ILEO RETROFIT ADVISORY GROUP BACKGROUND AND PRIMER DOCUMENT

JUNE 13, 2023



ILEO RETROFIT ADVISORY GROUP

The ILEO United Way team and CMHC are convening the Advisory Group to advise on the challenge statement:

"How might we design concrete and practical solutions that motivate private building owners to meet future decarbonization regulations via deep retrofits in a manner that maintains housing security for tenants?"

This project will consider the parameters to enable investments required to existing private housing to make this transition. There are many notfor-profit examples of deep retrofits that address capital repairs needs, reductions to operational greenhouse gas production and maintain housing affordablility that were completed with public funds. We are probing how to make this possible with privately-owned buildings, notably the types of partnerships and ecosystem development with multiple public and private entities.



CONTEXT

For millions on Canadians, older apartment housing is home. Built in the apartment boom of the 1960s and 70s, and supported through public finance and planning regimes, this 'legacy' housing was built with the aim of providing decent and more affordable homes for a booming country, and in so doing largely solved the housing supply crunch of the 1940s and 50s, which is similar to the one in which we find ourselves today.

This housing inheritance has been the backbone of the rental housing system ever since and represents the vast majority of purpose built rental housing found in our cities today.

In some regions this housing is deeply affordable, with legacy private apartment rental buildings providing rents well below regional median or average levels. This is the case in the Greater Golden Mile, home of some of the Toronto region's more affordable rental housing, much of it private.

IT IS AFFORDABLE.

IT IS AGING.

IT IS UNDER THREAT.

IT CAN BE TRANSFORMED.

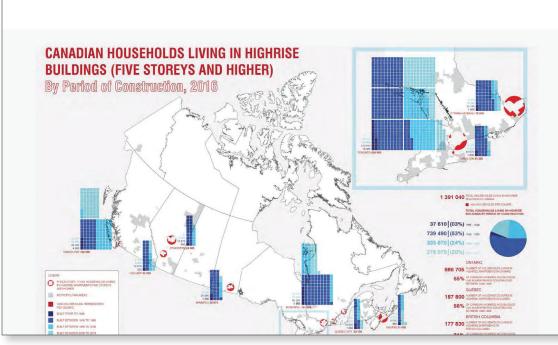
For additional information, please click links below

CMHC'S 2030 GOAL - THAT ALL CANADIANS HAVE A HOME THEY CAN AFFORD BY 2030 A POLICY PRIMER RELATED TO SCALING APARTMENT RETROFIT



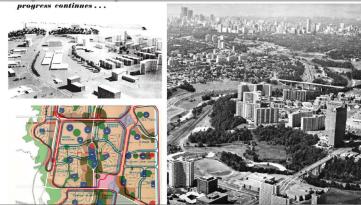
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CONTEXT



Legacy housing is found throughout Canada, representing over three quarters of a million homes built between 1950 and the early 1980s.

Tower Renewal Partnership Slide, 2022





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CONTEXT

AFFORDABILITY THE GREATER GOLDEN MILE (GGM)

The market context of the GGM positions it as one of the lowest market zones in the GTA, with median rents providing a high degree of affordability as compared to the Toronto average.

The City of Toronto's 80MMR for a 1 bedroom apartment (\$1,168) a rent level greater than East Scarborough's 100MMR (\$1,028)

Therefore, within the GGM, private accommodation is providing defacto affordable housing.

This projects aims to explore means to reinvest in this housing, while stabilizing and safeguarding these affordable rents, and prioritizing the needs of residents.

	Bachelor	1 Bedroom	2 Bedroom
Central Toronto (100MMR)	1,152.00	1,460.00	1,877.00
Central Toronto (80MMR)	921.6	1168	1501.6
Scarborough East (100MMR)	840.00	1,028.00	1,150.00
Scarborough East (80MMR)	672	822.4	920

Today, legacy rental buildings provide deep affordability and critical housing to lower income Canadians; however affordability due to temporary market conditions is not stable.

Tower Renewal Partnership Slide, 2022



GOALS Private Partners in Affordable Housing Retrofit

The core question for this project is:

"How might we design concrete and practical solutions that motivate private building owners to meet future decarbonization regulations via deep retrofits in a manner that maintains housing security for tenants?"



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GOALS

This project will examine the paradox of directing substantial investment toward private sector housing assets, with the aim of stabilizing rents and maintaining affordable housing. Primarily a financial discussion, the project will ask:

- 1. What objectives must be achieved to justify direct public financial support to private rental housing?
- 2. How can risks be shared and appropriate incentives be developed to enable the private sector to work with different entities within the public sector?
- 3. What are the roles and responsibilities of each stakeholder? What minimum vested interests must be met for participation?

And Critically:

- 1. What short term actions can be taken to pilot housing transformation in the GGM?;
- 2. Which longer term systemic actions are required to scale and deepen investments broadly?

For additional information, please click links below FOR FURTHER REFERENCE, SEE UNITED WAY REPORT: VERTICAL LEGACY



GOALS



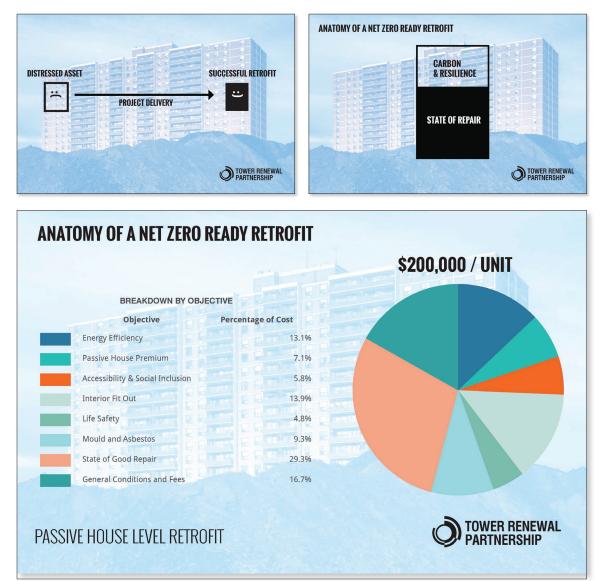
Legacy apartment housing is aging and most buildings systems are at their end of life. The most distressed assets require significant investment for base repair and to meet 21st century expectations of health, comfort and climate resilience.

Tower Renewal Partnership Slide, 2022



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GOALS



Distressed asset transformation is the primary focus of this project. For the purpose of solutions modelling costs for housing transformation, inclusive of full asset renewal and resilient retrofit is pegged at \$200,000 per unit, derived from aggregated data of real world retrofits.

Tower Renewal Partnership Slide, 2022



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CHANGING CONTEXT Future Code Readiness



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CHANGING CONTEXT

This project will pilot the transition for older apartment homes to meet future codes. Decarbonization mandates towards a 2050 Net Zero economy will place pressure on multiple levels of authorities to mandate performance through codes, insurance premiums, disclosure at sale and other compulsory requirements. The next two decades will see a strong push to decarbonize, from voluntary to mandatory.

Similarly, recent events such as COVID-19, the Grenfell Tragedy, a growing number of overheating deaths, and catastrophic system failures in older housing assets have placed a broad awareness on the critical need for improvements to the health, safety, comfort and resilience of our aging housing stock.

This project will consider what is required to enable investments to existing housing to make this transition, and what private and public partnerships may be required for this to be achieved in the short and long term.

The \$200,000 per unit figure has been chosen as a placeholder to represent a realistic and fulsome value for the purpose of analyzing financial models and discussion within this project. It is inclusive of both performance upgrades and typical life-cycle repairs for a building of this age. The unique site conditions, state-of-repair, design and building systems will require nuanced review and will have an impact on this figure.

For additional information, please click links below

SEE MORE AT THE CITY OF TORONTO'S NET ZERO EXISTING BUILDING STRATEGY



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CHANGING CONTEXT



Targets to achieve a net zero housing stock and broader economy by 2050, coupled with efforts to achieve broad affordability in the housing system by 2030, underpin our challenge in designing a framework for the private investment in affordable housing renewal.

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Federal Government:

National Housing Strategy Launched with Direction to Retrofit 200,000 + units of Public and Private Sector Housing through \$15.8 Billion Co-Investment Fund



TOWER RENEW

A place to call home

National Housing Day Message from CMHC 2020

"Access to safe, stable and affordable housing underpins social inclusivity and is essential to our sustained economic growth and competitiveness."



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ACHIEVED OUTCOMES

We are past the pilot stage.

Deep retrofits have been achieved throughout Canada, largely in the non-profit sector. These projects have been largely enabled through public programs – such as the National Housing Strategy's Repair and Renewal Funds, and the Federation of Canadian Municipality (FCM)'s Sustainable Affordable Housing Fund, and comparable provincial initiatives. These projects have targeted distressed housing assets and enabled their transformation as model resilient, sustainable, healthy, and affordable housing, that is able to address 21st century challenges.

These projects offer lessons related to scope, technical solutions, finance structures, and resident satisfaction. This project will use these achieved outcomes to frame a model retrofit from which to test solutions viable for private sector assets.



Tower Renewal Partnership Slide, 2022

For additional information, please click links below <u>A DETAILED CASE STUDY OF THE KEN SOBLE TOWER CAN BE FOUND HERE</u>



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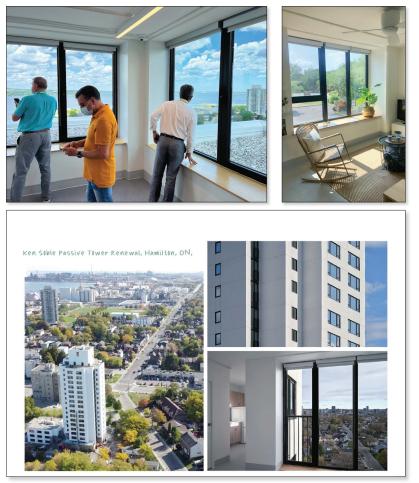
ACHIEVED OUTCOMES

Landmark not-for-profit deep retrofit projects have been enabled through federal, provincial and local investments and showcase what is possible today:

Tower Renewal Partnership Slide, 2022

SELECTED DEEP RETROFIT PROJECTS:

- Ken Soble Tower, world's largest residential passive house retrofit, Hamilton ON, CityHousing Hamilton (Link here to learn more)
- Toronto Community Housing, broad implementation at scale of deep retrofits through a fully funded 10year capital plan (Link here to learn more) and more information on an example project (Link here to learn more)
- Windsor-Essex Community Housing, retrofits to 4700 units with residents in place are underway across multiple buildings (Link here to learn more)
- BC Housing's Grandview Terrace, a deep retrofit completed with a resident's first mandate (Link here to learn more)





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THE CO-BENEFITS Health, Climate, Equity:

Legacy housing stock is often affordable due to lack of desirability such as location, upkeep or quality of home. This need not be the case.

The pandemic and climate change have changed our expectations of housing. High quality ventilation systems are no longer a 'nice to have'. With more extreme climate events, there is renewed focus on cooling to address extreme heat periods, and back-up systems to guard against winter storm black outs. The reliance on burning natural gas and the production of massive amounts of Greenhouse Gases (GHG) emissions through building operation are no longer perceived as acceptable. Safety, comfort and climate resilience are core expectations.

Housing retrofits will not only sustain legacy housing, but ensure that those residing in them thrive in the face of 21st century challenges. Building from solid foundations, housing transformation can improve health outcomes, reduce greenhouse gas emissions, guard against catastrophic climate events, and continue to provide housing stability for the hundreds of thousands of households who call these buildings home.

Enabling deep retrofit to reposition distressed assets as 21st century housing while maintaining housing stability is the core premise of this project.

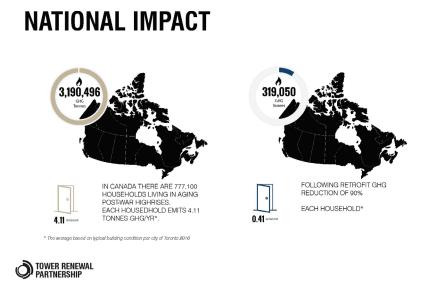
For additional information, please click links below

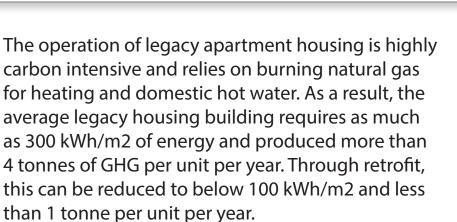
A primer related to new goals for healthy and sustainable housing can be found here.



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THE CO-BENEFITS





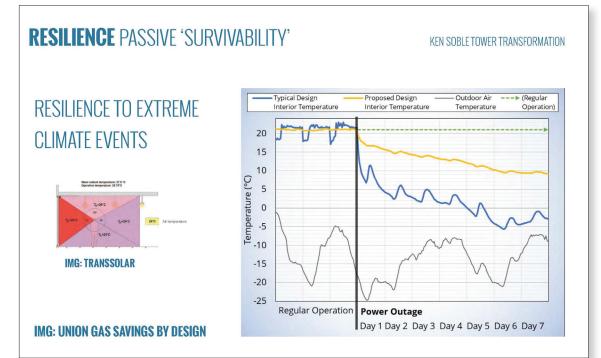


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THE CO-BENEFITS



LINKING HOUSING QUALITY OUTCOMES TO RETROFITS



Thermal controls Adequate ventilation Life safety measures Community connectivity Climate resilience

Tenant comfort

Deep retrofit toward resilient housing will significantly improve day to day comfort and protect against climate shocks.

The chart to the left outlines how a high performance retrofit (yellow) retains indoor warmth during a winter power outage – staying above minimum habitable temperatures for four days. A code minimum building would lose heat within hours –a legacy apartment built to 1960s standards sooner still.

Project planning that is quality of life focused, with a comfort-first approach, can ensure healthy, safe and resilient housing with the critical co-benefit of significantly reduced carbon.

Tower Renewal Partnership Slide, 2022



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THE CO-BENEFITS



Building retrofits can be accompanied by direct community investments. Examples in Toronto abound. Complementary mixed income developments can further enhance current sites where appropriate.

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EXAMPLES OF COMPLIMENTARY COMMUNITY INVESTMENTS:

- Toronto Community Housing Lawrence-Orton, addition of a daycare and upgrades to community facilities (Link here to learn more)
- TCH and MLSE Gordonridge Multi-Sport Court (Link here to learn more)
- East Scarborough Storefront
 (Link here to learn more)



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THE RESIDENT FIRST



220 | 21 × | 21 × | 22 × | 22 × | 23 × | 23 × | 23 × | 23 × | 23 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24 × | 24

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THE RESIDENT FIRST

Today, investments in privately owned legacy towers are often met by many with fear and suspicion. Fear that rents will increase or works will force residents to move out. This state of fear needs to transitions to partnership - how can residents be partners in how their homes will change, partners through construction, and true beneficiaries of the transformation process without an impact on affordability or tenure?

Public and private buildings have achieved remarkable retrofits with residents in place – in Canada and around the world. Living through renovations for anyone is a challenge, particularly at the scale and duration of large scale retrofit work. Innovation and partnership, between owners, constructors and residents will lead to efficiencies and higher impacts as retrofits scale.

One of the questions this projects asks is how to build a model where housing stability is secured for the long term and where retrofits do not mean displacement.



Living through construction is a challenge at the best of times. Designing a project plan that accounts for best outcomes with residents in place and as partners in the process is critical. There are opportunities for substantial industry innovation.

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For additional information, please click links below <u>A Field Guide for Retrofits with Residents in Place</u>



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THE RESIDENT FIRST





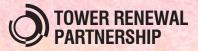
Worldwide, performing deep retrofits with residents in place is a growing area of specialized construction. This expertise is beginning to develop in Canada. Each party can play a role to ensure sucess – owners, designers, builders and residents. Residents should be involved in the contractor selection committee to evaluate the 'customer care approach' and be given tools to keep the construction team accountable. Likewise, ensuring trades are trained in retrofits with residents in place is a key strategy.

Tower Renewal Partnership Slide, 2022



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THE DO NOTHING SCENARIO



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THE DO NOTHING SCENARIO A Net Loss of Affordable Housing

As growing regions place pressure on limited housing supply, the net number of private

sector rental units that are today affordable will decrease due to rent up filtering at turnover. Concurrently, as buildings continue to age, units within the most distressed assets may go offline due to compounded repair backlogs. The result may be a significant net loss in affordable housing supply.

Substantial investments in new purpose-built affordable housing are required to keep pace with growing needs. If net loss of existing housing occurs unchecked, these housing investments will simply be used to replace the stock we already have rather than building net new.

If affordable homes are not replaced through new construction, and the pool of affordable homes diminishes, our regions will be impacted through a general loss of economic competitiveness; a reduced ability to attract newcomers; and critically through the crisis experienced by growing numbers of households experiencing acute housing precarity or homelessness. Our regions need more affordable homes - not less.

With direct development cost of new affordable housing as high as \$450,000+ per unit, in addition to land costs, and with comprehensive retrofit less than half this value, this project aims to test the efficiency and efficacy of sustaining regional housing stability through stabilizing existing affordable assets through public / private partnerships rather than either party bearing the full cost of replacement. The costs are simply too high.

For additional information, please click links below <u>CMHC SUPPLY SHORTAGE PRIMER</u>



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MATH SIDE BAR

(leave as a placeholder for now, we'll discuss at 2pm)

THE DO NOTHING SCENARIO



The most distressed legacy housing is at risk. The building failure at 650 Parliament Street in Toronto led to the displacement of nearly one-thousand residents for over a year. That was one building. What if two went off-line? What if ten did? The housing system cannot absorb this loss and adequately rehouse those displaced– investments to prevent such failures are critical.

Tower Renewal Partnership Slide, 2022



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Transformative retrofit are underway across Canada, primarily in the not-for-profit sector. To establish a baseline, a model retrofit finance stack will be shared, providing framework from which to outline gaps, and innovate solutions.

Not-for-profit retrofits are generally designed to meet the parameters of key funders, such as CMHC, FCM, or provincial programs. They generally use the full capacity of Net Operating Income (NOI) at a 1:1 Debt Coverage Ratio (DCR); have access to long term, low interest financing; and are supported by performance-based grants providing as much as 30% direct equity to a project. Debt capacity is expanded through lowered operating expenses and marginal rent increases, though buildings achieve deep affordability for 70-80% of units. These buildings are not required to be financially performative, rather, they provide a stable balance sheet while supporting growing reserved funds.

Private sector buildings look quite different. NOI is retained or invested; building debt capacity is used to leverage other ventures, and rents are increased as the market, and policy, will bear.

It is the aim of this project to flesh out a private sector retrofit; to uncover under what conditions private buildings will make substantives investments; and through which mechanisms of partnership the public sector might participate – to support both building performance and rent stability.

For additional information, please click links below <u>A REPORT EXAMINING THE OPPORTUNITIES AND CHALLENGES OF PRIVATE SECTOR RETROFIT</u> <u>CAN BE FOUND HERE:</u>



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ST HILDA'S CAMPUS UPDATED





Repair to Existing Masonry

AMENITIES SPACES

5 Modernization Lobbies 6 Updated Courtyard

Updated Share Space Terrace

Opdated Roof Amenities

Existing Ramp Update - Improve access to Courtyard and Dufferin Main Entrance

STATE OF REPAIR (10) Repair in Underground parking

FUTURE UPDATES (1) Future New main Entrance for Campus

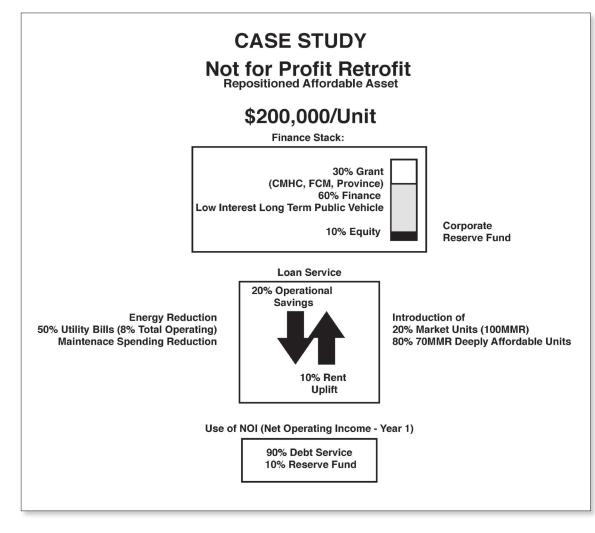
The transformation of legacy housing is underway across Canada and worldwide. Learning from these successes will provide a baseline for enabling investments in private market housing.





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Tower Renewal Partnership Slide, 2022



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.**

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CASE STUDY

For Profit Retrofit Repositioned Private Asset

Considerations:

1. Taxes account for 15%-25% of operating expense

2. Free NOI is reinvested with target ROI or taken as dividend

3. Debt taken on assets is used for performative investments inside or outside housing portfolio

4. Rent increase at turnover primary source of revenue uplift

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. Our project is to outline under which terms doing so would be attractive and effective.

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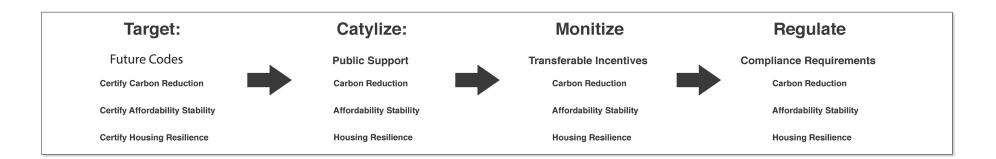


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Assuming a capital cost of \$200,000 per unit as an upper limit for a comprehensive deep retrofit that includes deferred maintenance and capital repairs of a distressed asset, the cost per month, without borrowing interest, over twenty years would 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, the monthly costs would be \$1,319 a month.

The core question of this project: Who pays for this monthly increase? What portion is from owner equity? What portion is financed through operations savings? What portion is through public support? And what portion is a fair contribution of 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 GGM and later proposing potential broader solutions, will be an output of this project.





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In simple terms, our challenge is to determine how \$833/unit/month can be raised to cover retrofit costs, assuming a 20 year horizon. Which actor pays, when and how?

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1. HOW CAN PRIVATE CAPITAL BE ATTRACTED?

2. WHAT IS THE FORM AND CONDITIONS OF PUBLIC SUPPORT?

3. UNDER WHAT CONDITIONS SHOULD RESIDENTS CONTRIBUTE?



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THE GAP

	Building A (High NOI)	Building B (Moderate NOI)	Building C (Low NOI)
Full Debt Capacity (1.1 DCR)			
Total Monthly	\$ 52,500.0	0 \$ 37,500.00	\$ 22,500.00
Per Unit /Monthly	\$ 350.0	0 \$ 250.00	\$ 150.00
Potential Loan Value	Building A (High NOI)	Building B (Moderate NOI)	Building C (Low NOI)
CIB (0.5%/20 Years)	\$ 11,988,110.7	6 \$ 8,562,936.26	5,137,761.76
Per Unit	\$ 79,920.7	4 \$ 57,086.24	\$ 34,251.75
CMHC NHCF (2.5%/30 Years)	\$ 13,287,072.4	3 \$ 9,490,766.02	2 \$ 5,694,459.61
Per Unit	\$ 88,580.4	8 \$ 63,271.77	\$ 37,963.06
FCM (3.25/ 25 Years)	\$ 10,773,292.0	2 \$ 7,695,208.58	\$ 4,617,125.15
Per Unit	\$ 71,821.9	5 \$ 51,301.39	\$ 30,780.83
Remaining Gap to Retrofit	Building A (High NOI)	Building B (Moderate NOI)	Building C (Low NOI)
Retrofit Cost Scenarios (Per Unit)	CIB Gap (% of Total Project Cost	s) CIB Gap (% of Total Project Costs)) CIB Gap (% of Total Project Costs)
\$ 200,000.00	60	719	6 83%
\$ 150,000.00	47	7% 62%	6 77%
\$ 65,000.00	Nc	ne None	20%

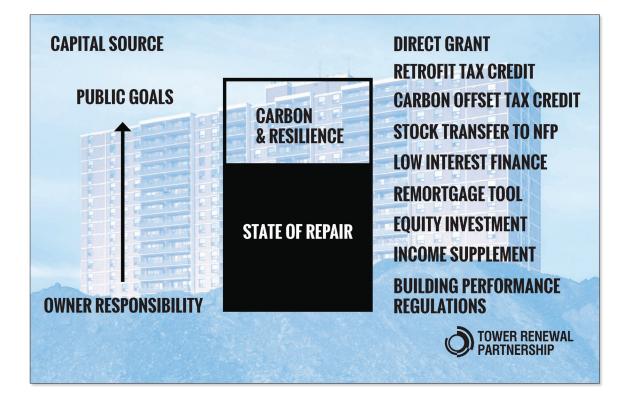


An analysis of the debt capacity of various buildings looks at the remaining capital gap using various public debt products. Filling these gaps is our challenge.

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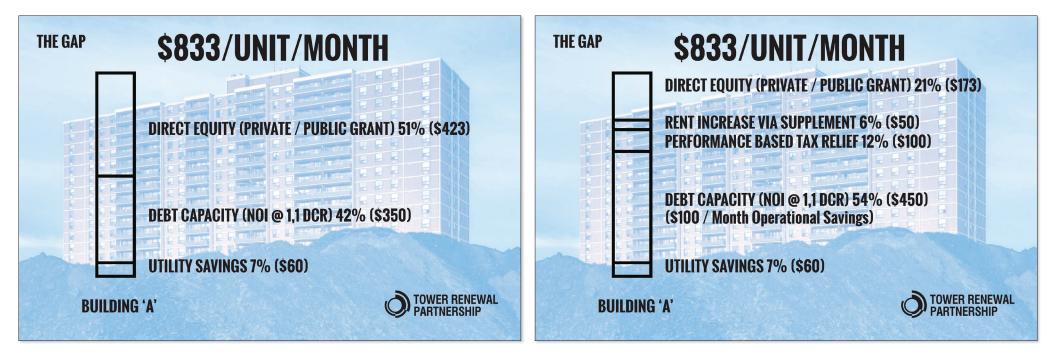


A variety of existing and potential tools should be explored - which are more effective for owners and public expenditure? What are we missing? How can these work together? This is our assignment.

Tower Renewal Partnership Slide, 2022



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

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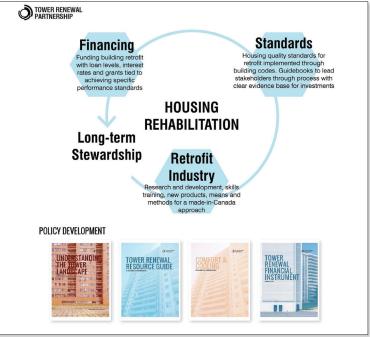


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BUILDING THE ECOSYSTEM

Beyond the scope of this project is directly tackling the broader retrofit ecosystem. The ecosystem will need to include specialty retrofit hardware, means and methods refinements, and integrated supply chains that are motivated by clear and mandatory decarbonization timelines. Coupled with deep knowledge from sub trades to portfolio managers, the retrofit ecosystem will spur innovation, reduce costs, risks, and timelines in order to catalyze retrofit at scale.

This project is at the beginning of such a process, piloting what is today possible, but with an eye to the future. It is setting the table for how public and private entities can work together to support private sector housing and create an anchor for broad investment and industry mobilization.



Tower Renewal Partnership Slide, 2022

For additional information, please click links below <u>A PRIMER OF THE RETROFIT CHALLENGE AND GROWING ECOSYSTEM</u>



BUILDING THE ECOSYSTEM

ACCELERATING RETROFIT INDUSTRY







TOWER RENEWAL PARTNERSHIP

particularly specialized products designed for rapid installation. Many of these products are currently available in the EU –technical partnerships can accelerate adoption in North America. Broader industry adoption can, in the longer terms, increase efficiency and reduce risks.

Innovation will streamline retrofits,

Private sector pilot projects and broader sector collaboration can help accelerate this transformation.

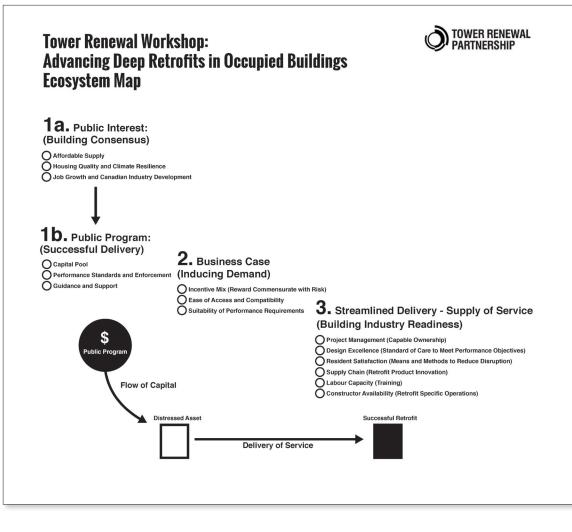
Tower Renewal Partnership Slide, 2022





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BUILDING THE ECOSYSTEM



Broader uptake and scaling will also be dependent on a frictionless process – that capital flow, design, construction and resident partnership is clear, smooth and, as much as possible, de-risked. Considerations for such a program design is part of our assignment.

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FIST & FILMER



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OUR FOCUS

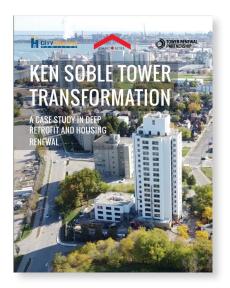
The project will place focus on three topics:

1.Overcoming the Capital Gap to achieve Deep Retrofits2.Developing a Framework for Effective Public & Private Solutions3.Achieving Resident Focused Outcomes

As a starting point the group will align on challenges and assumptions related to these topics, followed by solutions development and testing. The schedule of meetings can be found in the accompanying slide deck provided by CMHC.



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O TOWER RENEWAL PARTNERSHIP

SUPPORTING CANADA'S CLIMATE RESILIENCE, HOUSING AFFORDABILITY AND ECONOMIC RECOVERY THROUGH DEEP RETROFIT AND HOUSING RENEWAL

JUNE 29, 2020

Tower Perferences as a strategy to ensure that the anoncourse apartment owner stocks or maintained, enhanced and prolonged. The Tower Renewal approach works in tandem to achieve quality of life improvements and realize federal policy objectives related to climate change, affordable housing, poverty reduction and economic development.

Intre is consideration terminational precorden to support the rower kentwal approach. Were the past 30 years, many European countries, including the UK Cermany, the Vetherlands and Sweden have implemented national retroffst programs targeting postwar apartment tower housing. Most importantly, these programs have introduced government, riven financial tools and programs to enable retroffs at scale, resulting in significant

With much of Canada's affordable purpose built restal housing in need of renewal, the into to act is now, feeder alcotto house deep reroft can build canada's cimate medience, create healty and confortable glaces, and grow the green construer, And when targeted sound Canada's use usely of a grage public and private affordable housing, retroft can preserve housing affordable yand quality through integreem asset renewal. This prime three pointers before alconto sound the deep rector of Canada's aging againment housing and the pointers integrees alconto sound the deep rector of Canada's aging againment housing three points integrees alconto sound the deep rector of Canada's aging againment housing and the points integrees alconto sound the deep rector of Canada's aging againment housing and the specifical frequency and the specifical sound the specifical sound and the specifical sound and the specifical sound and the specifical sound the specifical sound and the specifical sou

As Canada engages in COVID recovery, a targeted approach to housing retrofit can catalys focuad investment in Canada green industry and ensure broad construction employme while improving housing security. health outcomes and canada's citature resilience. Furth remeal will address existing therecomings critical to our current control, such as the new improved westiliation and prevention to overheaintg to ensure sait can difference 'historice' historice' historice' historice' and the control of the same sait of the control of the same sait can difference 'historice' historice' histo

