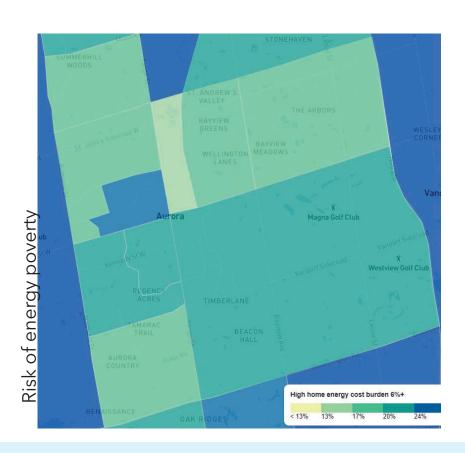


Most homes are owner-occupied by owners 35-64 yrs old with above-average incomes.

Older Neighbourhoods and those at Risk of Energy Poverty



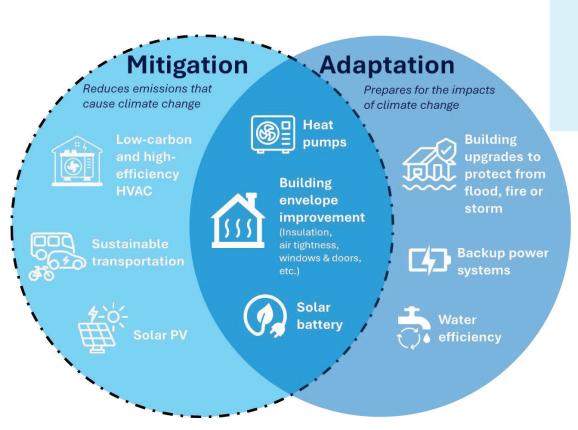




Some neighbourhoods have older homes and others are at higher risk of energy poverty.

Retrofit Measures for Mitigation and Adaptation







Higher average temperatures and extreme heat



Increase in average precipitation, heavy precipitation, and flooding



Increased occurrences of severe weather, including strong wind gusts and lightning impacts

Unique Role of Municipalities





Financing Tied to property: The LIC mechanism gives Ontario municipalities the ability to implement financing for energy efficiency and renewable energy that is tied to a property and can be amortized over a long repayment term (e.g. 20 years). This can help make retrofits cashflow positive and enable homeowners take a long-term view with their planned home energy upgrades.



Bylaws: Municipalities can implement bylaws regarding building emissions such as building labeling and performance/emissions standards. Note, Ontario municipalities do not have the ability to regulate equipment performance standards.



Connections and Reputation: Municipalities are trusted by homeowners. They interact with their residents daily through services like libraries, recreation facilities, transit, waste collection, water and sewer provision. Residents are more likely to see and trust the messages coming from their municipality than from many other entities.

Known Market Barriers and Solutions



Confusion navigating many programs in market

- One stop shop online platform
- Energy coach hotline.

Narrow participant eligibility criteria

- Loan program eligible to all homeowners in Aurora including landlords
- One stop shop platform and energy coaches to help navigate eligibility.

Inadequate support for most effective retrofit measures.

- Design a program to avoid dead-end pathways.
- Work with suppliers to find ways to reduce cost of heat pumps or electric hot water tanks.

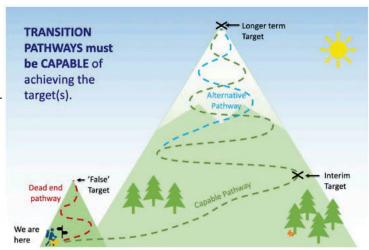
Only available to those with access to credit.

• Offer loans tied to property and use property tax payment history as underwriting criteria.

Limited measures

- Include adjacent work that may be required to complete retrofits such as electrical or structural work
- Include climate resiliency measures.

Meadowcroft, et al. 2019. 'Transition Accelerator.'



Barriers through an Equity Lens



Inability to access information online

• Energy coach phone line

Inability to understand information in English

• Translate materials

Limited time to implement retrofits

- Tailored retrofit pathways
- Energy coach to support

Lack of trust in, or confidence negotiating with, contractors

- List of qualified contractors
- Contractor engagement and training
- Energy coach

Limited access to credit

- Loan tied to property, not individual, using LIC mechanism
- Use property tax payment history as eligibility screening

Learnings from stakeholder engagement



Homeowner Survey



Motivations: Saving money, improve comfort, and reduce environmental footprint.



Barriers: Upfront cost, unaware of current incentive programs, and lacking certainty of energy savings.



Preferred features of a financing program: No early repayment penalties, easy application/approval process, and low monthly payments (so energy savings cover loan repayment)



Take Aways: An education campaign, online navigation platform and retrofit scenario tool, and/or energy coaching services would all help Aurora homeowners take more advantage of existing incentive and loan programs and have more confidence in the retrofit solutions.

Learnings from stakeholder engagement



External Stakeholders



York Region: Has applied with Windfall Ecology Centre for funding to launch the York Greener Homes Program, an online navigation and retrofit scenario tool which may include energy coaching also. Expect to know this Spring. Would be for 3 years.



Newmarket: Applying for funds from FCM to launch loan program using the LIC mechanism delivered by a 3rd party - Enerva. If successful, funds would cover the first 4 years. Focus on converting furnaces to heat pumps, weatherization, and smart thermostats (optimizing GHG reduction). Vaughan, Georgina, and Markham also working on home energy programs, though not as advanced, and interested in collaborating.



Alectra: Unable to offer on bill repayment but can help with outreach. They have applied to NRCan for funding to build an online platform based on disaggregation of smart meter data to help residential customers with energy affordability and peak shaving. It may include emissions calculations also.



Enbridge: In January, they launched Home Renovation Savings Program, which offers grants to homeowners for energy upgrades. Another attic insulation program is pending. They also offer grants to municipalities and courses for homeowners and Town building permit staff.

Learnings from stakeholder engagement



External Stakeholders - continued



Seniors Centre: Seniors are interested in reducing emissions but not aware homes are a major source. Centre could help with outreach. Seniors need cashflow neutral financing and a trusted advisor.



Contractor Association: Access to contractors in Aurora is not a limitation. 30-40% of BILD renovator members are trained on Net Zero techniques and more courses are planned. Town could promote those with certifications and encourage them to promote the program.



Environmental Advisory Committee: Suggested the program should not replicate existing ones. Agreed that a neutral advisor service would be helpful. Suggested targeting old homes but ensuring all homes can benefit. Supported using policies to drive more efficient new homes.

Learnings from stakeholder engagement



Town Stakeholders

- Internal Review Committee Meeting #1: Complement existing programs, not replicate. Focus on older homes. Be realistic to Town's capacities. Town has never done an LIC and requires approval from Region to borrow funds.
- **Revenue Collections:** Running an LIC loan program would require a lot of manual entries. Reviewing payment history would also take time and require more staff.
- **Equity Staff:** DEI efforts focused on newcomers, seniors, and gender equity communities. Seniors are most likely to own homes. Library is a good channel to reach these communities.
- **Building Permit Department**: Not aware of much energy retrofitting happening to date. They can talk to contractors/homeowners about code requirements.

Provincial Retrofit Programs



Available programs	Description	Funding gap
ntario Programs		
Home Renovation Savings Program Save on Energy and Enbridge	 Eligible measures include space and water heat pumps, smart thermostats, solar PV and battery storage, insulation, air sealing, and energy efficient windows and doors 	 Does not provide funding for climate adaptation measures
SAVE SENBRIDGE	 Certain rebates are only offered to projects that include two or more upgrades 	
	Energy Assessments required for two or more measures	
Enbridge Sustain Enbridge	Offers an energy-as-a-service solution with the turnkey installation,	Limited list of eligible measures
2	service and maintenance of selected measures	 Does not support full electrification
ÉNBRIDGE	• Eligible measures include geothermal, dual fuel systems (air source heat pump and natural gas furnace), solar PV & EV chargers	
Winterproofing Program Enbridge	Offers income eligible homeowners and renters access to a home energy assessment and the installation of energy efficient measures at no cost	 Only available to Enbridge Gas customers who use natural gas for home space heating
	• Eligible measures include wall, attic and basement insulation; draft	Unavailable to many income groups
ENBRIDGE	proofing; and smart thermostats	Limited list of eligible measures
CINBRIDGE	 Coordinates with the Energy Affordability Program (below) so selected measures across the two programs can installed at the same time 	ŭ
Energy Affordability Program Save on Energy	Offers energy-saving products and services at no or low cost, depending on a household's circumstances and income	 Some measures only support homes already heated with electricity (e.g.
SAVE	• Eligible costs the program covers may include the replacement of inefficient appliances and the installation of insulation and draft-	insulation, draft-proofing, smart thermostats, cold climate heat pumps)
ENERGY	proofing, smart thermostats, cold climate heat pump and free energy saving kits	Unavailable to many income groups
POWER WHAI'S NEXT	EnerGuide Assessments are required	

Federal Retrofit Support Programs



Federal Programs

Oil to Heat Pump Affordability Program | Natural Resources Canada



- Offers a heat pump incentive of up to \$10,000 to LMI homeowners with oil as their primary heating fuel
- Recent changes have expanded the list of eligible heat pumps and increased income eligibility to account for inflation
- Incentive is disbursed prior to installation
- Requires proof of purchasing heating oil (500L)

- Narrow focus on oil-heated homes, which are a very small percent of Aurora's homeowner-occupied homes
- Unavailable to many income groups

Canada Greener Homes Loans | Canada Mortgage Housing Corporation

- Offers interest-free 10-year loans for home energy upgrades, ranging from \$5,000 to \$40,000
- Eligible measures include insulation, air-sealing, windows and doors, thermostats, space and water heating, solar PV, and certain resiliency measures (e.g. basement wall waterproofing),
- Loan term does not align with useful life of many measures
- Reported significant delays to receiving final disbursement, thus requited bridge financing
- Requires good credit
- Limited advance disbursement (up to 15% of total loan)
- No ability to increase the loan amount if the final costs exceed the initial estimate

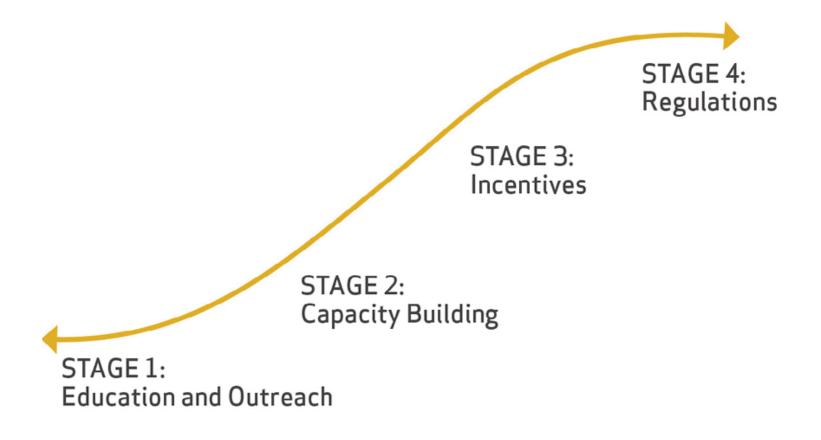
CMHC ♦ SCHL

Canada Secondary Suite Loan Program | Canada Mortgage Housing Corporation

- Offers loans up to \$80,000 to add secondary suites to existing homes, with low interest rates (2%) and 15-year loan terms
- Program planned to launch in 2025
- Details to come in coming months

Market Transformation Curve to Understand Market Gaps





*Note, it is easier to sell regulations if the "carrots" (Stages 1-3) are in place

Review of Existing Programs and Market Gaps



	ON Home Renovation Savings Program	Canada Greener Homes Loan	Toronto HELP	*Proposed: York Region Greener Homes Program
Education				Pro : Home rating and retrofit scenarios
& Outreach (Public awareness)				Gap : Energy coaching will be for a fee for those who can afford
Capacity Building (Training for skilled labour)			Pro: Increases labour quality Gap: Does not address contractor quantity	
Incontinue (Grants or	Pro : Offers grants	Pro : Offers 0% loans up to \$40,000	quantity	
Incentives (Grants or low-cost loans)	Gap : Does not include resilience	Gap : Requires good credit. Uncertain future. Hard to access.		
Regulations (Home ratings or emissions standards)				Gap : Home ratings will not be public

Potential home retrofit options and impact



Example retrofits and their potential impact:

	Red one intensity		
	Gas-heated home retrofit with:	Gas-heated home retrofit with:	Gas-heated home retrofit with:
	Insulation (ceiling, basement wall, windows)	Heat pump, water heater, solar (all electric)	Heat pump, water heater, all insulation measures, solar (all electric+)
Upfront cost	\$12,700	\$33,601	\$60,028
Incentives	\$3,080	\$6,300	\$12,180
Cost remaining to be financed	\$9,620	\$27,301	\$47,848
Annual energy savings (%)	5%	62%	71%
Annual GHG reductions (%)	6%	92%	94%

Retrofit intensity

Preliminary modelling shows that out of 13,160 eligible homes, program participation could range from **24 to 85 homes per year on average**.



Recommended Program Models



Program Model	Key Features
1. Market-Support Program	Focus on education and awareness and exclude a loan component. Support Aurora residents to implement retrofits using programs already in market.
	A third-party delivery agent is secured to offer turnkey program delivery services.
A. Turnkey Loan Program with grant funding	Collaborate with York Region or a nearby Town for economies of scale and to reduce homeowner confusion.
	Secure FCM funding to offer a lower cost of capital and a grant to fund a loan loss reserve as well as market support elements of the program.
	Requires innovation features to enhance program success and funding competitiveness.
B. Turnkey Loan Program without grant funding	Same as above however, to replace FCM funding, the loan capital is borrowed from the private sector and the market support elements are done on a minimal budget.
C. Targeted Loan Program with grant funding	Offer loans to just a segment of the population such as LMI households, newcomers, seniors, oil heating, those achieving net zero, those needing bridge financing, etc. The program would be smaller and delivered in house.

Recommended Market Support Elements



- Promote existing programs
- Raise public awareness
- Collaborate for reach
- Focus on target

Outreach and education



- Provide energy coaches for guidance
- Group sessions to encourage peernetworks for learning and ongoing support
- Offer retrofit

Energy coaching



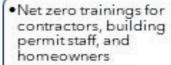
 Provide information about existing programs, finding qualified contractors, and implementation support

Online onestop-shop platform



- Tailored solutions
- Scenario tool for homeowners to compare packages
- Include resiliency measures for prevention

Roadmap for staged retrofits



 Enable access to equipment through libraries

Capacity Building



 Incorporate resilience measures into the retrofit roadmaps and education tools

Explain resiliency measures



- Explore ways to reduce the cost of high impactitems
- Collaborate with
 Toronto to leverage
 scale and experience

Explore bulk procurement



 Offer grants for specific target audiences, for certain equipment, or for specific outcomes

Incentives and rebates



- Generate virtual home assessments and home ratings for all homes to identify energy savings
- Ratings can be public or opt-in

Virtual home assessments & energy ratings



 Consider an emissions performance standard for residential buildings

Explore emissions standards



Which of these components seem most important to you?

Innovative Elements for Consideration



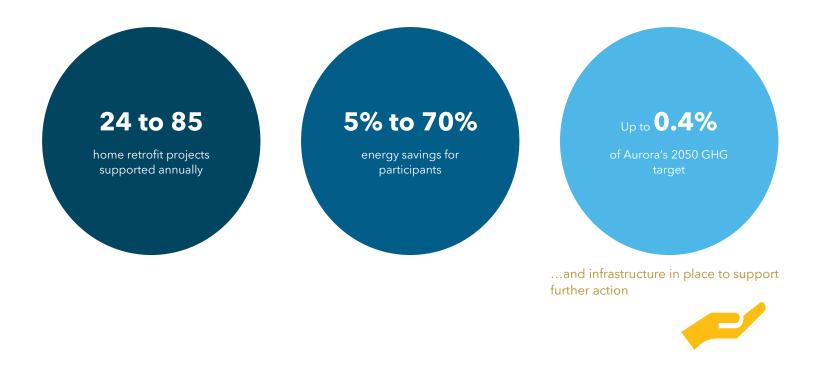
To secure funds from FCM, the program design needs to demonstrate innovation. Some options to consider would be, in order of most to least innovative:

- 1. Pilot a Turnkey delivery model in Ontario: First of a kind in Ontario and paves the way for commercial loan programs and possibly new construction projects
- **2. Home ratings and virtual audits:** Provide all homes in Aurora with a home energy rating on a public map and provide homeowners with a free virtual home energy audit
- **3. Energy requirements in heritage initiatives:** Incorporate energy and emissions considerations, or green strings, in heritage initiatives to focus efforts on older homes

Which of these elements are most appropriate for Aurora?

Projected Program Impact





Cost of Delivering a Home Energy Retrofit Program



Uptake Scenario	Capital budget - Homeowner loans	Operating budget - Loan administration	Operating budget - Market support
1. Market-Support Program	\$0	\$0	\$350k - \$2.2 M
A. Turnkey Loan Program with grant funding	\$3 - \$4.5 M	\$1.5 - \$2M	\$350k - \$2.2 M
B. Turnkey Loan Program without grant funding	\$1 - \$2 M	\$300k - \$600k	\$350k - \$2.2 M
C. Targeted Loan Program with grant funding (bridge, LMI, newcomers, seniors, oil, net zero)	\$300k - \$1M	\$300k - \$500k	\$350k - \$2.2 M

Do you think a loan component is critical for the Town to deliver?

Agenda	
1 Introduction	19:00 – 19:05
2 Local Context	19:05 – 19:20
3 Program Model Options & Discussion	19:20 – 19:55
4 Next steps	19:55 – 20:00

Next Steps

Advancing the program design study





Supported by FCM grant. Assesses the feasibility of a home energy retrofit financing study.

Program Design Study

Pending approval from Council and FCM, we can continue with the Program Design Study to meet local needs.

Funding the Program

The main funder of home retrofit loan programs is FCM, which has a **hard deadline of Sept 1**. Other funding sources and approaches may be possible if FCM funding is not accessible or if a program that does not include financing is desired.

Feasibility study May 2025

Present to EAC and Council May & June 2025

Program design study July - Sept 2025

Present to EAC and Council
Oct - Nov 2025

