

# RETROFIT AND HOUSING SECURITY ADVISORY GROUP SUMMARY REPORT



# LAND ACKNOWLEDGEMENT

It is with profound respect that United Way Greater Toronto (UWGT) acknowledges that we operate on the traditional territory and gathering place of many Indigenous nations including the Wendat, the Anishnaabeg and the Haudenosaunee. Today, it is home to many urban Indigenous peoples, including Inuit, Métis and First Nations peoples.

We recognize that the Greater Toronto Area is covered by several treaties, including Treaty 13 signed with the Mississaugas of the Credit First Nation and the Williams Treaties signed by seven First Nations, including the Chippewas of Beausoleil, Georgina Island and Rama, and the Mississaugas of Alderville, Curve Lake, Hiawatha and Scugog Island.

We recognize the rights of Indigenous communities and acknowledge the ancestral and unceded territories of the Inuit, Métis and First Nations peoples across Turtle Island. We honour the teachings of Indigenous peoples with respect to the land we each call home and our responsibilities to the land and one another. We are committed to improving our relations with Indigenous peoples and acting on our responsibilities in Truth and Reconciliation and the United Nations Declaration on the Rights of Indigenous Peoples.

# ACKNOWLEDGEMENTS

The ILEO team acknowledges the support of several people who helped shape this summary report. The CMHC team, including Amy Bolt, Tamara Daniel, Nik Schruder and Elle Ziegler, as well as United Way's Tasleem Thawar, Juliana Dutkay and Federico Vargas made important contributions. We thank all the advisory group representatives who participated actively in the workshops: and we especially acknowledge the two co-chairs of the group who led its proceedings: Nik Schruder, CMHC, and Mwarigha, WoodGreen Community Services. We thank the Tower Renewal Partnership and ERA Achitects team led by Graeme Stewart for authoring this report and supporting the advisory group's process through analysis and research.

Finally, we thank Alex Mlynek for copy editing and Leonardo Vissotto for the visual design.

June 2023



## ABOUT ILEO

The Inclusive Local Economic Opportunity Initiative (ILEO) brings together the private, public and community sectors to find innovative ways to reduce gaps in economic prosperity at the neighbourhood level. ILEO is convened by United Way Greater Toronto and BMO.

[ILEO.org](https://ileo.org)

As the largest non-government funder of community services in the GTA, United Way Greater Toronto reinforces a crucial community safety net to support people living in poverty. United Way's network of agencies and initiatives in neighbourhoods across Peel, Toronto and York Region works to ensure that everyone has access to the programs and services they need to thrive.

[unitedwaygt.org](https://unitedwaygt.org)



## ABOUT CMHC

As Canada's authority on housing, Canada Mortgage and Housing Corporation (CMHC) contributes to the stability of the housing market and financial system, provides support for Canadians in housing needs, and offers unbiased housing research and advice to all levels of the Canadian government, consumers and the housing industry. CMHC's aim is that by 2030, everyone in Canada has a home they can afford and that meets their needs. CMHC is a signatory of the ILEO Charter and a member of the ILEO Leadership Table.

[cmhc-schl.gc.ca](https://cmhc-schl.gc.ca)



Opportunity made here.

## ABOUT WOODGREEN COMMUNITY SERVICES

WoodGreen is one of the largest social service agencies in Toronto, serving 37,000 people each year. The organization offers more than 75 programs and services tackling the social determinants that affect the health and well-being of individuals in our community. WoodGreen is a member of the ILEO Leadership Table.

[woodgreen.org](https://woodgreen.org)



## ABOUT TOWER RENEWAL PARTNERSHIP

The Tower Renewal Partnership (TRP) is a not-for-profit initiative working to advance the preservation and modernization of legacy tower housing and its neighbourhoods through research, advocacy and demonstration. The TRP has worked with municipal, provincial and federal governments to establish the Tower Renewal approach as a key public policy priority, with preservation of this housing stock now central to the National Housing Strategy and Toronto's Hi-RIS Program, among others.

[towerrenewal.com](https://towerrenewal.com)



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# EXECUTIVE SUMMARY

The majority of affordable housing in urban centres in Canada is found in aging apartment towers constructed before 1985, aided in large part by federal incentive programs. Despite this legacy housing providing relatively affordable supply, these buildings are disproportionate contributors to greenhouse gas emissions (GHGs) and are deteriorating and reaching the end of the lifespan of their major building systems. These naturally occurring affordable units must be preserved to address the ongoing housing crisis and must be retrofitted to meet Canada's climate goals. While preservation doesn't negate the need for new housing supply, it is far more cost-effective to preserve and retrofit existing units than to construct new affordable homes to replace those lost to market pressure. A two-pronged approach focused on protecting existing supply of affordable housing, alongside development of new affordable and deeply affordable purpose-built rentals, is required.

The challenge preventing the deep retrofit of privately-owned legacy residential towers is financial: the cost to provide a deep retrofit, including GHG emission reductions and addressing state-of-repair, is approximately \$200,000 per unit in the worst-performing buildings. To maintain affordability, the cost cannot be borne by rent increases and the utility cost savings alone are not remotely sufficient. As such, new solutions must be sought that both preserve and retrofit Canada's legacy housing supply while safeguarding its affordability.

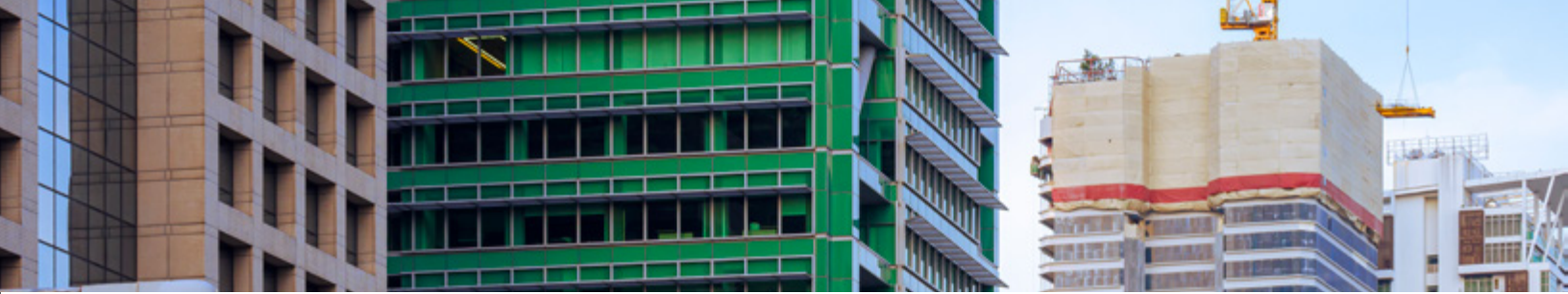
As part of the Inclusive Local Economic Opportunity Initiative (ILEO), CMHC and United Way Greater Toronto, with support from the Tower Renewal Partnership, convened the ILEO Retrofit and Housing Security Advisory Group, which was comprised of leaders and experts from the development and real estate sectors, the financial sector, non-profits, government organizations, academia,

professionals, and tenant organizations. The advisory group worked to identify and evaluate tools and business models to preserve affordability after the retrofit process, with a view to piloting the recommended tool(s) in the Greater Golden Mile, an area at risk of losing its existing affordable housing stock.

Over a series of six work sessions, the advisory group focused on four key financial tools: Direct Grants, Retrofit Tax Credits, favourable Retrofit Remortgages and Housing Stock Transfers to Non-profits. After careful evaluation and analysis, the group's core recommendation was to build a Combined Retrofit Remortgage Tool and Grant Program to incentivize private owners to conduct deep retrofits of their buildings while maintaining affordability and reducing emissions. Moreover, a set of complementary recommendations were developed to support the tool and program design and implementation.

There is alignment on policy and activity among federal programs, community and private partners to maintain affordability and retrofit aging apartment towers. However, these actors are currently working separately and lack the capacity to meet the challenge in isolation. The tools proposed here are not novel in a global context—programs serving the EU broadly, and Germany in particular, have been successfully performing retrofits for decades and are a key part of their climate change and housing affordability action plans.

To enable a broader supportive ecosystem, the advisory group has also offered a series of recommendations related to retrofit standards, industry readiness, and cross-sector innovation. Together, these actions have potential to increase uptake of retrofit programs, reduce risk for proponents and help generate the scale required to meet Canada's housing affordability and decarbonization objectives.



## SECTION ONE:

# THE ILEO RETROFIT AND HOUSING SECURITY ADVISORY GROUP

## 1.1 PURPOSE AND MANDATE

While there are successful examples of deep retrofits in the social housing sector, it has been challenging for private multi-unit residential buildings (MURBs) to implement deep retrofits that maintain affordability. This is in large part because the capital costs, financing programs requirements and housing security implications have made it hard to justify deep retrofits from a business perspective.

The ILEO Retrofit and Housing Security Advisory Group was brought together to advise on the challenge statement: **How might we motivate private building owners in the Greater Golden Mile to meet climate objectives by undergoing deep retrofits in a manner that maintains housing security for tenants?**

This question explored transitioning from exclusively supporting non-profits, to financing and funding the retrofitting of privately-owned buildings.

The current state of retrofits in private buildings is either shallow retrofits that are funded by utility cost reductions and/or deeper retrofits that impact the affordability of units. The advisory group identified and evaluated tools that addressed the financial gap (between utility cost savings and the cost of a deep retrofit) to ensure continued affordability.

The group's recommendations focused especially on encouraging private building owners in the Greater Golden Mile to undertake deep retrofits (e.g., complete retrofit), and, simultaneously, ensure housing security for the existing tenants by minimizing disruption during the retrofit process and maintaining and preserving affordability once the retrofit is complete.



## 1.2 COMPOSITION

The ILEO Retrofit and Housing Security Advisory Group was composed of leaders and experts from the development and real estate sectors, financial sector, non-profits, government organizations, academia, professionals and tenant organizations. Here are its members:

### Co-Chairs:

- **Mwarigha**, VP Housing and Homelessness, Woodgreen Community Housing
- **Nik Schruder**, Advisor, Climate Change Office, CMHC

### Advisory Group Members:

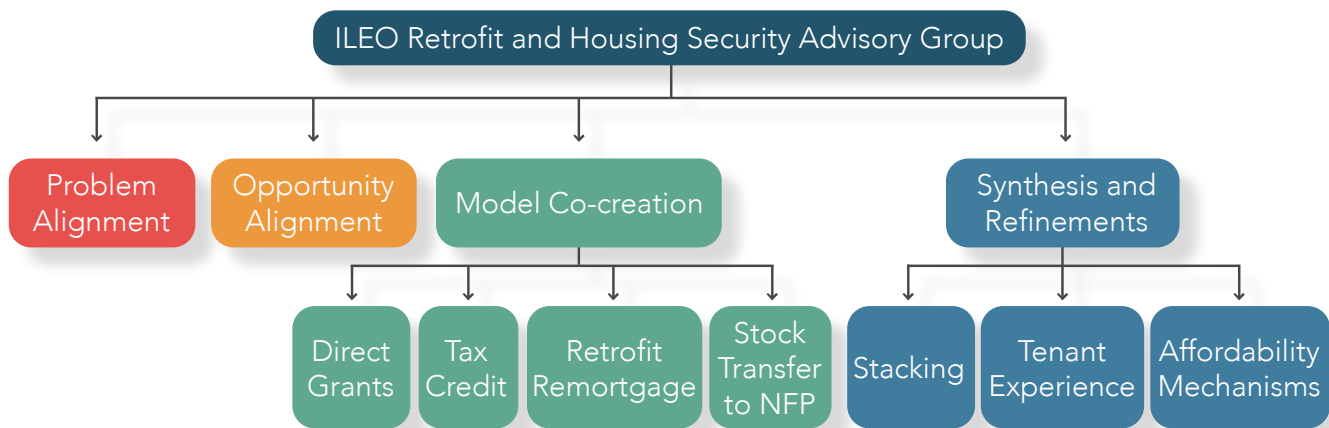
- **Aaron Berg**, Director, Energy Efficiency Investments, Canada Infrastructure Bank
- **Andy Broderick**, Managing Director, New Market Funds
- **Bryan Purcell**, VP Policy and Programs, TAF
- **Daryl Chong**, President & CEO, Greater Toronto Apartment Association
- **Giovanni De Benedictis**, National Manager, Key Accounts, Client Relationship Management, CMHC
- **Graeme Stewart**, Principal, ERA Architects, Tower Renewal Partnership
- **James Burrow**, Director Sustainable Finance, BMO
- **Laura Hammond**, Tenant Engagement Representative, TCH resident
- **Laura Tozer**, Asst. Professor of Environmental Studies (leading the Just Transition Research project, University of Toronto)
- **Lauralyn Johnston**, A/Manager, Tower & Neighbourhood Revitalization, Housing Secretariat, City of Toronto
- **Matt Zipchen**, President, Efficiency Capital
- **Noah Slater**, City of Toronto Housing Secretariat

### ILEO Representative:

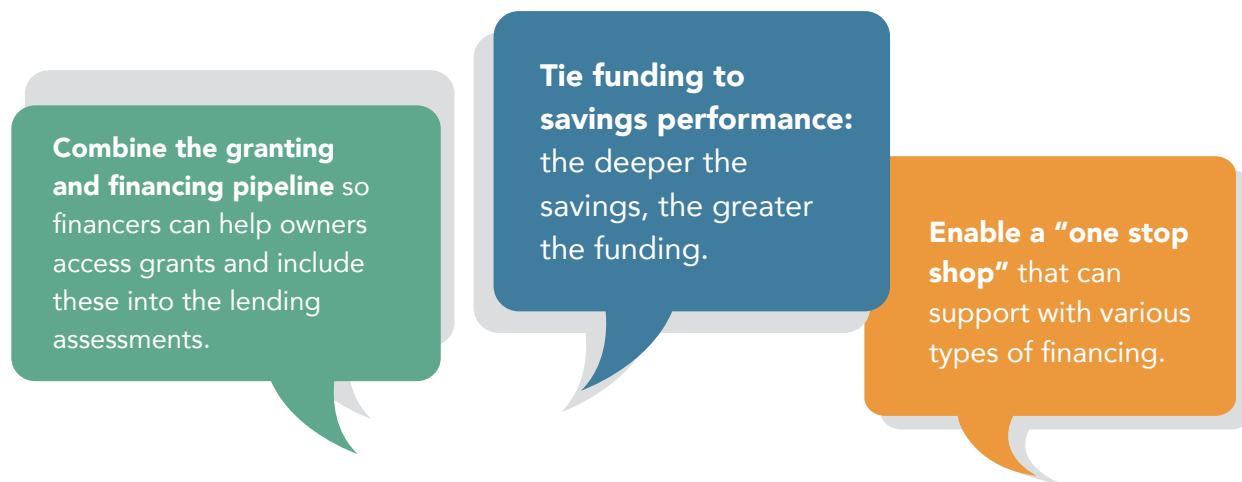
- **Juliana Dutkay**, Senior Lead, Strategic Initiatives, United Way Greater Toronto



## 1.3 RECOMMENDATIONS DEVELOPMENT PROCESS



### Highlighted ideas from members of the advisory group



The ILEO Retrofit and Housing Security Advisory Group convened regularly over three months to first align on the problem, identify and prioritize proposed opportunities, vet and iterate those opportunities through model co-creation and finally synthesize the models and identify refinements and constraints.

The advisory group investigated the following opportunities: Direct Grants, Tax Credits, Retrofit Remortgages and Stock Transfers to Non-Profits.

## SECTION TWO:

# FRAMING THE CHALLENGE

Older apartment housing is home for millions of Canadians. Built in the apartment boom of the 1960s and '70s, and supported through policy, public finance and planning regimes, this “legacy” housing was built with the aim of providing decent and more affordable homes for a booming economy and a growing urban population, and in doing so largely solved the post-war housing supply crunch.

These legacy apartment towers represent a housing inheritance that has been the backbone of the rental housing system and represents the vast majority of purpose-built rental housing found in our cities today, with rents below regional median or average levels. This is the case in the Greater Golden Mile, home of some of the Toronto region’s most affordable rental housing.

This housing stock is aging and needs considerable retrofit. However, due to their lower rents, many building owners do not have the financial capacity to modernize this housing for resident health and safety.

With likely GHG regulations within the next five to 10 years, the market is at risk of losing these affordable buildings as it is not financially viable for a number of current owners to undergo deep retrofits to meet the requirements or for them to pay the penalties for not complying with decarbonization regulations. This may lead building owners to apply for above the guideline rent increases or sell their buildings, putting them at risk of demolition.

Encouraging deep retrofits in apartment housing is important for a number of reasons. Renovating these buildings will contribute to community health and resiliency. As major climate events become more likely, these improvements to building envelope and heating and cooling systems will mitigate adverse health effects (including death) for vulnerable populations during heat waves. Beyond health impacts, the energy savings from deep retrofits have the potential to increase operational savings for owners by about 10% and for individual tenants by about \$60/month/unit.

Currently, 76% of Canada’s rental units are more than 36 years old. Aside from a small amount of social/affordable housing, much of this purpose-built rental housing is owned and managed by the private sector.



Homes and buildings account for 18% of national GHG emissions with existing buildings being more energy inefficient than new builds.



## 2.1 ABOUT THE GREATER GOLDEN MILE

The Greater Golden Mile, an inner suburb of Toronto, centres around a largely commercial and industrial corridor surrounded by five neighbourhood improvement areas: Victoria Village, Ionview, Kennedy Park, Flemington Park and Eglinton East. The housing in this area is largely made up of rental buildings from the 1950s-1980s with some of the lowest rents in Toronto and single family homes that are rapidly rising in price.

Formerly serving as an important hub for large-scale manufacturing, the economic power of the area began to decline in the 1970s after manufacturers moved to more affordable areas and average incomes fell relative to the rest of the city. Today, the core corridor between Victoria Park Avenue and Birchmount Road is dominated by chain stores and large surface parking lots. Major transit development is underway, connecting the Greater Golden Mile to the downtown and other parts of the GTA as never before. Over the next 20 years it will become a major hub for Scarborough, with three times more residential units compared to well-known master-planned redevelopments like Regent Park and City Place. There will be a likely increase in property value, a change in demographics and a risk of gentrification, leading to displacement of current lower-income residents and

blocking opportunities for new lower-income residents to settle in the area.

The Greater Golden Mile is home to diverse communities, with approximately 62% of residents being born outside of Canada and 76% identifying as visible minorities. Income and educational attainment rates in the neighbourhood continue to fall below the city average—a key indication that opportunity is not reaching residents. Thirty-four per cent of tenants within the Golden Mile are in Core Housing Need as defined by CMHC. The neighbourhood has significantly higher rates of housing subsidies than the City of Toronto's average. There are 94 legacy towers, and the majority are privately owned. Legacy towers have low vacancy rates, which creates upward pressure on prices. Despite their deteriorating and unsuitable conditions, these buildings are coveted for their relatively affordable rents. Average rents are 14% less than other regions in Toronto and even at these rates, many residents are still spending more than 30% of their income on housing. Maintaining the affordability of existing housing stock is critical to this neighbourhood.

For more about the neighborhood see:

[Golden Mile -The Opportunity](#)



North-facing 3D Visualization of Golden Mile Redevelopment with the 13 current redevelopment proposals. Courtesy of Stephen Velasco, Future Model Toronto (2022).

## 2.2 PAST AND PRESENT

### **Apartment supply: Successful historic programs**

During the post-war boom, Canada experienced a surge in high-rise rental housing construction, peaking in the 1960s and 1970s. During this period, multi-unit rental housing developments outpaced single-family home construction nationwide. This substantial supply, made possible through targeted housing delivery programs, remains the backbone of the rental housing system today.

**Between 1946 and 1984, the Canadian federal government used a series of programs to incentivize apartment construction by providing private sector support through tax relief, below-market financing and grants.** Four major rental housing programs were designed to accelerate supply:

- The Limited Dividend Program (LD) 1945-1975
- The Assisted Rental Program (ARP) 1975-1978
- The Multi Unit Residential Building Program (MURB) 1975-1981
- The Canada Rental Supply Program (CRSP) 1982-1984

The first two programs contained affordability requirements, enabling private sector affordable housing development during a booming market. The latter two projects did not have such requirements; instead, they aimed to encourage apartment development of any type in a weaker economic environment. **Together, these programs supported the development of more than half a million apartment units across Canada.** At the close of these programs in 1984, rental development nearly stopped.



Courtesy of the Archives of Lockwood Survey Corporation Limited



## 2.3 THE GROWING RISK OF HOUSING LOSS

**The most distressed legacy housing is at risk, with some buildings beginning to fail.**

Two examples include 650 Parliament Street in Toronto and Mackenzie House in Hay River, Northwest Territories. Both of these buildings experienced electrical fires that led to full building evacuations for extended periods, resulting in local crises related to rehousing. In Toronto, more than 1,000 residents were displaced for over a year. In Hay River, the building has remained empty since its 2019 fire. If this trend continues, the housing system will struggle to absorb the loss and adequately rehouse those displaced.

Investment tools that both stabilize and enhance aging apartment housing are critical for ensuring the long-term housing security of Canadians.



CBC Article, "Few answers on Hay River highrise fire, 1 year later," (Gabrielle Sky Landrie) 2020

## 2.4 THE NEED FOR COORDINATION

There is a supportive policy context and goal alignment among federal ministries, community and private sector partners in achieving the advisory group's objectives, which is to engage in housing retrofit at scale while preserving housing affordability. Canada's policies, including the National Housing Strategy and the Canada Green Building Strategy, are chief among these efforts. In addition, supporting organizations such as the Canada Infrastructure Bank (CIB), the Federation of Canadian Municipalities (FCM) and private financial organizations, such as the big five banks and community impact foundations, are all working toward the common goals of affordable housing retrofit.

However, these independent initiatives are currently working in silos and lack the capacity to address the retrofit challenge in isolation. Therefore, it is important to link the capacity and objectives of these public, private and community partners to address the capital gap that currently limits retrofit at scale.

### PARTNERS

There are currently several actors engaged in supporting retrofits. Bundling these actions creates opportunities for scaling meaningful complete retrofits.



Opportunity made here.



## 2.5 CANADIAN PRECEDENTS

### Current Successes and Existing Programs

Current programs aligned with the National Housing Strategy, such as the Co-Investment Repair and Renewal Fund and FCM's Sustainable Affordable Housing Fund, have enabled deep retrofit projects across Canada. **These programs have advanced the industry through landmark projects like CityHousing Hamilton's Ken Soble Tower—North America's first Passive House retrofit of a high-rise apartment building—and portfolio-scale investments like the \$1-billion funding agreement with Toronto Community Housing, which enables the modernization of hundreds of existing buildings.**

This progress has moved deep retrofit projects beyond the pilot stage and is building industry capacity to address the broader sector. A continued focus on not-for-profit and public housing will support the wider decarbonization effort while providing housing security for millions of Canadians.

### Challenges with Existing Programs

**Current programs have gaps that limit scalability and overall retrofit potential.** On one end, the complexity of program requirements and administrative burdens restrict participation to only the most sophisticated not-for-profit and public entities. On the other end, options for private housing participation are highly limited. The FCM Sustainable Affordable Housing Fund explicitly excludes private housing, and the CMHC Repair and Renewal Program imposes affordability requirements that necessitate deep rent reductions without operating subsidies to offset revenue losses. Consequently, no private owners have engaged in the program.

**However, the CMHC MLI Select Mortgage has seen widespread uptake.** This tool offers preferential refinancing terms for projects that achieve social and environmental objectives in housing. It could serve as the foundation for a deep retrofit loan and grant program that addresses financing current gaps.

### RETROFIT FINANCE AND AFFORDABILITY: HIGH-RISE RETROFIT IMPROVEMENT SUPPORT PROGRAM (HI-RIS)

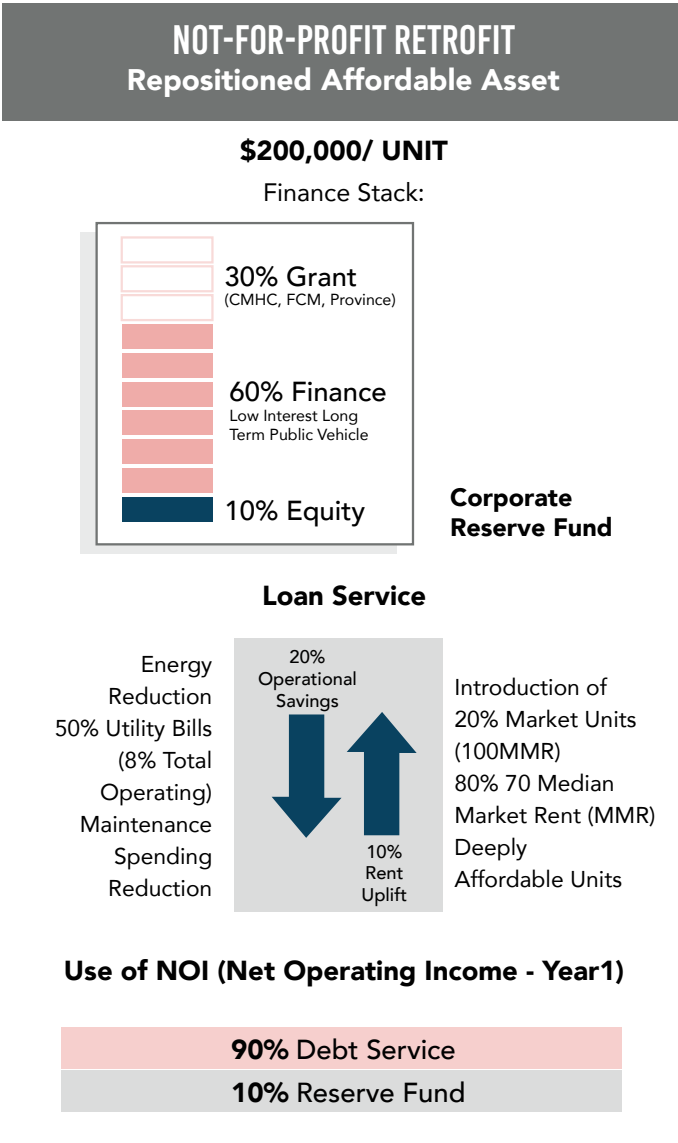
The City of Toronto's High-rise Retrofit Improvement Support (Hi-RIS) program, part of the Tower Renewal Program, offers funding to private property owners for energy efficient and water-conservation building improvements. This financing is provided at below-commercial rates and is not considered debt for the property owner. Instead, it is financed through the city and repaid via a special property tax levy.

To participate in the program, property owners apply, complete an energy assessment and enter into an agreement with the city. Once the improvements are finished, a special charge—covering the cost of the works, finance cost and administration fee—is added to the property tax bill. The owner repays this charge over an agreed term of five to 20 years. The payment obligation is tied to the property, not the owner, and is secured by the city's priority lien status. As a program condition, property owners must agree not to apply for rent increases above the guideline set by the Residential Tenancies Act related to the funded improvements. The maximum funding amount per property cannot exceed 10% of the property's Current Value Assessment (CVA), with a limit of \$2 million per building. While this tool has primarily enabled intermediate to light retrofits rather than deep ones, it has facilitated essential work on private sector apartment housing while maintaining affordability.

## 2.6 BARRIERS TO INVESTING IN PRIVATE HOUSING RETROFITS

According to data from Tower Renewal Partnership, not-for-profit retrofits have been achieved by expanding project debt capacity (through lowered operation costs and marginally increasing rents), the use of low-interest and long-term government backed finance products, and through access to direct public equity contributions (from CMHC, FCM, city and provincial partners.) This direct public investment has preserved thousands of housing units from going off-line and helped to kick-start Canada’s low-carbon retrofit industry.

**Retrofit investments in private housing presents a paradox:** How can substantial capital be directed toward asset renewal without raising rents, in a manner attractive to asset managers, that accounts for project risks and does not freeze capital otherwise invested elsewhere? Doing so will likely require significant public support.



Data courtesy of the Tower Renewal Partnership

FOR-PROFIT RETROFIT

Repositioned Private Asset

CONSIDERATIONS:

- Taxes account for 15%-25% of operation expense
- Free net operating income is reinvested with target ROI or taken as a dividend
- Debt taken on assets is used for investments inside or outside housing portfolio
- Rent increase at turnover primary source of revenue uplift



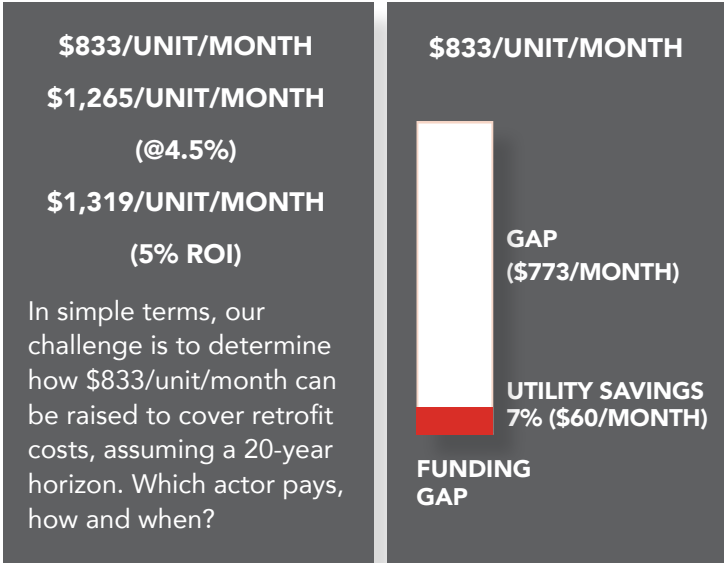
## 2.7 ADDRESSING THE FINANCIAL GAP

According to data from Tower Renewal Partnership, assuming a capital cost of \$200,000 per unit as an upper limit for a comprehensive deep retrofit that includes deferred maintenance and capital repairs of a distressed asset, the cost per month, without borrowing interest, over 20 years would be \$833. Using a 4.5% debt product, the cost would be \$1,265 per month. If a project were financed by direct equity, and assuming a 5% annualized return on investment (ROI), the costs would be \$1,319 a month.

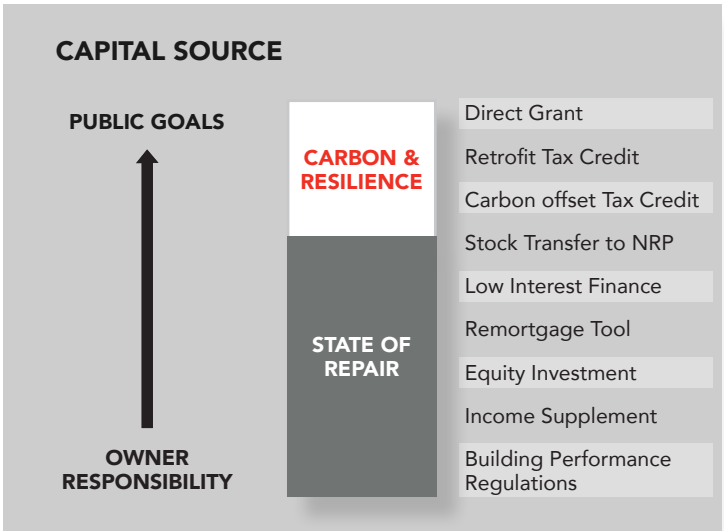
The advisory group considered the following questions:

- Who pays for this monthly increase?
- What portion comes from owner equity?
- What portion is financed through operations savings?
- What portion is financed through public support?
- And what portion comes from renters?

Further, what form should public support take? Is it a retrofit tax incentive? Direct equity contribution? A rent supplement? Outlining the roles of private and public actors, and the key terms of support, initially as it relates to the Greater Golden Mile and later proposing potential broader solutions, is an output of this project.



Using a baseline building for illustration, current debt capacity, potential utility savings and remaining gap are shown (top). Additional tools in filling the gap are tested for illustration purposes (bottom).



A variety of existing and potential tools were explored by the advisory group with the following questions in mind: Which are more effective for owners and public expenditure? What are we missing? How can these work together?  
Data courtesy of the Tower Renewal Partnership

### SECTION THREE:

## KEY RECOMMENDATION: A COMBINED RETROFIT MORTGAGE AND GRANT PROGRAM

**Significant action is required to support sustained deep retrofit initiatives that also maintain affordability.**

Critical to achieving large-scale deep retrofit is an effective, stable and streamlined retrofit finance mechanism to address the capital gap that is the largest barrier to action today.

Therefore, the advisory group recommends piloting a **comprehensive combined retrofit remortgage tool and grant program** that would offer better loan terms (interest and amortization) and grant amounts based on the depth of affordability and the level of energy and greenhouse gas reductions.

A comprehensive combined retrofit remortgage tool and grant program that would offer better loan terms (interest and amortization) and grant amounts based on the depth of affordability and the level of energy and greenhouse gas reductions. The more committed owners are to the outcomes, the better the incentives.

Early successes in Canadian deep retrofit have been achieved through stacked financial tools supported by federal and provincial governments, targeting housing assets in the public and not-for-profit sectors. A tool that directly addresses the capital gap through an aggregated loan and grant retrofit tool that, by targeting private assets, aims to attract and expand the impact of private capital while ensuring affordability is maintained. This proposed tool directly addresses the capital gap by attracting and expanding the impact of private capital while ensuring affordability is maintained.

### AFFORDABILITY

Lower-income earners simply cannot afford to bear the cost of retrofits if they are passed on as rent increases. For low-income households, these increases could represent 25% of total income or more. In Toronto, 49% of high-rise renters (non-condo) are low-income households (Toronto CMA, 2016 census.) Retrofits funded by rent increases are not tenable.

### A RETROFIT FINANCE AND FUNDING FACILITY

Government support can leverage private investment in achieving retrofits while maintaining housing affordability. This will enable a just transition in the building stock that secures healthy homes for lower-income households while also decarbonizing and growing the economy.

## 3.1 RATIONALE FOR THIS KEY RECOMMENDATION

An effective retrofit financial facility has the capacity to influence immediate impact, and pave the way for capacity-building and lead to future regulatory changes.

The primary considerations for the core recommendation were:

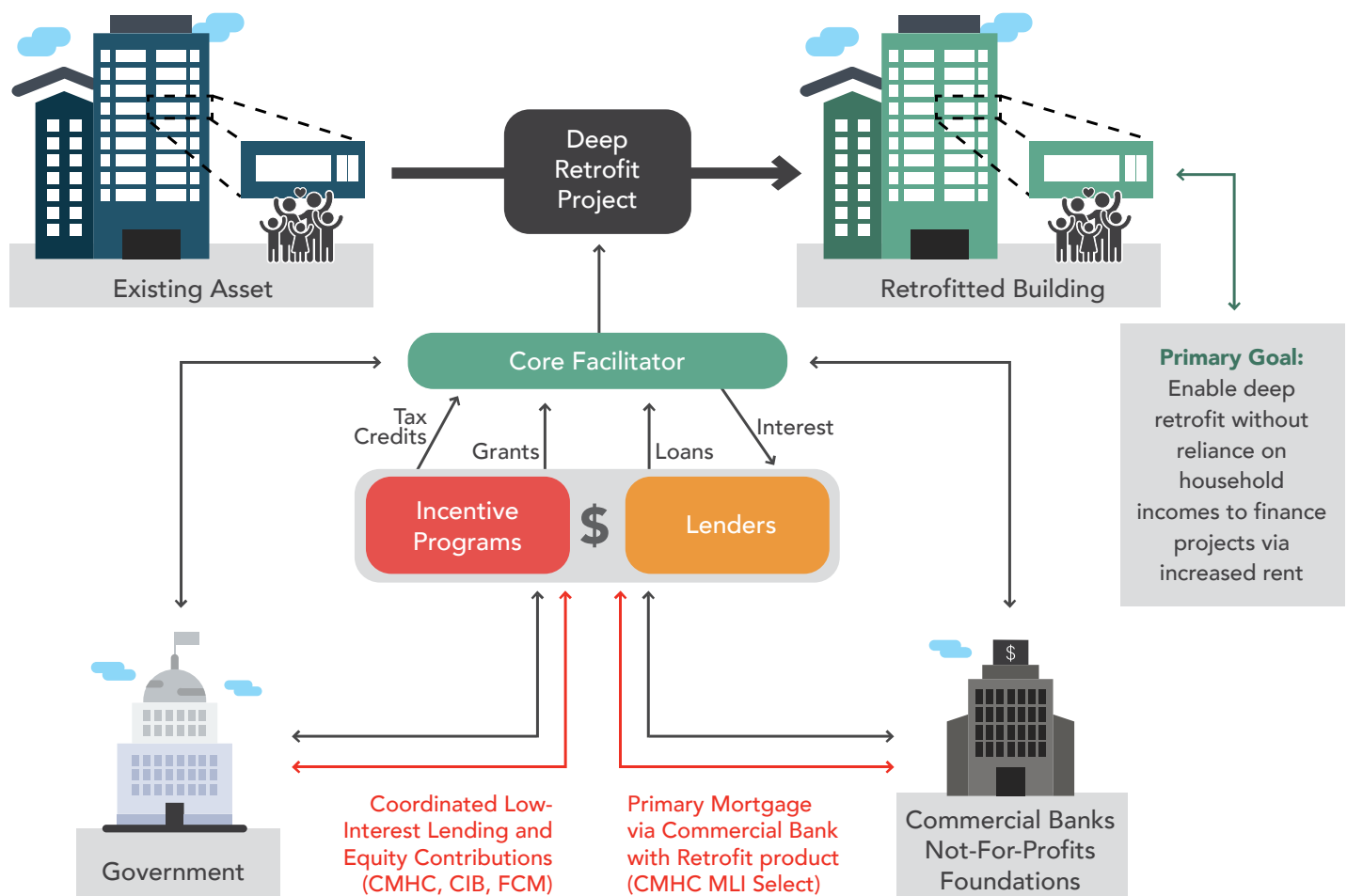
- **Funding:** Introduce a new pool of money tied to higher performance through deep retrofits
- **Stackability:** Alignment with other programs to stack funding sources and be predictable and consistent
- **Flexibility:** Applicability across various situations, ownership scenarios and business models, and ability to set the groundwork for the industry to self-sustain
- **Affordability & Security:** Social outcomes, including maintaining affordability and tenant security

## 3.2 HOW THIS TOOL AND PROGRAM WOULD WORK

The financing organization and the granting organization would work together to:

- Enable all grant funding to be included in the underwriting of the project
- Increase the total amount of funds available to owners to incentivize GHG reductions
- Reduce the administrative load to access available funding and undertake complex retrofit
- Require covenants to maintain existing affordability and housing security
- Attract broad participation
- Incorporate funding for tenant engagement

### A Retrofit Finance and Funding Facility





### 3.3 WHY THIS COMBINATION OF TOOLS?

**Taken together, these tools will close the capital gap, which is the primary barrier to retrofitting and maintaining affordability**

#### **Retrofit Remortgage Tool Strengths**

- Offer owners the opportunity to access some of the equity in their building at favourable rates, which is of particular benefit to owners who do not have other equity sources to fund a retrofit. Lowering the cost of financing reduces the burden on building net operating income (NOI)
- Retrofits extend the life of the building and lower operational cost, which improves NOI and the value of the building, which can extend amortization periods, driving monthly savings that reduce reliance on rent uplift
- This is a tool people are familiar with and is streamlined within standing refinancing cycles, which means additional loan applications (and administrative work) are not required
- Ideal for assets at the point of remortgage, when owners are primed to make significant investments in a building
- When the bank retains the senior secured position as the lender, the client benefits from lower rates due to the security of the building

#### **Grant Strengths**

- Simple for the funders to design and administer
- No requirement to hit profitability metrics
- Can be catalytic for additional debt financing
- Suitable across owner types
- Can be stacked with tax credits and favourable debt products
- Can have a sliding scale with larger grants given to those groups that have a larger capital gap to overcome

## 3.4 IMPLEMENTATION CONSIDERATIONS

Implementing the core recommendation has the potential to:

- Test funding solutions for **maintaining the affordability** of existing stock
- Test funding solutions for **deeply retrofitting MURBs** to meet GHG emission reduction targets and support climate resiliency
- Test strategies to engage and focus on **improved tenant experiences** during and after retrofit
- Collect data and evidence to enable the retrofit ecosystem

**Building pilots to test the tool would involve stakeholders committed to affordable housing, GHG reductions, climate, resiliency and equity coming together to harness their strengths to build this comprehensive tool. Although it would take concerted collaboration, the potential benefits of such a solution would transform our housing and climate landscape, including:**

- **Preservation** of naturally occurring affordable rental housing while transitioning them for a net zero future at a lower cost (~\$200,000/unit) compared to building new (~\$550,000/unit)
- Energy savings with the potential to **increase operational savings** for owners by 10-15% and reduce monthly expenses for tenants by ~\$60/unit
- **Substantially reduced GHG emissions** and movement toward GHG emission reduction targets
- **Improved community health** and climate resilience in the face of increasing climate events. For example, improvements to the building envelope and systems will mitigate adverse health effects (including death) for vulnerable populations during heat waves and other shelter-in-place incidents

- **Building trust** in the process and value of deep retrofits through data collection and dissemination will encourage and enable future retrofit projects and innovations **in the housing system.**

### Important design considerations

To maximize effectiveness and sustainability, this tool and program must:

- Consider the role of additionality: for a retrofit to be considered additional to what would have occurred in the absence of the tool, the possibility to receive the preferred terms and additional funding must be strong influencers in the decision to undertake the deep retrofit and maintain affordability
- Have a significant impact on the owner's business case
- Reduce administrative burden, stack easily with other funding sources, and be predictable and consistent
- Apply to a variety of business models and set the groundwork for a successful and scalable retrofit economy
- Consider all aspects of tenant security

**Pilots should be targeted for outcomes, testing specific technical, financial and resident-focused milestones.** A funded retrofit pipeline will create a market for industry innovation, create market confidence for performance regulation, reduce perceptions of risk for owners and create both bottom-up and top-down demand by both affordability and emission reduction outcomes.



Photos courtesy of ERA Architects

## A TENANTS-FIRST APPROACH

Today, investments in privately owned legacy towers often evoke fear and suspicion among residents, who worry about rent increases or being forced to move out due to renovations. **To address these concerns, there needs to be a transition towards partnership, where residents can actively participate in the changes to their homes, be involved throughout the construction process, and truly benefit from the transformation without affecting affordability or tenure.** This begins with program designs that enable project capitalization while ensuring rental security for sitting tenants. Additionally, adopting a “tenant-first” approach to design and construction methods is essential.

Living through renovations can be challenging, especially considering the scale and duration of large-scale retrofit work. However, fostering innovation and partnerships among owners, constructors, and residents can lead to greater efficiencies and higher impacts as retrofits expand.

### A resident care approach

**There is local and global excellence in engaging in deep retrofit with residents in place.** Yet care and attention needs to be taken to ensure these practices are built into projects from day one. Below are some considerations:

**Develop and implement a strong tenant engagement strategy** for the entire duration of the retrofit, from initial planning to post-commissioning. What is being contemplated and how will it improve homes? How is the project performing and can it be improved?

**Assign a point person as the tenant liaison**, a member of the retrofit team that works directly with tenants and the construction team throughout the retrofit to keep tenants informed, sequence activities and timelines, and minimize impacts.

**Ensure tenants are empowered and informed** with clear paths of communication from residents to building manager to constructor. Communication should be translated into commonly spoken languages (employ a tenant if possible) and include the following information:

- Overview of the renovation, including timeline

- Contact information of tenant liaison and/or social media site to air concerns/ provide input
- Requirements for tenants to prepare for the retrofit
- Implications of construction process on health
- Impacts on energy performance
- Co-benefits of the retrofit (affordability, health, aesthetics, thermal comfort)
- Information on how to use equipment post-retrofit

#### When tendering a retrofit project:

- Include minimize tenant disruption in terms of reference
- Provide a clear codes of conduct from workers, including information on how these are enforced on site
- Include a tenant liaison role in contractor requirements
- Include residents in contractor selection to evaluate their customer care approach

# COMPLEMENTARY RECOMMENDATIONS

The Retrofit and Housing Security Advisory Group also outlines the following complementary recommendations for the design of the tool:

- **Target the most challenging buildings and incentivize deep retrofit best practice:** Tie project grant value to project performance to incentivize excellence toward meeting and surpassing Canada's 2030 and 2050 decarbonization goals
- **Attract private sector leadership:** Broaden current retrofit program criteria to include privately-owned rental housing providers and incentivize their participation through direct financial support to kick-start private sector retrofits and leverage private sector investment
- **Preserve affordability:** Ensure rents are safeguarded from the costs of retrofit and affordability plans. Consider the following actions:
  - Prohibit above-guideline rent increases.
  - Sublease blocks of units to not-for-profit operators to manage as below-market affordable homes
  - Transfer entire buildings to not-for-profit operators to manage as below-market affordable housing
  - Require covenants that protect affordability at tenant turnover and ensure long-term housing security
- **Set clear targets:** Ensure projects are aligned with Canada's decarbonization targets and broader health, safety and resilience goals;
- **Design a tenants-first approach:** Ensure projects anticipate the full costs of retrofit, including resident engagement, customer care activities during the retrofit, and post-construction training and commissioning to ensure long-term stewardship
- **Create additional financial tools:** Create a national Low-Carbon Retrofit Tax Credit that is refundable and transferable for private and non-for-profit operators



# SUPPORTIVE CONSIDERATIONS

A series of complementary actions related to retrofit standards, industry readiness and cross-sector innovation is also recommended. Together, these actions will increase uptake, reduce risk and be self-reinforcing, leading to the scaling required to meet housing needs, affordability and decarbonization objectives.

The following recommendations target federal leadership and action in strengthening the retrofit ecosystem:

## AN ECOSYSTEM APPROACH

The success of the European Union's efforts toward deep retrofit comes from an integrated approach involving industry: design, technology and trades; building regulations; and substantial public investments motivating both public and private action to reach ambitious targets both in terms of energy performance and volume of homes retrofitted. As a result, the average operational carbon intensity for buildings in Germany today is less than half that of Canada and continues to drop through widespread action. Canadian action can follow this integrated approach. Please see the appendix for more details.



1. **Establish a national strategy:** Develop a comprehensive and coordinated national strategy with clear GHG reduction and affordability targets, timelines and funding mechanisms.
  - Set annual retrofits targets scaling over time for all buildings, supported by targeted acceleration funding for aggregator and to support startup work
  - Establish a regulatory ecosystem for tenant protection



2. **Strengthen regulatory frameworks:** Strengthen building codes and regulations to require higher energy efficiency standards for existing buildings and establish mandatory energy audits and disclosure requirements.
  - Develop federal model retrofit standards to outline a trajectory on future requirements to spur industry readiness, align with the insurance sector, and update provincial and territorial codes
  - Require owners of MURB buildings to benchmark and implement decarbonization plans to meet 2050 targets



3. **Provide technical support:** Provide technical support to building owners and contractors to ensure effective and efficient retrofit projects.
  - Establish demonstration and training centres to support education and trades training in partnership with trade schools, colleges and universities
  - Guide owners with specialized retrofit service support from initial assessment through to implementation



4. **Develop industry capacity:** Build industry capacity with a focus on supply chain and trade expertise, creating jobs and building a retrofit economy.
- Propel industry through targeted research and development funding for products and assemblies required to fill identified market gaps



5. **Foster innovation:** Support research and development of innovative design, technological and process solutions to achieve deep retrofit targets through labs, industry partnerships and targeted demonstrations.
- Establish design labs to develop integrated solutions partnered with industry to advance 21st-century retrofits



6. **Collaborate with stakeholders:** Collaborate with building owners, tenants, contractors, designers, suppliers and community organizations to ensure that retrofit initiatives are tailored to meet the needs of different communities.
- Establish a cross-Canada retrofit forum to advise on targets and regulatory frameworks and identify local barriers and opportunities nationwide



7. **Demonstrate Best Practice:** Lead by example through immediate action in deep retrofit with early adopters, accelerating through a multi-year rollout.
- Prototype next generation retrofits and holistic site renewal tackling identified technical and supply chain gaps
  - **"BETTER, FASTER AND CHEAPER"** Repeat proven solutions at scale targeting product and process innovation

# CONCLUSION

## Preserving Affordable Legacy Housing

Strategies to retrofit our legacy apartment housing are critical in achieving Canada's housing affordability and decarbonization goals. The backbone of rental housing in cities across Canada is legacy purpose-built rental apartment towers, the bulk of which were constructed in the 1960s and 1970s. These apartments are home to hundreds of thousands of residents with lower and moderate incomes. They resulted from targeted public policy, government incentives, and private initiatives that led to a massive investment in rental homes from the 1960s through the mid-1980s. A similar public-private partnership can be established to renew and preserve these homes for current and future generations.

This housing is currently at risk of aging into disrepair and of becoming unaffordable to current and future tenants as housing demand pressures dramatically raise rents. While the supply of new affordable and moderately priced rental housing is crucial in meeting Canada's housing needs, retaining the stock we have is similarly imperative.

A lack of action leading to a sustained net loss of affordable units will destabilize both the housing system and urban economy. It will remove housing options for

key workers, lead to homelessness for those with low to moderate incomes, and hinder the ability of newcomers and younger generations to move, establish themselves and ultimately invest.

Supporting the current legacy rental stock is significantly more economically efficient than replacing these same units through new affordable housing development. Roughly, a deep retrofit costs \$200,000 per unit compared to \$550,000 per unit for new rental replacement at current construction values. Preservation Is Supply.

### THE ILEO RETROFIT AND HOUSING SECURITY ADVISORY GROUP'S CALL TO ACTION: A COMPREHENSIVE AND COMBINED RETROFIT REMORTGAGE TOOL AND GRANT PROGRAM

Retrofitting our legacy towers can reposition these at-risk housing assets as resilient infrastructure for the 21st century and beyond. Those of low to modest incomes who call these apartments their homes cannot bear the cost of deep retrofits. Program coordination and support through government action can unlock investment



and enable retrofits of privately owned buildings that maintain housing security for tenants.

Global progress in deep retrofits has relied on effective, stable and streamlined government-backed retrofit finance mechanisms to address the capital gap that is a barrier to action. The ILEO Retrofit and Housing Security Advisory Group identified implementing this tool in the Canadian context as the key action to accelerate deep retrofits that will have an immediate and long-term impact.

The ILEO Retrofit and Housing Security Advisory Group recommends a comprehensive and combined retrofit remortgage tool and grant program be created that bundles existing retrofit funding and grant capacity into a single point of entry. It would combine the capacity of CMHC, the CIB, FCM and commercial banks to streamline participation and provide sufficient support to close the financial gap in today's market conditions. This comprehensive and combined retrofit remortgage tool and grant program would be targeted for outcomes and enable focused pilots across Canada that test specific technical, financial and resident-focused milestones.

A funded retrofit pipeline will inspire industry innovation, create market confidence for performance regulation, reduce perceptions of risk for owners, and create both bottom-up and top-down demand by demonstrating what is possible. Public-private partnerships can leverage private investment to implement retrofits while maintaining housing affordability, enabling a just transition in the building stock that secures healthy homes for low-to-moderate income residents while decarbonizing and growing the economy. Canada has conducted a series of ground-breaking retrofit experiments nationwide over the past decade, demonstrating technical capacity and political leadership for decarbonization and affordable housing preservation. As the housing and climate crisis continue to deepen, there is an urgent need to build on these successes and scale up efforts to achieve Canada's housing and climate goals. The time for action is now.



## GLOBAL CASE STUDIES

### The EU Case Study

Canada is not the first country to undertake the actions required to achieve retrofit objectives. In fact, the European Union and its member states have been leading the way in deep retrofit for several decades. These efforts have been further invigorated through the European Green Deal, part of the broader European COVID 19 recovery efforts known as the NextGenerationEU Recovery Plan. This plan includes a Renovation Wave—renovating the EU building stock—a key aspect of the European Green Deal. The German Energy-Efficient Refurbishment program, administered through their national KfW Bank, also serves as an important precedent for Canadian action. In summary, these initiatives provide critical precedents for Canada to follow in its own efforts toward achieving retrofit objectives



## EUROPEAN GREEN DEAL RENOVATION WAVE

The European Union (EU) recognizes that climate change and environmental degradation are existential threats to Europe and the world. To address these challenges, the EU has launched the [European Green Deal](#), which aims to transform the EU into a modern, resource-efficient and competitive economy. The Green Deal has three key objectives: no net emissions of greenhouse gases by 2050, economic growth decoupled from resource use and leaving no person or place behind.

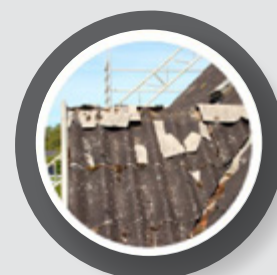
[The Renovation Wave](#) is a critical aspect of the European Green Deal, intending to double annual energy renovation rates in the next 10 years. The program seeks to enhance the quality of life for people living in and using buildings and create additional green jobs in the construction sector. The Renovation Wave focuses on three areas: tackling energy poverty and the worst-performing buildings, public buildings and social infrastructure, and decarbonizing heating and cooling.

The program will achieve its goals through four key actions:

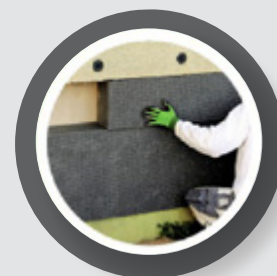
- direct investments;
- leveraging private investments;
- research and innovation; and
- addressing market barriers and technical assistance.

The Renovation Wave is also supported by complementary initiatives, including the [New European Bauhaus](#), the [BUILD UP](#) initiative, the [BUILD UP Skills](#) initiative and the [4RinEU](#) project. Together, these programs support the broader skill, technology and design sectors critical in achieving retrofit at scale. One-third of the €1.8 trillion in investments from the [NextGenerationEU Recovery Plan](#) and the EU's seven-year budget will finance the European Green Deal, of which the Renovation Wave is a core pillar. Renovation Wave is implemented through direct EU and member state action.

### Renovation Wave Priorities



Tackling **energy poverty**  
and **worst-performing**  
**buildings**



Renovation of  
**public buildings**



Decarbonization of  
**heating and cooling**



## GERMAN FEDERAL ACTION TOWARD ENERGY-EFFICIENT REFURBISHMENT

At the EU member state level, Germany has been a world leader in energy efficiency refurbishment for several decades. The German Energy-Efficient Refurbishment program, which is administered by KfW Bankengruppe, is aimed at promoting the energy-efficient renovation of buildings. KfW Bankengruppe is a German state-owned development bank that promotes economic and social progress both within Germany and in other countries. It is the largest national promotional bank in the world. It offers a wide range of financing options, including loans, guarantees and equity financing, focusing on projects related to climate protection, environmental protection, infrastructure development and social development.

The objectives of the German Energy-Efficient Refurbishment program are to reduce energy consumption in buildings, promote the use of renewable energy sources, and support the construction industry and related jobs. The program also aims to improve building occupants' comfort and quality of life while reducing greenhouse gas emissions. The funding for the program comes from various sources, including KfW's own funds, public funds from the German federal government and the states, and private capital.

The program offers two types of financing:

1. **KfW loan:** A low-interest loan for homeowners, landlords and housing associations to finance energy-efficient building renovations. The loan can cover up to 100% of the renovation costs, with loan terms ranging from four to 30 years and interest rates starting below 1%.
2. **KfW grant:** A grant for homeowners who carry out energy efficient building renovations. The grant can cover up to 20% of the renovation costs, with a maximum grant amount of €37,500. The grant is means-tested and available to low- and middle-income households.

To be eligible for financing under the program, buildings must meet specific energy efficiency standards and undergo an energy efficiency assessment. The program also provides technical support and guidance to building owners throughout the renovation process. The program is designed to reward high performance, enabling nearly 200 billion Euros in retrofit investment over the past decades. The stability and longevity of the program have enabled Germany to emerge as a world leader in knowledge, technology and retrofit implementation.



Photo from the website of KfW Bankengruppe [www.kfw.de](http://www.kfw.de)

