

Resilient Towers Hosted by GTAA







500,000
Torontonians
in 35+ year old
buildings

Why Resilient Towers?

Resilient towers is an initiative to define policy changes which will create an **enabling environment** for significantly scaling up retrofits of towers.

- Improve the quality of the city's affordable market rental housing stock;
- Decrease GHG emissions by >50%;
- Improve the livability and social outcomes; and
- Oreate local jobs and support innovation through the retrofit economy.

Resilient Towers Scale



Total Towers ~1200 (City Only)



Target Group ~880 Towers

30-50

Per Year Retrofits

For 20 years

How does this connect to Tower Renewal?

Resilient towers is:

- A time bound project
- From the City Manager's Office
- Working with Tower Renewal and multiple city divisions, including Municipal Licensing, Environment and Energy, Toronto Building
- Focused on system level change to the business case for retrofits

Tower Renewal continues to be the **long term, City leader** mobilizing economic, social, and environmental improvement in tower neighbourhoods.

Work to date



Phase 1

Kick off at TRBOT (Feb)

Interviewed different owners types (Mar-Apr)

Longlist of interventions (May-Jun)



Interview Sheet for Discussions with Tower Apartment Owner/Operators

- Preamble
 Retrofits of apartment buildings have been happening for many years, but usually only at the level of lighting, boiler replacement, and occasionally appliances and windows.
- . Few "deep retrofits" have happened, which would include re-cladding of the building, and a
- comprehensive makeover for energy, water and waste reduction.

 A group of people, including the Toronto Board of Trade, the Tower Renewal Partnership, and the City of Toronto and others are advocating that the Governments of Canada and Ontario take action to encourage and support deep retrofits, and we wanted to find out what you thought might be useful.
- This conversation is totally confidential, and not for attribution. Our intention is just to make sure that what we advocate to government actually makes sense for the owners and operators of buildings.

Introduction

Owner/Operator Type (e.g. REIT, Company, Family Business) Approximately how many residential apartment towers over 8 stories tall built before own or operate? How are they distributed across Canada?

1. What kind of retrofits has your firm undertaken in the last few years (e.g., lighting upgrades, boiler replacement, appliance replacement, window replacement, water efficiency measures like low-flow toilets, shower heads, etc.)?

Incentives Toolkit Draft for Discussion 08 May 2018 1 of 1									O TON PAR	TOWER RENEWAL PARTNERSHIP			
					OWNER TYPES For Polit								
					Implementation		Nongroffi		Fort		Private		
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		FED	Loan guarantees		no	Mid	High		×	×	x	×	×
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		ng and PROV selding	Mandatory benchmarking with accre		forthorning	Mid	High		×	×	×	×	×
			Mandatory disclosure of benchmarking at time of sale		no no	Mid	High		×	×	x	x	×
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	o. megualition	MUN	Municipal Licensing Services		no no	Mid	High	×	×	×	×	×	×

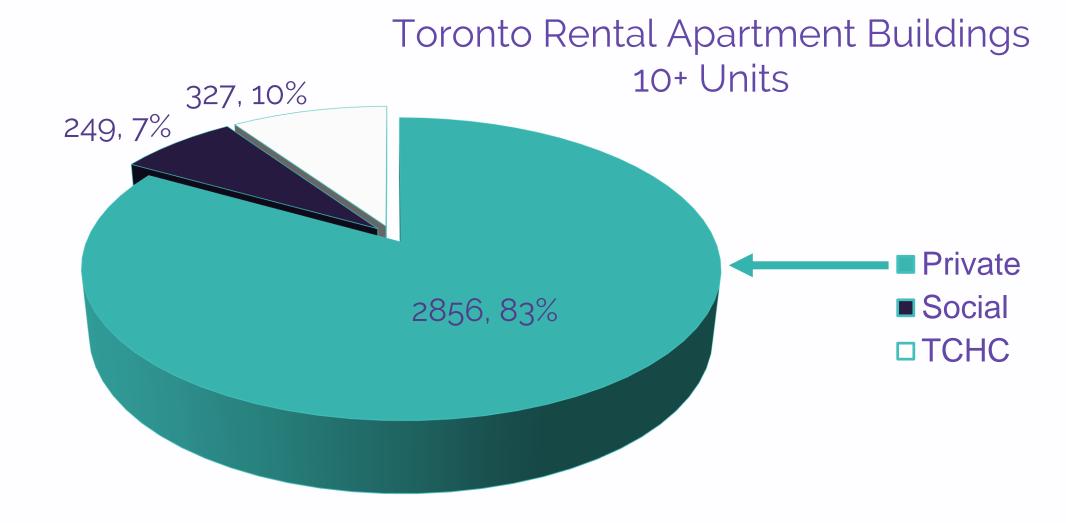
Phase 2 Plan

- A. Create a building taxonomy
- B. Understand ownership
- C. Price retrofits
- D. Create policy changes
- E. Demonstrate the financial model
- F. Implement or advocate for policy change

Categories + Owners

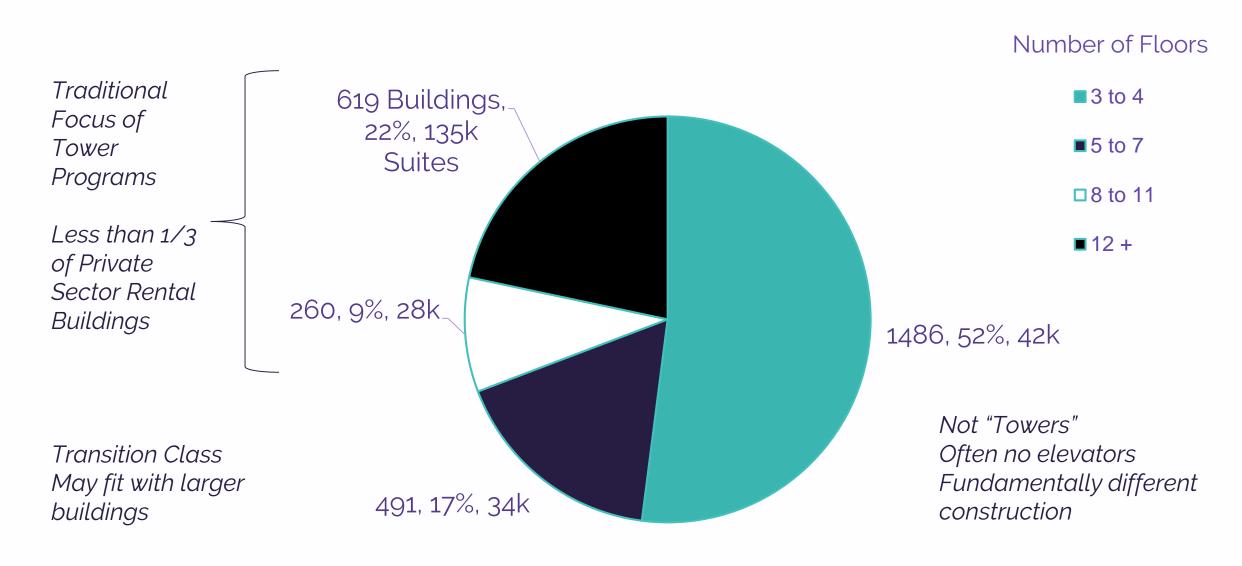


3432 Buildings in Total



2856 Private Sector Rental Buildings

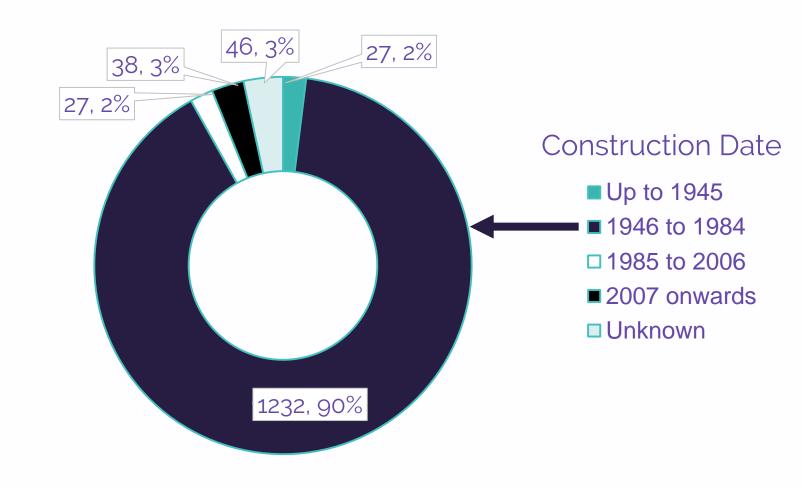
10+ Units



1370 Private Sector Rental Buildings

5+ Floors

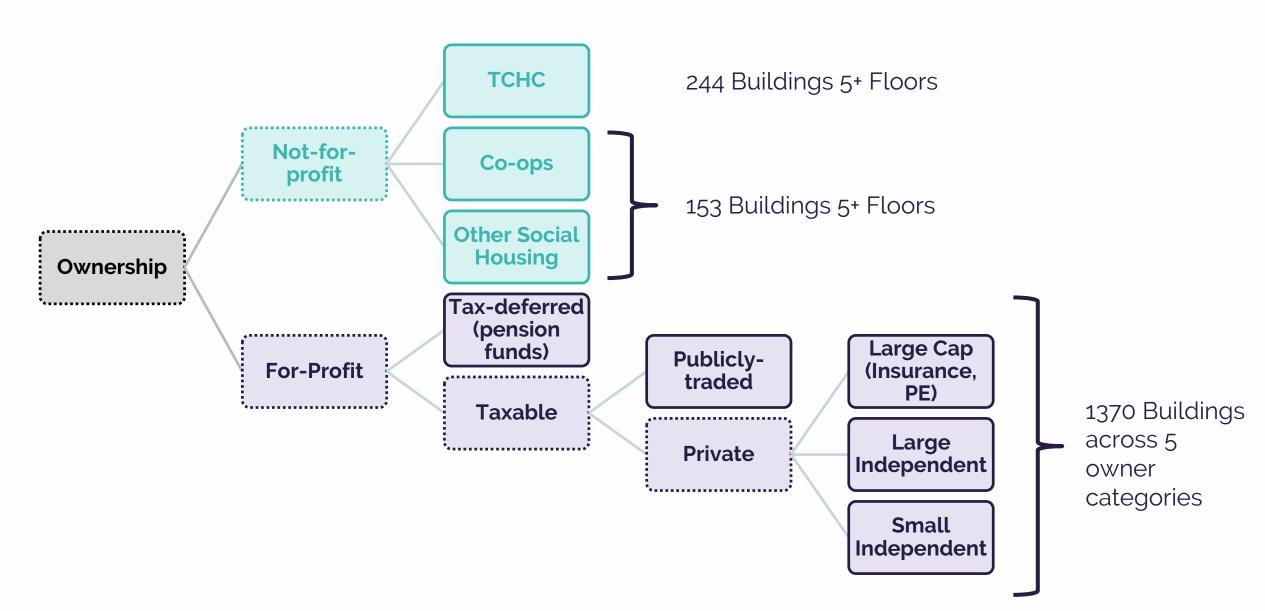
- 90% are between34 and 72 years old
- Only 5% are less than34 years old
- Theoretical useful life may be 100 years or more, but these buildings are "middle aged" or older, with predictable consequences



Category Characteristics

	5 to 7 Floors	8 to 11 Floors	12 + Floors	
Number in Toronto	491	260	619	
Average Suites/Bldg	70	107	218	
More than 34 yrs old	92%	88%	93%	
Electrically heated	5%	5%	10%	
Single-pane windows	14%	11%	12%	
Electricity Suite Meters	70%	70%	75%	
Balconies	85%	93%	94%	
Underground Garage	40%	90%	95%	

Ownership Categories



Ownership Features

	Tax-deferred (Pension Funds)	Publicly- traded (REITs)	Capital Pools (Insurance, PE)	Large Independent	Small Independent
Access to Capital					
Cost of Capital					
Income Tax Exposure	X	√	√	√	√
Access to Services & Information					
Risk Appetite					

Policy Options



Incentive Type	Level	Mechanism	Implementation Instrument	Cost to Government	Feasibility
Grants	FED	Housing Repair and Renewal Stream of the National Housing Co-Investment Fund	Program rules overseen by CMHC		
	FED	Development of new funding streams	Budget 2019 or Budget 2020		
	PROV	Ontario Emissions Reduction Fund	Program rules to be designed by MECP		
Loans	PROV	Infrastructure Ontario Loan Program	Municipal Act of Ontario		
Planning issues	MUN	Expedited permits and approvals	City of Toronto Official Plan & Design Guidelines; Permitting process rules		
	MUN	Infill and development charge discount	City of Toronto Act; by-laws		
	PROV	Limited above guideline rent increases	Residential Tenancies Act; Rent Increase Guidelines		
Taxation	PROV	MPAC re-assessment holiday	Assessment Act; City of Toronto Act		
	MUN	Municipal property tax rate exceptions	City of Toronto Act; by-laws		
	FED	Change CCA rate for retrofit expenditures	Canadian Income Tax Regulations; Budget 2019 or Budget 2020		
Energy Costs	FED / PROV	Providing a floor price on energy to guarantee value of efficiency investments	Natural Resources Canada energy efficiency programming; IESO contract		
Scoring and Benchmarks	FED / PROV	Develop standards for building performance	Documented standards and guidelines		
Regulation	PROV	Mandate minimum building performance	Ontario Building Code		

Federal Government:

National Co-Investment Fund has committed \$5.7 toward the Housing Repair and Renewal Fund: \$2.2B in grants; \$3.5 in direct lending;

First round of investment directed toward not for profit sector, with aim to expansion to private sector;





Federal Government:

Private Sector Considerations:

Up to 15% of project cost eligible for grants;

Up to 70% of project cost eligible for direct government loans; Projects must meet program criteria to be eligible, which include accessibility, energy and affordability requirements,

Program requirements currently under review to expand uptake.





Retrofit Measures







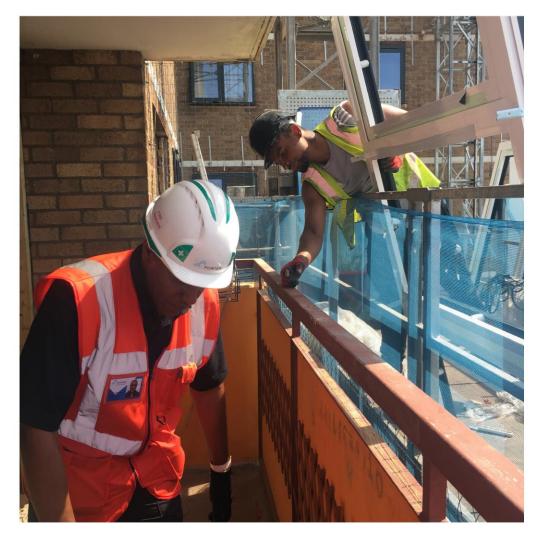








ACCELERATING RETROFIT INDUSTRY













Retrofit Scenarios: Primary Motivation

1. Primary Motivation

- State of Good Repair
- Utility Cost Savings
- GHG Reduction
- Health & Safety Upgrades
- Climate Resilience



Retrofit Scenarios: Performance Level

1. Primary Motivation

- State of Good Repair
- Utility Cost Savings
- GHG Reduction
- Health & Safety Upgrades
- Climate Resilience

2.Performance Level

- Light
- Moderate
- Deep
- Best in Class



Retrofit Scenarios: State of Repair

1. Primary Motivation

- State of Good Repair
- Utility Cost Savings
- GHG Reduction
- Health & Safety Upgrades
- Climate Resilience

2.Performance Level

- Light
- Moderate
- Deep
- Best in Class

3. State of Repair

- Good
- Poor



Retrofit Scenarios: Scenario 1

1. Primary Motivation

- State of Good Repair
- Utility Cost Savings
- GHG Reduction
- Health & Safety Upgrades
- Climate Resilience

2.Performance Level

- Light
- Moderate
- Deep
- Best in Class

3. State of Repair

- Good
- Poor



Retrofit Scenarios: Scenario 2

1. Primary Motivation

- State of Good Repair
- Utility Cost Savings
- GHG Reduction
- Health & Safety Upgrades
- Climate Resilience

2.Performance Level

- Light
- Moderate
- Deep
- Best in Class

3. State of Repair

- Good
- Poor

SUPPORTS AND INCENTIVES



Retrofit Scenarios: Policy Goals

Performance Objectives

- National Housing Strategy (25% GHG Reductions)
- Social Housing Apartment Improvement Program (30%)
- TransformTO (50% GHG Reductions)

Projects meeting these objectives underway in not-for-profit Sector. The goal is to support private sector in this level of retrofit activity





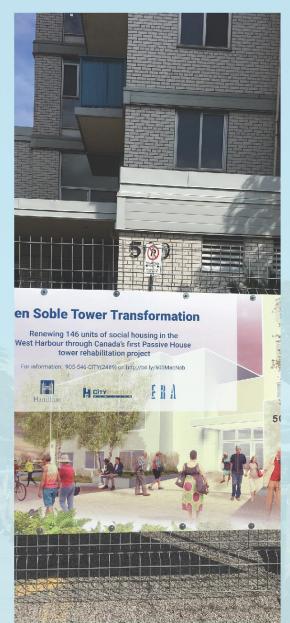
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Next Steps



Support Required

- ASAP Building Financial Data
- ASAP Cost of Retrofit Data
- January Peer Review, Advocacy