

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

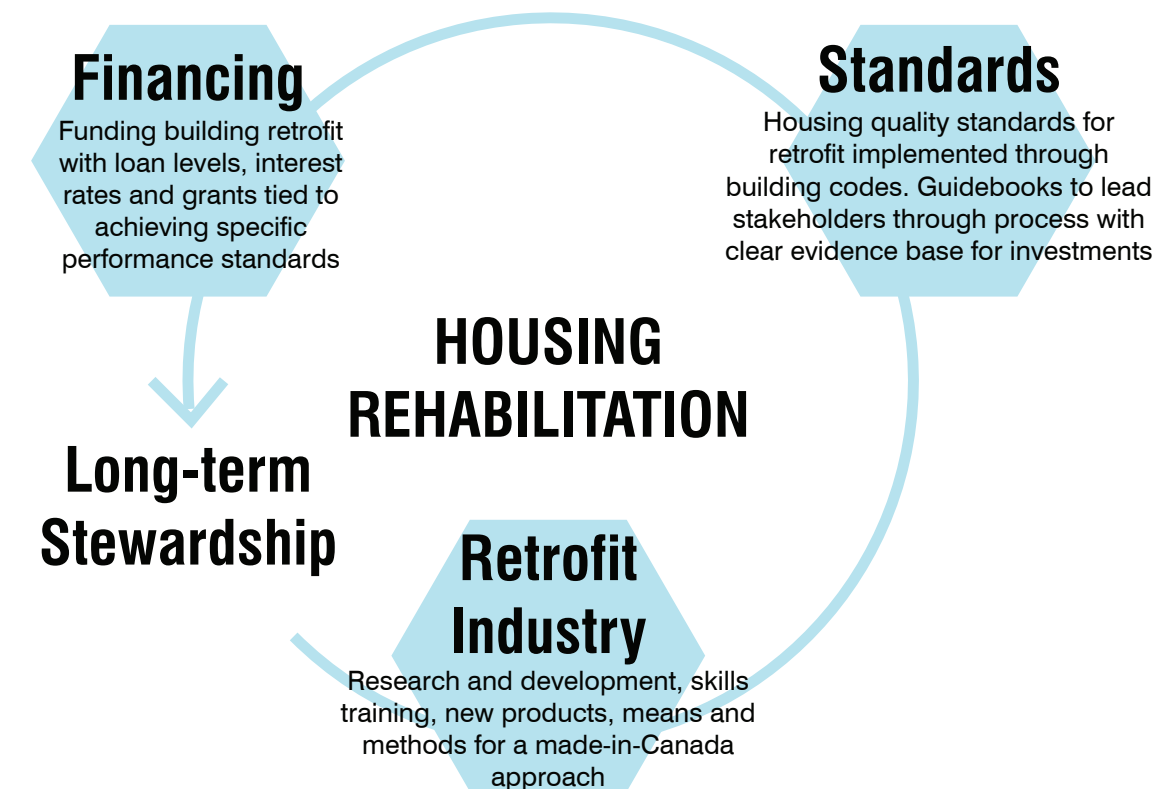
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Tower Renewal is a strategy to ensure that the affordable apartment tower stock is maintained, enhanced and prolonged. The Tower Renewal approach works in tandem to achieve quality of life improvements and realize federal policy objectives related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

There is considerable international precedent to support the Tower Renewal approach. Over the past 30 years, many European countries, including the UK, Germany, the Netherlands and Sweden have implemented national retrofit programs targeting postwar apartment tower housing. Most importantly, these programs have introduced government-driven financial tools and programs to enable retrofits at scale, resulting in significant positive impacts on their economies.

With much of Canada's affordable purpose-built rental housing in need of renewal, the time to act is now. Federal action toward deep retrofit can build Canada's climate resilience, create healthy and comfortable places, and grow the green economy. And when targeted toward Canada's vast supply of aging public and private affordable housing, retrofit can preserve housing affordability and quality through long-term asset renewal. This primer outlines potential federal action toward the deep retrofit of Canada's aging apartment housing stock, representing over 700,000 units of housing and over \$50 billion in potential construction activity.

As Canada engages in COVID recovery, a targeted approach to housing retrofit can catalyze focused investment in Canadian green industry and ensure broad construction employment while improving housing security, health outcomes and Canada's climate resilience. Further, renewal will address existing shortcomings critical to our current context, such as the need for improved ventilation and prevention of overheating to ensure safe and effective "sheltering in place".



The Retrofit Ecosystem:

OPPORTUNITIES & RECOMMENDATIONS

1. UNLOCK CAPITAL TOWARD RETROFIT

The primary barrier to engaging in retrofit is overcoming financial limitations of both public and private affordable housing assets and engaging in capital-intensive works without relying on increased rental stream as the primary revenue source. The following recommendations can work together to overcome this barrier:

- **Expand access** to Repair and Renewal Low-Interest Finance: Encourage cross-sector uptake of existing programs by bundling renewal funds with urgent repair funds.
- Develop a stand-alone **“Energy-Backed Loan Product”**: Create a Green Bank which provides standalone products backing projected future values of gas, water and electricity.
- Develop a **“Repair and Renewal Mortgage Refinance Tool”**: Allow qualifying rental owners to remortgage their properties at favourable rates subject to affordability and housing quality requirements.
- Encourage **Portfolio-Scale Approaches**: Calibrate finance tools to be applicable to both individual assets and portfolios of buildings.
- **Expand direct equity contributions** for renewal projects that meet or surpass renewal objectives, closing the gap to enable deep retrofits.
- Develop a **“Renovation Tax Credit for Private Rental Buildings”**: Encourages private sector investment in renewal activities through enabling tax avoidance linked to value of building renewal works where performance goals met and affordability maintained.
- Develop an **“Affordable Rental Sale, Acquisition and Renewal Tax Credit”** for Private Rental Buildings: A tax credit program inclusive of renovation works and portion of asset acquisition value to encourage capable owners to acquire distressed assets for renewal.
- Develop an **“Affordable Rental Sale and Acquisition Capital Gain Tax Incentive for the Sale of Private Buildings to Not for Profit Owners”**: Capital gains tax credit at point of sale, where housing assets sold to not for profit owners, encouraging transfer of assets into owners with repair and affordability mandates.



2. GROW THE RETROFIT ECONOMY

The tools outlined above can close the gap on financial viability and induce owner demand to engage in retrofit. However, the development of a capable retrofit industry ecosystem is also crucial to drive down risk and trade pricing. The public sector is best positioned to lead this market transformation through complementary initiatives including the follow key recommendations:

- Open **demonstration centres** for low-carbon affordable housing (new construction and retrofit): Create demonstration centres as knowledge-dissemination hubs for information, training, product and methodology showrooms, and other supports for high-performance new-builds and retrofits, encouraging Canadian manufacturers to compete to achieve enhanced performance goals through new product development;
- **Communicate industry growth areas** by quantifying the size of the low carbon market and by working with Provinces and Territories to attract the labour market toward the skilled trades;
- Provide financial project support to **encourage early adopter demonstrations** that tackle identified market gaps with potential to scale;
- Provide **guidance documents and other knowledge dissemination** to owners undertaking retrofits with residents in place;
- Build **requirements for tenant engagement and mitigation of disruption** to siting tenants into retrofit program eligibility criteria, and assign budgets to these activities;
- Allow publicly-supported carbon-reduction-driven **retrofits to be bundled with capital repairs** to encourage more holistic projects, incorporating GHG emission reduction targets of 60%+, resilience and wellbeing improvements, and accessibility upgrades retooled to mitigate negative impacts on sitting tenants;

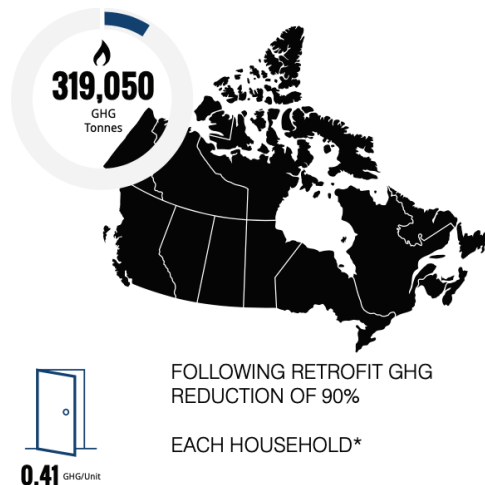
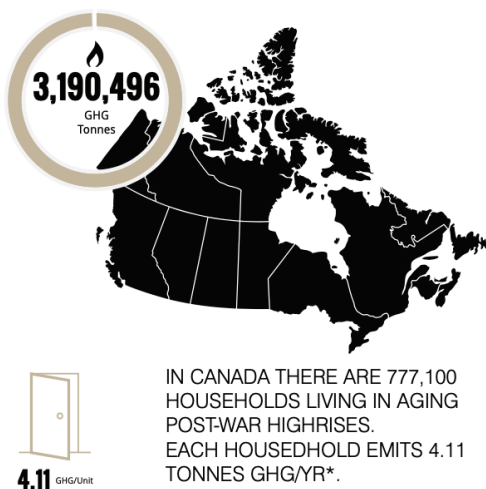
- Provide clear **technical and best practice guidelines** for retrofits for owners, contractors, and design professionals, including guidance on phased retrofit approaches to avoid ‘locking in’ carbon;
- Support **cross-Canada high-performance building forums and networks** whose mandate is to: compile evidence base for early-adopter outcomes through central database; advise on targets and incentive/regulatory frameworks to meet targets; identify barriers and opportunities nation-wide;
- Provide publicly-funded **design assist and review services** for complex retrofits;
- Incent early adoption country-wide by requiring **publicly-owned asset retrofits to meet the highest targets;**
- Support colleges and universities to develop **high-performance building labs** that offer ongoing training for tradespeople, architects and engineers.

3. PROVIDE RETROFIT GUIDANCE AND RENEWAL STANDARDS

Enhanced financial capacity supported by a robust and competitive industry will kickstart deep retrofit activity across the sector. The creation of retrofit standards will ensure repair and renewal activity follows best practice in healthy and resilient housing, reduces project risk and, importantly, expands retrofit activity throughout the building stock as owners meet compliance targets through a ‘step’ process over the coming years through the following key recommendations:

- Require owners of rental MURB buildings to **develop ‘decarbonization’ plans to meet 2030/2050 targets**, encouraging stepped but ‘stackable’ retrofits.
- Pilot market advancement through incentive programs, but use targets and step codes to realize wide-scale industry advancement;
- Develop a **federal model step code**, like those implemented in Germany and British Columbia, providing a trajectory and guidance on future code requirements to spur industry readiness, and work with Provinces and Territories to plan for their adoption;
- Disseminate knowledge and require training to **encourage step code readiness**, allowing industry to up-skill and decision-makers to plan on that basis;
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National Carbon Impact



* The average based on typical building condition per city of Toronto 2016

**Tower Renewal Workshop:
Advancing Deep Retrofits in Occupied Buildings
Ecosystem Map**

1a. Public Interest: (Building Consensus)

- ☐ Affordable Supply
- ☐ Housing Quality and Climate Resilience
- ☐ Job Growth and Canadian Industry Development



1b. Public Program: (Successful Delivery)

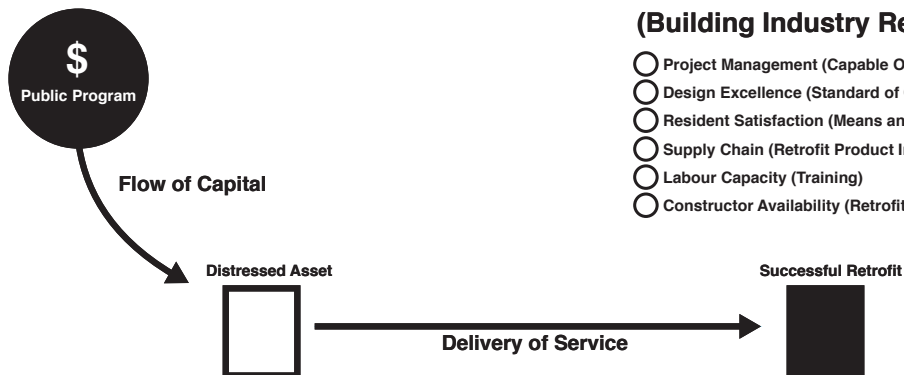
- ☐ Capital Pool
- ☐ Performance Standards and Enforcement
- ☐ Guidance and Support

2. Business Case (Inducing Demand)

- ☐ Incentive Mix (Reward Commensurate with Risk)
- ☐ Ease of Access and Compatibility
- ☐ Suitability of Performance Requirements

3. Streamlined Delivery - Supply of Service (Building Industry Readiness)

- ☐ Project Management (Capable Ownership)
- ☐ Design Excellence (Standard of Care to Meet Performance Objectives)
- ☐ Resident Satisfaction (Means and Methods to Reduce Disruption)
- ☐ Supply Chain (Retrofit Product Innovation)
- ☐ Labour Capacity (Training)
- ☐ Constructor Availability (Retrofit Specific Operations)



WHAT IS TOWER RENEWAL?

Tower Renewal is a strategy to ensure that the affordable apartment tower stock is 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.

There is considerable international precedent to support the Tower Renewal approach. Over the past 30 years, many European countries, including the UK, Germany, the Netherlands and Sweden have implemented national retrofit programs targeting postwar apartment tower housing. Most importantly, these programs have introduced government-driven financial tools and programs to enable retrofits at scale, resulting in significant positive impacts on their economies.

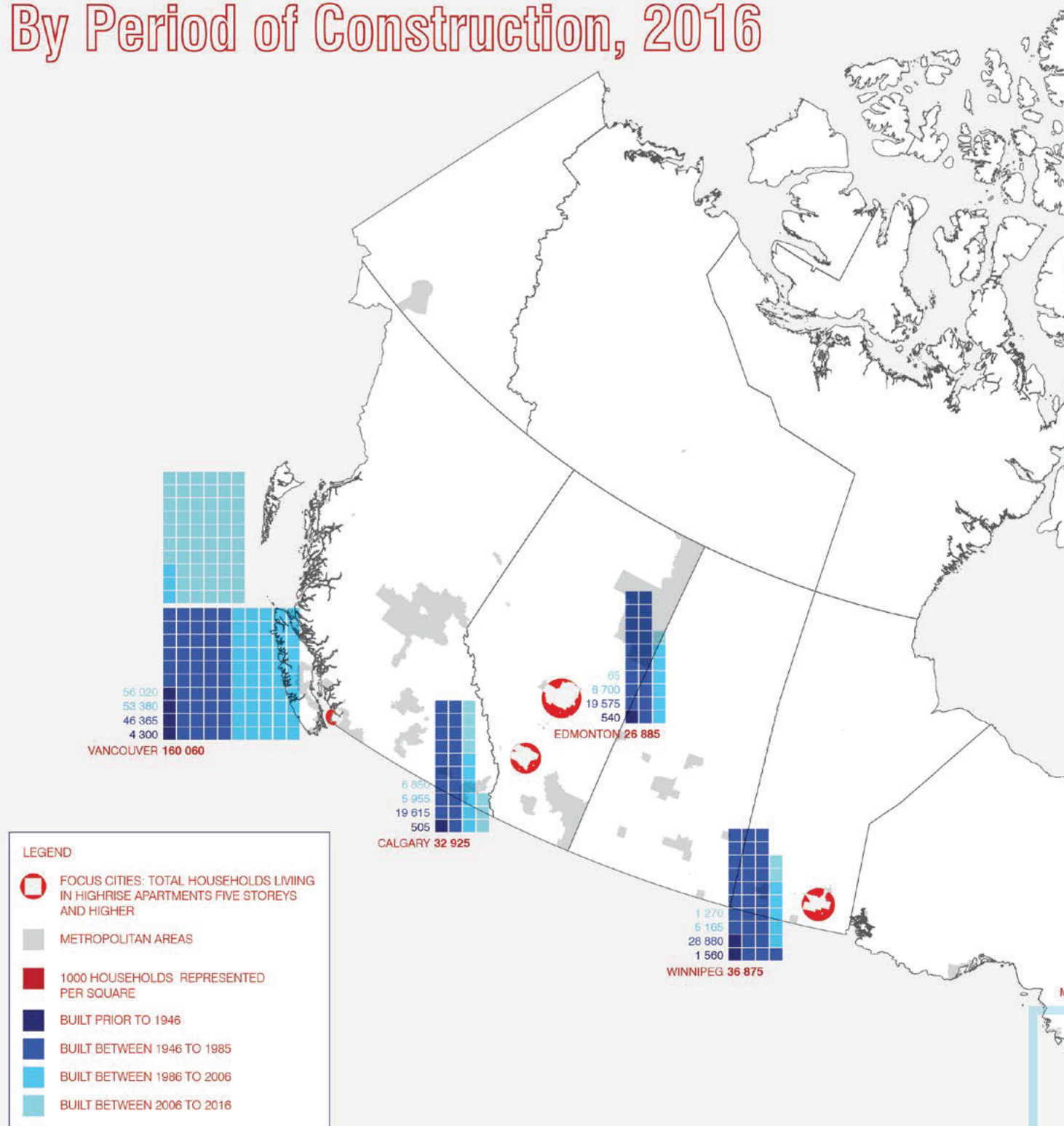
With much of Canada's affordable purpose-built rental housing in need of renewal, the time to act is now. However, costs - along with the need to maintain affordability - continue to be a primary barrier. As a result, the Tower Renewal Partnership (TRP) has undertaken research uncovering the financial challenges and tracing out potential solutions. In 2017, the National Housing Collaborative and the TRP produced Financial Tools for Tower Renewal, a report which proposed program design considerations for federal housing repair and renewal programs. In June 2019, the TRP released Tower Renewal and Retrofit Finance in support of the Canadian Mortgage and Housing Corporation's interest in encouraging the retrofit and renewal of Canadian post-war towers, taking a deeper dive into the economics of comprehensive retrofits in apartment towers. In August 2019, the TRP released Federal Green Housing Measures: Renewal and Affordability which examined a series of potential tax treatments to support broad renewal uptake. And in March 2020, the TRP released draft recommendations for the forthcoming Advancing Building Retrofits in Canada, a report funded by CMHC outlining opportunities for industry investment to make Canada a leader in low-carbon building retrofit.

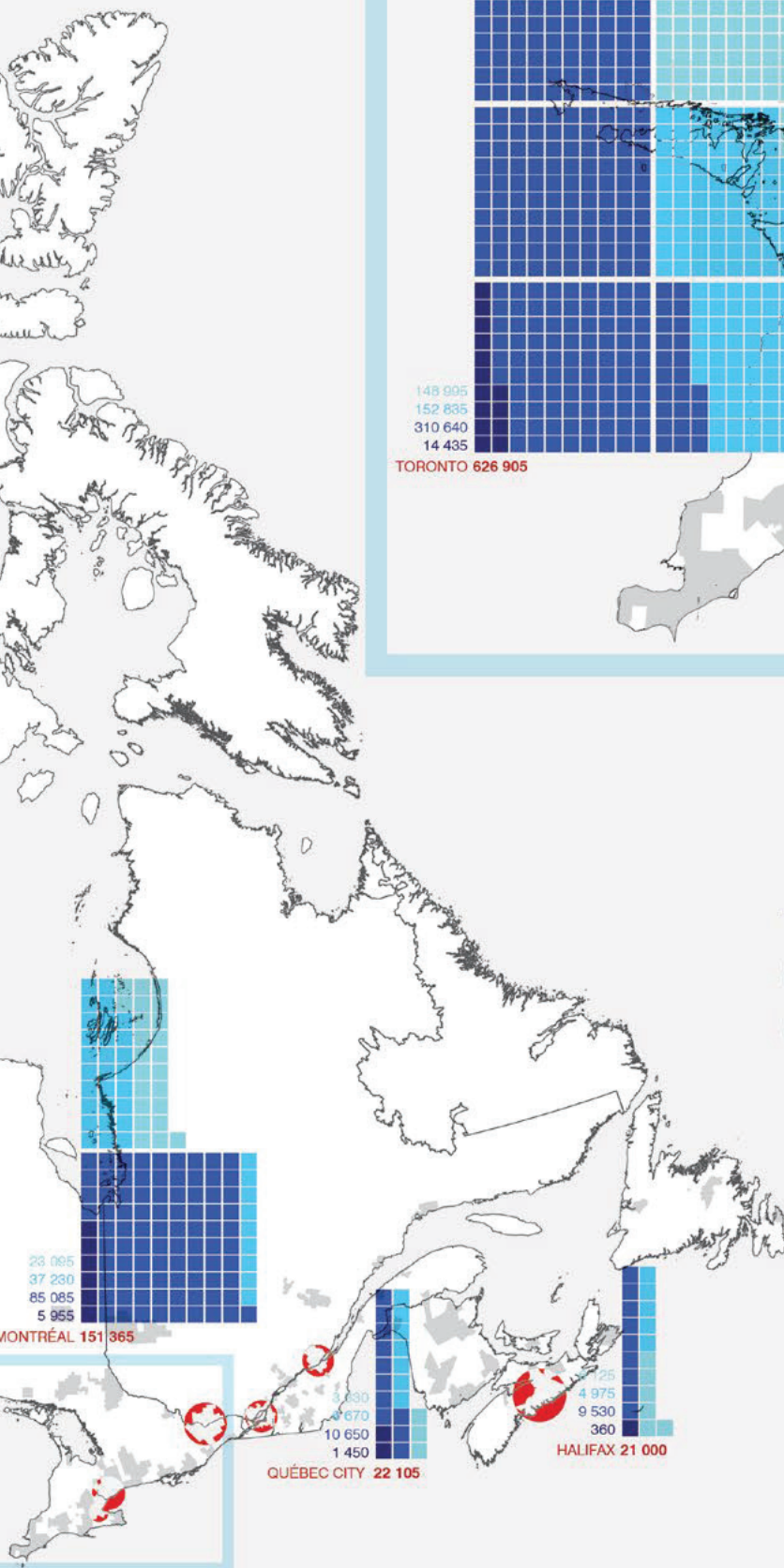
Together, these studies along with a series of bricks-and-mortar demonstration projects, have led to a series of recommendations to accelerate housing repair and renewal in Canada: preserving critical affordable housing, while working toward national climate resilience and housing affordability goals.



CANADIAN HOUSEHOLDS LIVING IN HIGHRISE BUILDINGS (FIVE STOREYS AND HIGHER)

By Period of Construction, 2016





1 391 040 TOTAL HOUSEHOLDS LIVING IN HIGHRISE BUILDINGS IN CANADA

1 000 HOUSEHOLDS PER SQUARE

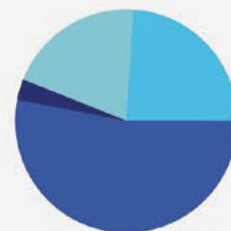
TOTAL HOUSEHOLDS LIVING IN HIGHRISE BUILDINGS BY PERIOD OF CONSTRUCTION

37 610 | (03%) PRE - 1946

739 490 | (53%) 1946 - 1985

335 870 | (24%) 1986 - 2006

278 075 | (20%) 2006 - 2016



ONTARIO

886 705 NUMBER OF HOUSEHOLDS LIVING IN HIGHRISE APARTMENTS IN ONTARIO

55% OF CANADIAN HIGHRISE HOUSEHOLDS LIVE IN APARTMENTS CONSTRUCTED BETWEEN 1946-1985

QUÉBEC

187 800 NUMBER OF HOUSEHOLDS LIVING IN HIGHRISE APARTMENTS IN QUÉBEC

56% OF CANADIAN HIGHRISE HOUSEHOLDS LIVE IN APARTMENTS CONSTRUCTED BETWEEN 1946-1985

BRITISH COLUMBIA

177 830 NUMBER OF HOUSEHOLDS LIVING IN HIGHRISE APARTMENTS IN BRITISH COLUMBIA

31% OF CANADIAN HIGHRISE HOUSEHOLDS LIVE IN APARTMENTS CONSTRUCTED BETWEEN 1946-1985

ALBERTA

62 395 NUMBER OF HOUSEHOLDS LIVING IN HIGHRISE APARTMENTS IN ALBERTA

66% OF CANADIAN HIGHRISE HOUSEHOLDS LIVE IN APARTMENTS CONSTRUCTED BETWEEN 1946-1985

THE AFFORDABILITY IMPERATIVE

Through a shift in market position over several decades, aging purpose-built rental apartment buildings have become the backbone of the rental stock in Canada, and are home to hundreds of thousands of households with modest and low incomes. The majority of these buildings are privately owned. In many respects, this housing is the “de-facto” affordable housing option for Canadians with rental rates lower than those of newer rental buildings. Ensuring affordability is maintained, and that lower income populations are securely housed and not displaced, is a policy priority for all levels of government.

A GROWING RETROFIT IMPERATIVE

As this stock of housing ages, some of the oldest towers are at considerable risk of failure as core systems go offline. As was the case for 650 Parliament Street in Toronto, aging infrastructure can lead to full-building displacement of residents for extended periods of time - multiple years in some cases. With little room in the housing system to accommodate such an event, there is no contingency for widespread high-rise building failures. Mechanisms that ensure investments to maintain a base state of good repair are critical. Further, widespread retrofits to achieve 21st Century building quality objectives, including Canada’s and Toronto’s 2030 and 2050 climate targets, have emerged as key federal and municipal priorities. Initiatives such as TransformTO (Toronto’s climate action strategy), Toronto’s Resilience Strategy, the National Housing Strategy, and an emerging framework through the Model National Code to Alterations to Existing Buildings are gearing policy and industry toward the widespread deep retrofits across existing building stocks. Tower renewal is key in achieving both retrofits for resilience – state of repair & health and safety, as well as retrofits for climate change – deep energy retrofits that move towards decarbonization. The vast potential of tower renewal has been embedded in municipal and federal policy, and marquee demonstration projects are underway.

PROGRESS OVER THE PAST 10 YEARS

A range of municipal, provincial and federal programs geared to housing and climate resilience have led to significant investment in the tower stock, mostly in the not-for-profit and public sectors. This has included marquee deep retrofit projects, such as dozens of retrofits undertaken by Toronto Community Housing Corporation (TCHC), many projects undertaken by BC Housing, the Passive House tower retrofit undertaken by CityHousing Hamilton, and others in the planning stage for private not-for-profits throughout the country. CMHC has earmarked billions for its Co-Investment Fund Repair and Renewal stream. Through this program, large social housing entities have secured portfolio-scale commitments, with TCHC securing \$1.34 billion to engage in asset renewal and deep retrofits. As a result of these early projects and commitments, the retrofit industry is now beginning to develop new capacity across the country. In parallel, a small number of private owners have engaged in deep retrofits, however, wide market uptake has yet to occur.

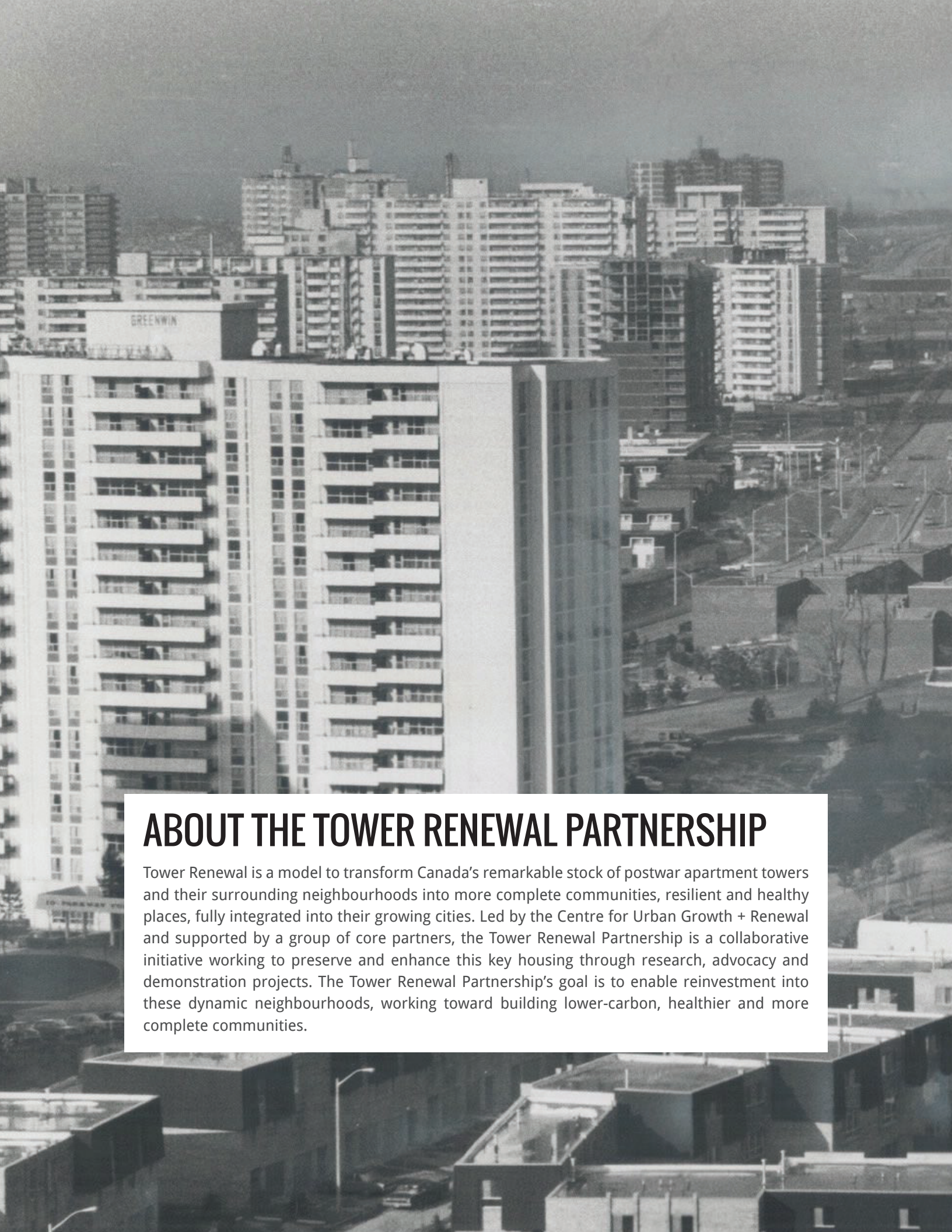
THE CHALLENGE

While strides have been made to engage in retrofits in Canada's publicly-owned apartment towers, private towers are stuck in a policy paradox, where the goal of continued affordability does not align with the increased investment required to ensure housing quality and climate. Since the capital required to engage in a retrofit is substantial, the typical means by which investment in private housing is financed – revenue via increased rent – is at odds with maintaining affordability.

This paradox has led to either: an investment stagnation (low rents and poor/declining housing quality), or investment geared toward up-filtering (strategic investments to attract higher income groups, with mixed results related to state of repair or climate resilience). Coming to a solution that encourages broad investment in the performance of the private housing stock while maintaining rents at affordable levels for lower income groups is of critical importance.

The affordability crisis coupled with a deteriorating stock has meant that the future of this housing is no longer an issue of private asset management -- but rather a matter of public housing policy.

How can the public and private sector work together to unlock required investment and drive retrofits in this aging housing stock, while maintaining affordable rents?



ABOUT THE TOWER RENEWAL PARTNERSHIP

Tower Renewal is a model to transform Canada's remarkable stock of postwar apartment towers and their surrounding neighbourhoods into more complete communities, resilient and healthy places, fully integrated into their growing cities. Led by the Centre for Urban Growth + Renewal and supported by a group of core partners, the Tower Renewal Partnership is a collaborative initiative working to preserve and enhance this key housing through research, advocacy and demonstration projects. The Tower Renewal Partnership's goal is to enable reinvestment into these dynamic neighbourhoods, working toward building lower-carbon, healthier and more complete communities.