







FINANCING & FUNDING HEAT PUMPS IN LOW-RISE MULTI-UNIT RESIDENTIAL BUILDINGS

# Dialogue Summary



URBAN CLIMATE LEADERSHIP, A PROJECT OF 🐼 MakeWay

# Acknowledgements

<u>Urban Climate Leadership</u>, is a Pan-Canadian project of MakeWay, dedicated to dismantling obstacles that local governments face in advancing equitable climate action. In acknowledging the distinctive challenges faced by cities, the initiative assembles a diverse array of expert stakeholders to collaboratively propel systems-changing solutions in four critical areas: financing, AI and cities, procurement and transportation.

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Over half of Vancouver's residents, including a majority of citizens with lower incomes, live in multi-family buildings. **The City of Vancouver** aims to help these residents protect themselves against increasingly common life-threatening climatic events such as extreme heat and fire smoke, while at the same time, reducing the carbon pollution from the buildings they call home. Retrofitting these buildings will require access to affordable capital and the City of Vancouver is striving to understand the role it might play in facilitating this critical element of its response to housing affordability and climate change challenges.

#### The Pacific Institute for Climate Solutions

**(PICS)** brings together the research strengths and capacity of B.C.'s leading universities to advance transformative climate solutions for B.C. and the world. PICS was created in 2008 with an endowment from the Government of B.C., and is hosted by the University of Victoria, in collaboration with the University of British Columbia, Simon Fraser University, and the University of Northern British Columbia.

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Trust is key—programs must be developed in a way that aligns with community values and long-term financial stability

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# Introduction



### Introduction

In the spring of 2024 Urban Climate Leadership (UCL) hosted its first dialogue on transitioning to heat pumps in low-rise multi-unit residential buildings. In less than a year, over 170 individuals representing 100 different private, public and nonprofit organizations have been involved in this process which has included:

**Dialogue #1:** Mapping the barriers to heat pump installations in low-rise MURBs, naming and framing the problem, and identifying criteria for success;

**Dialogue #2:** Identifying solution pathways in communications and messaging, data, workforce development, technology and quality installation and service, policy and regulation, and financing;

Dialogue #3: Exploring financing and funding solutions to accelerating the adoption of heat pumps in low-rise MURBs.

From the onset, this initiative has worked to build an "innovation cluster" of leaders working across sectors, to develop a multi-pronged plan targeted at the disparate needs of different residents and building owners (be they landlords, strata and condo corporations, nonprofit organizations, indigenous communities or cooperatives). This collaborative plan centres **the health**, **safety and resilience of residents** and seeks **accessible**, **feasible and affordable solutions** that will accelerate the transition to heat-pumps in low-rise MURBs - an under-served asset class.

As part of the framing of this initiative, participants seek solutions that are **phased and integrated**, **address overlapping crises** (e.g. housing, climate, health and affordability) and **align with the aspirations of diverse solutions providers**, including educators, contractors, designers, manufacturers and technology innovators, regulators and financiers.



In this, the third major convening of this cluster, UCL convened key leaders to grapple with the most difficult barrier to the transition to heatpumps in 3 and 4 story buildings: financing and funding. Drawing on consultations with dozens of financial leaders and representatives of resident and building owners, UCL prepared a **primer** that charted some of the approaches and existing financing and funding approaches and provided an overview of blended finance, highlighting stories from other jurisdictions. Then we convened over 50 leaders in a solutions oriented dialogue that identified short and long-term criteria for success, probed viable options and recommended tangible financing and funding solutions.

The following report summarizes this expert dialogue. In <u>section one</u>, we explore the criteria over time for successful financing and funding of heat pumps in low-rise MURBs, considering 6 month, 1 year and 5 year time horizons. In <u>section two</u> we explore viable financing and funding options. And, in <u>section three</u> we outline the recommended financing and funding actions that participants felt were most promising in accelerating the adoption of heat pumps in 3 and 4 story buildings.

We recommend everyone read the <u>Conclusion</u> of the report. In this closing section, we introduce an important 'big ask' that responds to the current geo-political and economic moment in Canada that has emerged with the US tariffs and the threats by President Trump to Canada's sovereignty. This 'big ask' is rooted in the work and capacities of this low-rise heat-pump innovation cluster by proposing *A* made in *BC* economic development strategy for accelerating heat pumps adoption in low-rise MURBs.

# What is a low-rise MURB?

We define a low-rise MURB as a 3 or 4 story multi-unit residential building with a shared entrance and common space.

As with all of our dialogue summary reports, we encourage you to review them with their companion **primer** which provides detail and background information to ground our deliberations.





#### SOLUTIONS TO TRANSITIONING TO HEAT PUMPS IN LOW RISE MURBS





# Criteria for Success



We need scalable models for blended finance—loan guarantees, economies of scale, and strategic partnerships with community asset owners to reduce risk

## Overview

As identified in the first discussion primer in this series, the transition to heat pumps in low-rise MURBs is often described as 'the last frontier of decarbonizing the built environment' in urban centres. While in recent years heat pump adoption has certainly accelerated in single-family homes, retrofitting low-rise MURBs presents additional complexities beyond financing. Decision-making processes in strata councils can be slow and fragmented, rental housing providers face affordability constraints and outdated infrastructure in most buildings constructed in the 50s to 90s, may require additional upgrades before heat pumps can be installed. A lack of accessible information, unclear eligibility criteria and complex application processes for funding further discourage building owners from pursuing retrofits, limiting uptake despite available incentives.

> We need to remove barriers between sectors—strata, nonprofits, market rentals—so that everyone has access to financing and support programs

Over the course of the dialogue series, success criteria has evolved from broad systemic enablers such as regulatory alignment and market awareness (Dialogue 1) to more tangible interventions like communications, workforce development, data assessment and monitoring, financial mechanisms and policy coordination (Dialogue 2). In Dialogue 3, the focus narrowed further to define how financing mechanisms must be structured to ensure large-scale, equitable implementation, particularly in response to challenges specific to strata and condo corporation governance, nonprofit and cooperative housing providers, and rental housing operators.

To facilitate the discussion, participants were asked to define success in two time frames during the meeting's first breakout session: 12 months and 5 years. The conversation was guided by questions such as, "What will be different in 12 months because of this collaboration?" and "How will we know if we have succeeded?" The conversation was structured to identify measurable, realistic and scalable financing solutions that reflect market transformation, improved affordability and greater accessibility to financing mechanisms for lowrise MURBs.

Although facilitators structured discussions around these two timelines, post-event evaluation form responses suggested that some participants sought an additional 6-month marker to gauge early progress. Participants stressed that financing programs must be designed for continuous evaluation and evolution to ensure long-term effectiveness, with some suggesting a target of at least 5% retrofits of the target building stock annually.

#### THE SHORT-TERM (1-6 MONTHS) MILESTONES NEED TO GO FROM IDEATION TO ACTION AND MUST BE CLEARLY DEFINED

## Timeline(s) for Success: Immediate, Short-Term & Long-Term

# IMMEDIATE SUCCESS (6 — MONTH MILESTONES)

While six months is a relatively short window, participants emphasized that early indicators of success should be evident through the initial structuring of financing programs, engagement with financial institutions and foundational policy adjustments. These early steps are necessary to create the conditions for large-scale investment in heat pump retrofits.

#### Increased clarity on funding pathways.

- A structured framework mapping different funding sources (government grants, utility-backed financing, private capital) and their eligibility requirements.
- Public funding bodies such as CMHC, FCM and provincial agencies should take preliminary steps toward aligning funding timelines and eligibility criteria to minimize administrative bottlenecks.
- There is strong advertisement and emphasis of importance of heat pump installation to contractors and in trade schools, with consistency in training and messaging to homeowners.

# Early adoption by financial institutions and investors.

 Initial discussions and agreements with banks, credit unions and private lenders to assess risk mitigation strategies for financing heat pump retrofits.

- Loan loss reserves and concessional finance models should begin taking shape, with early-stage agreements being developed between government agencies and lenders.
- Utilities should begin piloting on-bill financing and repayment models that allow heat pump costs to be spread across utility bills.
- There are regular and comprehensive trades training updates, that include heat pump technical education. These programs establish clear pathways for workforce transition from declining industries to the growing field of heat pump installation.

#### Regulatory and policy adjustments underway.

- Governments should initiate coordination efforts to align financial incentives across jurisdictions.
- Discussions should begin on how existing energy efficiency programs can be expanded to include financing for heat pumps in low-rise MURBs.
- Initial work should begin on reducing regulatory and administrative complexity, particularly for strata councils and condo corporations, and rental housing operators seeking financing.

#### Early market and stakeholder mobilization.

- Outreach to building owners, strata councils and rental housing providers to increase awareness of financing options.
- Demonstration projects should be identified or launched to serve as early proof-of-concept case studies.
- Municipalities and utilities should begin engagement campaigns to encourage early adopters and secure commitments from key market players.

These early-stage activities will lay the groundwork for scalable financing mechanisms, ensuring that more formalized financial products, regulatory support and widespread market adoption can take place within the next 12 months.

#### O SHORT TERM SUCCESS (12 — MONTH MILESTONES)

The 12-month milestone marks the transition from early-stage engagement and framework development to actual implementation of financing models, increased market uptake and improved regulatory coordination. By this point, financing solutions should be moving from planning to execution, with clear indicators that funding is becoming accessible and retrofits are starting to scale.

#### Financing models in place and accessible.

- Blended finance models should be operational, integrating public and private capital to offer attractive financing options.
- Government and private lenders should be actively piloting loan and funding agreements to validate feasibility.
- Utility-backed financing programs such as on-bill repayment models should be publicly launched and accessible to building owners.
- A green bank model or equivalent financial intermediary should be in development, aggregating funding sources and reducing risk for lenders.

#### Expanded awareness and market uptake.

- Building owners should have clear, widely available information on financing mechanisms and eligibility criteria.
- Early adopters and pilot projects should be underway, with initial case studies available to demonstrate cost savings and financing viability.
- Financial institutions should be actively issuing loans and structuring heat pump financing packages for MURB owners.

# Regulatory adjustments should be enacted or near completion.

- Municipalities and provinces should be working on removing regulatory barriers that prevent financing solutions from scaling effectively.
- Carbon credit trading and energy efficiency incentive structures should be better defined and positioned to generate revenue streams that support financing efforts.

By this stage, financing should no longer be a concept—it should be a tangible, functioning system, actively facilitating the adoption of heat pumps in MURBs.

#### • LONG TERM SUCCESS (5 — YEAR VISION)

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Five years from now, financing mechanisms should be fully embedded in the market, serving as standard options for building owners, strata and condo corporations, and rental operators. Some participants emphasized the need to set ambitious yet achievable targets, with one suggestion being that at least half of the low-rise MURB housing stock should have completed heat pump retrofits within five years, ensuring affordability and equity.

> At least half of the low-rise MURB housing stock should have completed heat pump retrofits within five years, ensuring affordability and equity

# Market transformation and widespread financing accessibility.

- Financial institutions should be offering mainstream, low-risk lending options for heat pump retrofits, independent of government support.
- A mature blended finance ecosystem should be in place, with revolving funds ensuring continuous reinvestment into financing programs.
- Financing solutions should be integrated into broader decarbonization and energy efficiency programs, ensuring seamless adoption.

Ensuring those facing financial hardship have affordable options to make the choice to switch to a heat pump is essential

# Equity and affordability embedded in financing solutions.

- Non profits, strata council and condo corporations and other rental housing providers should have equitable access to financing without regulatory or structural barriers.
- Financing should be structured in a way that ensures affordability concerns - which are preventing low-income households from being locked out of retrofits - are addressed.
- On-bill financing models should be widely available, allowing repayment structures that reduce upfront financial burdens for building owners.

We need to reduce the cost differential between heat pumps and fossil fuel incumbents by using incentives, aggregators, and regulatory signals to phase out gas systems

# Alignment between financing, policy and market regulation.

- Strong policy signals should create a clear and stable investment landscape, attracting continued private capital for financing.
- Heat pump financing should be fully aligned with national, provincial and municipal climate goals, reinforcing long-term decarbonization efforts.
- Financial models should support deep retrofits beyond heat pumps, integrating building envelope improvements, electrification and grid resiliency measures.
- Regulatory mandates should phase out "likefor-like" gas system replacements, ensuring that financial and policy incentives actively support heat pump adoption rather than maintaining fossil fuel dependency. Participants emphasized that without stronger policy intervention, many building owners will default to familiar, short-term solutions rather than prioritizing decarbonization. Removing outdated policy loopholes and aligning energy efficiency standards with climate goals were identified as critical steps to ensuring long-term market transformation.

At this stage, heat pump retrofits should be financially viable, widely accessible and deeply embedded in standard building upgrade pathways, ensuring a lasting transition away from fossil fuel-based heating systems.



### **Timeline Summary**

The success criteria outlined above provide a roadmap for ensuring that financing solutions for heat pump retrofits in low-rise MURBs are accessible, scalable and equitable. In the short term, success will be measured by the establishment of key financing mechanisms, regulatory alignment and increased engagement from lenders, utilities and government agencies.

Over the next five years, these mechanisms must evolve into standardized, market-driven solutions that facilitate widespread adoption, ensuring that heat pumps become a viable and attractive option for building owners across various ownership models.

Beyond five years, success will mean full market transformation, where financing for heat pump retrofits is seamlessly integrated into standard lending and investment practices with minimal public intervention. Policy evolution will continue to play a critical role, with stronger building efficiency mandates, expanded electrification incentives and grid modernization ensuring that heat pumps become the default heating and cooling solution in urban residential buildings. Private capital and financial institutions must remain engaged, ensuring that financing solutions are sustainable and adaptable to emerging technologies and evolving energy market conditions. As these financing models mature, they should align with Canada's 2030 Emissions Reduction Plan and British Columbia's CleanBC Roadmap to 2030, which set ambitious targets for building sector decarbonization. Heat pump retrofits should be positioned within a broader climate resilience strategy, integrating with other decarbonization efforts such as building envelope improvements, demand-side energy management and net-zero building policies.

While this session identified clear pathways for success, participants also noted areas requiring further discussion. Questions remain on how public financing can prioritize public benefit, how financing structures can best serve low-income households, small-scale landlords and strata councils with limited borrowing capacity. More work is needed to ensure successful financing models can be scaled across different provincial and municipal regulatory environments.

Ensuring long-term success will require bolder moves in aggregating buildings to achieve a scale of demand that will drive market transformation. This will entail leadership by government and collaboration among industry, financial institutions and building owners to sustain momentum and drive lasting systems change in the built environment.

#### SECTION 02

# Viable Options



We need simple, aligned, and proven financing models that reduce complexity for both tenants and building owners

# Overview

The second breakout session was designed to assess potential solutions across the blended finance spectrum, drawing from examples provided in the discussion primer and participant expertise. The discussion primer was designed to stimulate dialogue by profiling a range of possible models, not to prescribe specific solutions. While some of the options presented in the primer were met with strong support, others served primarily as starting points for analysis, critique and refinement - which are later exemplified in Recommended Actions. In this section, we have captured each of the viable options to reflect the diversity of financing tools available, the collaborative effort to assess their relevance and applicability in the BC context, and to reflect new ideas that were generated by participants through the discussion. We recognize that there is some overlap with section 3, which identifies the options that participants moved out of the 'viable' category to recommended courses of action.

# Responses to Proposed Financing Models

#### **BLENDED FINANCE MODELS**



We should develop an interlocking series of agreements between existing concessionary capital sources (e.g., CMHC, BC Housing, CIB) to create standardized financing structures

**Proposed Model:** The discussion primer highlighted blended finance as a means of combining public capital, private investment and concessional loans to lower financial risk for lenders and provide affordable financing options for building owners.

#### **Participant Response**

 There was broad agreement that blended finance is necessary to unlock large-scale investment in heat pump retrofits, but participants emphasized the need for greater transparency in how public and private funds interact to ensure long-term sustainability.

- Participants raised concerns that without clear oversight, public funds could be used to subsidize private lenders in a way that does not meaningfully increase financing accessibility for building owners.
- Many attendees suggested that concessional public capital should be tied to specific affordability and decarbonization requirements to ensure that financing supports low-carbon investments and remains accessible for smallscale rental providers, non-profits and sstrata and condo corporations with limited borrowing capacity.

#### LOAN LOSS RESERVES

**Proposed Model**: Loan loss reserves were identified as a way to leverage private capital, reduce lender risk by providing a government-backed safety net in cases of default, making loans for heat pump retrofits more attractive to financial institutions.

#### **Participant Response**

- Participants generally supported the expansion of loan loss reserves but expressed concern that existing reserves may be too limited to support large-scale adoption.
- In addition to supporting commercial lenders, participants want to see any loan loss reserves apply to credit unions, pension funds and philanthropic institutions who are involved in heat pump retrofit financing.
- Several participants proposed tiered loan loss reserves, where higher-risk borrowers (such as small landlords, non-profit societies or lower-income strata and condo corporations) could access deeper coverage, making financing more inclusive.

#### UTILITY-BACKED FINANCING

**Proposed Model:** On-bill financing, in which heat pump costs are repaid through utility bills, was proposed as a way to lower upfront capital requirements for building owners.

#### **Participant Response**

- Many participants supported on-bill financing but noted that utility-backed programs must be flexible enough to accommodate seasonal energy cost fluctuations to prevent payment shocks for building owners.
- Some raised concerns about administrative complexity, particularly for smaller landlords and strata and condo corporations unfamiliar with utility-backed financial structures.
- There was discussion around expanding utility-backed financing beyond just energy providers to allow municipalities or private investors to participate in similar repayment structures.

#### STRATA AND CONDO CORPORATION SPECIFIC FINANCING SOLUTIONS

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It's critical to develop financial products that serve both strata owners who can access capital and those who can't

**Proposed Model:** Recognizing that strata governance presents a significant financing barrier, the discussion primer suggested targeted financing solutions, including specialized lending models with competitive rates and longer amortization periods for mortgages and strata hardship funds.

# Pace Financing in BC

Property Assessed Clean Energy (PACE) financing allows building owners to repay energy upgrades (like heat pumps) through property tax bills. While popular in parts of the U.S., PACE is not widely used in BC due to:

- A lack of enabling legislation
- Concerns from mortgage lenders
  about repayment priority
- The need for strong municipal coordination

Like on-bill financing, PACE aims to simplify repayment, but rollout in BC has been limited.

#### **Participant Response**

- Many participants agreed that strata-specific financing solutions are critical, but some expressed concerns about the administrative burden of securing collective approval for borrowing.
- Some proposed government-backed strata loan guarantees to minimize borrowing risks for strata and condo corporations, particularly in older buildings with limited reserve funds.
- Support tenants in strata and condo corporation buildings so they are not left behind.

#### CAPITAL AGGREGATION MECHANISMS

**Proposed Model:** The discussion primer profiled centralized financial intermediaries, such as a "green bank," to aggregate funding sources and streamline financing access for MURB owners.

#### **Participant Response**

- Participants widely supported this concept but emphasized that aggregation must go beyond financial capital to include technical and administrative support to guide building owners through the financing and retrofit process.
- Participants profiled the important role of concierge services to help strata councils, landlords and non-profits navigate complex funding streams and noting that BC has a number in place (e.g. ZEIC, Afine, AHMA and BC Non Profit Housing)
- Others recommended regional or municipal-level financing pools to increase accessibility for buildings with limited access to large-scale lending institutions.

#### CARBON CREDIT AND MARKET-BASED INCENTIVES

**Proposed Model:** The primer explored the potential for revenue generation through carbon credits, allowing building owners to monetize emissions reductions.

#### **Participant Response**

- Many participants expressed skepticism about the feasibility of integrating carbon credits into financing structures due to the complexity and administrative burden of certification.
- Some suggested simplifying participation through collective carbon aggregation models, where groups of buildings could sell credits collectively rather than navigating the market individually.

- A key concern was that the carbon credit value of individual building retrofits is often too low to be financially attractive to buyers, limiting the effectiveness of carbon markets as a financing tool. Pooling credits from multiple buildings was seen as a necessary strategy to increase overall market value and create a viable revenue stream.
- There was discussion about aligning carbon credit programs with provincial and municipal energy policies to ensure greater participation.

# Additional Viable Options Identified by Participants

Beyond the financing models outlined in the discussion primer, participants proposed additional solutions to address gaps and improve accessibility.

Green Mortgages and Second-Lien Loan Products: Expanding access to financing by integrating heat pump retrofits into mortgage refinancing and second-lien loan structures.

Performance-Based Financing (Energy-as-a-Service Models): Expanding the ESCO model where third-party service providers finance, install and maintain heat pumps in exchange for a share of the resulting energy cost savings.

Public-Private Climate Investment Funds: Pooling capital from pension funds, impact investors and philanthropic organizations to provide long-term, below-market-rate financing.

Tenant-Inclusive Financing Solutions: Exploring cost-sharing mechanisms or rebates for tenants in rental buildings where landlords are hesitant to invest in heat pump retrofits.

# Ontoly

Ontoly Carbon is a B.C. based emerging company that offers a platform that enables carbon credit buyers—like banks, developers, or corporations—to offer additional financing for retrofits in exchange for certified emissions reductions. Their software helps aggregate carbon savings across buildings and simplifies the process for building owners to participate in the carbon market.

# Viable Options Summary

The dialogue reinforced that while multiple financing pathways exist, ensuring accessibility and scalability remains a key challenge. Participants emphasized that financing solutions must be aligned with real-world decision-making processes, particularly for strata and condo corporations, non-profit and indigenous housing providers, landlords and cooperatives. Additionally, they noted that financing alone is not enough—funding applications must be streamlined and ideally integrated (not stacked) to reduce administrative burdens and programs must provide technical guidance to ensure building owners can effectively navigate funding opportunities. Moving forward, further work is needed to align financial mechanisms with policy and regulatory frameworks, expand risk-mitigation tools like loan loss reserves and ensure that financing solutions support equity and accessibility across different ownership models. Further work in aggregating buildings according to energy profile and retrofit needs will also help drive demand and demonstrate the size of the market opportunity for financiers.



SECTION 03

# Recommended Actions



Set a program size that is quickly achievable, but don't build a pilot build a scalable, minimum viable product (MVP) or prototype



### Overview

In the final session, participants were asked to develop concrete, actionable recommendations, moving beyond broad goals to specific implementation of heat pump/retrofit strategies suited to the ownership complexities of low-rise strata and condo corporations, rental portfolios and non-profit housing providers.

Facilitators emphasized the importance of clear, measurable and achievable actions, encouraging participants to define who should lead, what funding mechanisms should be leveraged and what policy changes are required. Information for this section was synthesized from rapporteur notes capturing key recommendations and supporting justifications. The evaluation form responses helped identify areas where further refinement, stakeholder engagement or regulatory alignment is needed to ensure the effectiveness of these recommendations. Although there is overlap with the section above on viable options, the summary below captures the best thinking that emerged from across sectors to guide next steps.

## Action 1: Strengthening and Expanding Financing Mechanisms

PACE financing would be great, but it's a distraction in B.C. right now—Loan Loss Reserves from foundations or concessional finance would get things rolling much faster

Refine existing financing programs and introduce new models that reduce risk, improve accessibility and scale adoption across different ownership structures.

#### EXPAND LOAN LOSS RESERVES AND RISK-MITIGATION STRATEGIES

- Increase public funding allocated to loan loss reserves to de-risk private sector lending and encourage financial institutions to offer heat pump retrofit financing at scale.
- Explore philanthropic and private-sector partnerships to supplement public loan loss reserves, ensuring broader access for non-profits, strata and condo corporations, and small-scale landlords.
- Introduce tiered loan loss reserves, where riskier borrower groups (such as rental operators in older buildings) receive greater financial protection to make financing viable.

**Considerations:** Expanding loan loss reserves can make financing more accessible and affordable, particularly for those with limited borrowing options. However, sustained funding is required to ensure long-term viability. If poorly structured, reserves may not be effectively targeted to those most in need.

#### DEVELOP SPECIALIZED STRATA FINANCING SOLUTIONS

- Implement strata loan guarantee programs that reduce financial risk for lenders, allowing strata corporations to secure funding.
- Standardize financing options, ensuring rental units are included in funding eligibility.

**Considerations:** Specialized strata financing solutions can help address governance and borrowing challenges unique to strata buildings, making retrofits more feasible.

#### SCALE UTILITY-BACKED AND GREEN BANK FINANCING MODELS

- Expand on-bill financing to provide low-cost repayment structures for heat pump retrofits, ensuring that upfront costs do not pose a barrier.
- Develop a regional or municipal green bank to pool public and private capital for financing energy efficiency retrofits in MURBs.

**Considerations:** Utility-backed and green bank financing can streamline funding access and lower upfront costs, increasing adoption rates. However, implementation complexity and administrative costs could limit the speed and scale of program rollout.

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BC Hydro and municipal utilities should play a larger role in managing capital for energy efficiency projects Participants called for BC Hydro and other utilities to play a stronger role in financing and implementation.. Several noted that electrical infrastructure upgrades should be embedded within retrofit programs and that BC Hydro's 10-year plan must reflect the increased demand heat pump adoption will bring. The consensus was that BC Hydro should view these investments as part of a broader climate and infrastructure build out strategy that ensures adequate electricity is available at site to upgrade low-rise MURBs.

#### PILOT ENERGY-AS-A-SERVICE MODELS

- Establish pilot programs for third-party-owned heat pump systems where building owners pay for performance rather than the equipment itself, reducing financial risk.
- Create regulatory structures that allow thirdparty service providers to operate across multiple jurisdictions without excessive administrative burden.

**Considerations:** Energy-as-a-service models reduce financial risk for building owners and provide an alternative to traditional financing. The challenge lies in ensuring fair contract terms and regulatory alignment to prevent unintended cost burdens.

# Action 2: Aligning Policy and Regulatory Frameworks to Support Financing

Participants stressed that financing mechanisms alone will not be sufficient unless policy and regulatory barriers are addressed. Several recommendations focused on ensuring that financing programs are integrated into broader decarbonization policies.



Synchronizing FCM and CMHC funding timing and requirements would be useful ... they don't always mesh well together!

#### ALIGN PROVINCIAL AND FEDERAL INCENTIVE PROGRAMS

- Streamline eligibility criteria and application processes for heat pump financing programs across CMHC, FCM and provincial energy agencies.
- Establish clear alignment between utility rebate programs and financing incentives, ensuring that these supports work in tandem rather than competing with one another.

**Considerations:** Aligning incentives across government levels can make financing more predictable and accessible, improving program uptake. The risk is that intergovernmental misalignment or bureaucratic inefficiencies may continue to create barriers.

#### REDUCE REGULATORY AND BORROWING BARRIERS FOR STRATA COUNCILS

 Review provincial legislation governing strata borrowing, particularly restrictions that make it difficult for strata and condo corporations to access financing for common building-wide retrofits.

#### INCENTIVIZE AND REGULATE HEAT PUMP ADOPTION

- Consider mandatory benchmarking and disclosure policies that require building owners to report on energy performance, encouraging early adoption of retrofits.
- Expand property tax incentives or rebates to reward building owners who invest in heat pump retrofits, particularly in rental housing and non-profit sectors.

**Considerations:** Incentives and regulations can accelerate adoption by making heat pumps a more financially attractive option. The risk is that incentives may not be sufficient to drive wide-spread change without complementary policies and financing tools.

# Action 3: Expanding Financial Accessibility and Equity

Ensuring that financing models work for all types of building owners—including non-profits, small landlords, indigenous groups, cooperatives and lower-income strata and condo corporations was a recurring theme. Participants recommended targeted actions to reduce financial barriers for groups that are often excluded from traditional financing models.

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If extreme heat events continue, banks should start viewing heat pump adoption as a risk factor in mortgage underwriting mortgages should not be at risk because people are dying from heat exposure in units



#### MORTGAGE INSURANCE PROGRAM FOR LOW-RISE MURBS

- Expand the CMHC Mortgage Insurance Program to enable preferential terms for refinancing low-rise MURBs retrofits for heat pumps. (If not CMHC then consider a selected private financial institution to manage the program).
- Ensure that there are points for accessibility, affordability, energy efficiency and GHG reductions. Use these points to achieve deeper discounts in lending and longer amortization periods.
- Aggregate some of the major affordable housing organizations (e.g. Affordable Housing Society, Brightside, Community Land Trust, Pacifica) to create a big enough portfolios to accelerate the set up of the program.

**Considerations:** Aligning incentives across government levels can make financing more predictable and accessible, improving program uptake. The risk is that intergovernmental misalignment or bureaucratic inefficiencies may continue to create barriers.



Community bonds could be an amazing solution for the non-profit and co-op sectors, allowing local capital to stay within the community

#### LAUNCH COMMUNITY BONDS FOR SOCIAL HOUSING RETROFITS

 Community bonds allow local investors to fund retrofits in co-ops or non-profits while keeping capital within the community. They are similar to traditional bonds, acting as an interest-bearing loan from an investor with a set rate of return and a fixed term.

 The sale of community bonds could be a way to engage tenants and local communities and build a sense of ownership in a heat pump retrofit project.

**Considerations:** Community bonds are seen as a high-potential mechanism for mission-driven housing providers, which could help finance gaps where conventional loans are inaccessible.

#### ESTABLISH LOW-INCOME, LOW-CARBON FINANCING PROGRAMS

- Provide interest-free or deeply concessional loans for heat pump retrofits in affordable housing and low-income rental properties.
- Design financing structures that minimize split incentive issues between landlords and tenants, ensuring that rental affordability is maintained.

**Considerations:** Targeted low-income financing ensures that decarbonization benefits all building owners and tenants. However, demand may exceed available funding, and program sustainability will depend on long-term financial backing. This could be an arena where social impact investors could provide deeper discounted rates by achieving social and environmental benefits.



Households living in poverty or with limited means cannot be left behind in this transition

#### DEVELOP TARGETED SUPPORT FOR NON-PROFIT AND BELOW-MARKET HOUSING PROVIDERS

- Create dedicated funding streams for nonprofit housing providers that offer longer repayment terms and more flexible underwriting criteria.
- Ensure non-profits have access to technical support and financing concierge services to navigate complex funding programs.
- Where there is no capacity to enter into a financing arrangement, extend government grants and philanthropic support to ensure residents living in distressed buildings are able to secure safe and adequate heating. cooling and air ventilation.Explore the New York City pilot projects of providing window mounted heat pumps to social housing groups. Is there an advantage to bulk purchasing these for targeted buildings?

**Considerations:** Providing non-profit housing with tailored support ensures affordability and energy efficiency improvements. The challenge is balancing accessibility with program complexity, as non-profits may require significant administrative support.

#### IMPROVE AWARENESS AND ACCESSIBILITY OF FINANCING OPTIONS: ONE STOP SHOP?

- Launch public outreach campaigns to increase awareness of financing solutions, ensuring that strata and condo corporations, landlords and non-profit housing providers understand their options.
- Enhance and expand existing concierge services or centralized platforms to provide better coordination and support for building owners seeking to navigate available funding streams and application processes.

**Considerations:** A centralized resource can simplify financing access, particularly for smaller building owners unfamiliar with the process. The main risk is that awareness efforts may not reach all stakeholders, limiting impact. The plenary pitch session revealed broad support for a strengthened **one-stop-shop model**, with many participants emphasising the need for a centralized hub that could simplify access to loans, grants and retrofit contractors for all tenure types.

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We need a 'one-stop shop' approach for financing solutions, but tailored to different housing tenures strata, non-profits, co-ops, purpose-built rental



### Action 4: Strengthening Private Sector and Institutional Investment

How do we make it clear in the market and property valuation that retrofits add long-term value

Participants emphasized the importance of attracting private capital into financing solutions to ensure long-term sustainability beyond public subsidies.

#### ENCOURAGE LENDER PARTICIPATION THROUGH STANDARDIZED FINANCIAL PRODUCTS

- Develop green mortgage and second-lien loan products that enable building owners to finance heat pump retrofits within existing mortgage structures.
- Work with financial institutions to establish standardized lending criteria for energy efficiency projects, ensuring that financing is scalable.

**Considerations:** Standardized financial products can make heat pump retrofits more accessible through conventional lending channels. The risk is that banks and lenders may be slow to adopt these products without clear financial incentives.

#### LEVERAGE PENSION FUNDS AND INSTITUTIONAL INVESTORS

- Explore mechanisms for pension funds and impact investors to provide capital for large-scale heat pump retrofit financing.
- Establish climate investment funds that blend public and private capital to provide low-interest loans for retrofits.

**Considerations:** Engaging institutional investors can unlock significant capital for retrofits, reducing reliance on public funding. However, private investors may require guarantees or structured returns, which could complicate public-private collaboration.



The ability to regulate large office and retail GHG emissions has a clear business case—how do we make residential retrofits as compelling?

#### EXPAND CARBON CREDIT AND MARKET-BASED INCENTIVES

- Simplify participation in carbon credit programs, allowing multiple buildings to aggregate emissions reductions for collective carbon trading.
- Develop standardized carbon valuation models to ensure that financing programs can reliably integrate carbon market incentives.

**Considerations:** Carbon credit incentives can generate additional revenue for building owners investing in heat pumps. However, market volatility and complex certification processes may limit effectiveness.



### Summary

The need to get the processlevel work nailed – having a big pot of money won't be helpful if the players in the ecosystem aren't ready, like other financiers, incentive providers, etc."

The recommendations noted above emerged through a short dialogue among experts. They are neither exhaustive nor complete and they require deep collaboration and coordination between financial institutions, government agencies, utilities and building owners if they are to succeed. Several key gaps remain, including the need for standardized financial frameworks, improved regulatory alignment and targeted funding for underserved building owners. Moving forward, continued dialogue will be needed to refine these strategies, test pilot programs and ensure that financing solutions are structured to drive meaningful decarbonization at scale.

These insights provide a clear direction for the next phase of work: aligning financial mechanisms with policy frameworks, expanding risk mitigation tools and ensuring that financing solutions are both accessible and equitable across different ownership models. With focused collaboration, these recommendations can move from concept to implementation, supporting the transition to heat pumps in low-rise MURBs across Canada.

### SECTION 04

# Conclusion



"

Canada's old relationship with the United States, based on deepening integration of our economies and tight security and military cooperation, is over... Canadians must fundamentally reimagine our economy - *Prime Minister Mark Carney* 



As Urban Climate Leadership hosted our third dialogue on financing and funding heat pumps in low-rise MURBs, an economic tsunami was hitting the country. President Donald Trump announced that our greatest ally was no more. The US was applying 25% tariffs on Canadian goods and was seeking to make Canada its 51st state.

Against this backdrop, our provincial government stepped up to reassure British Columbians that they had our backs and convened key business, labour and indigenous leaders to strategize about BC's economic response. Municipalities took stock of their vulnerabilities to the US trade war and grassroots movements of residents launched "buy Canadian" campaigns. It was amidst this economic storm that the calls for reducing our dependence on the US emerged. UCL, with our partners, began researching reliance on US heat pump testing, technologies and services and mapped out our relationships with other global suppliers. Through dialogue with government officials, city serving organizations and national think tanks working on US Canada trade, UCL evolved our thinking on financing and funding heat pumps to reflect the historic moment and opportunity.

UCL has proposed a "made-in-Canada economic opportunity that would be guided by the BC government and scaled across the country. The main tenets of the idea - A made in BC economic development strategy for accelerating heat pumps adoption in low-rise MURBs.

- Aggregate enough low-rise MURBS to transition to heat pumps to send a demand signal to accelerate market transformation.
- Leverage private capital including pension, public and social investment funds to create blended finance products to accelerate heat pump adoption.
- Enhance job creation in heat pump installation and service, with a potential to create a manufacturing site in BC (e.g. with a Japanese or South Korean partner) near a port to supply other areas of Canada.
- Reinforce existing investment in BC concierge services to provide wrap-around services for building owners and managers and create a deal flow for financial institutions.
- Achieve energy performance in older residential buildings and reduce green-house gas emissions.

This initiative is grounded in the work that we have been developing together since early 2024 on multi-solving the transition to heat pumps in low-rise MURBs. We have argued that this "cluster" or ecosystem of solution providers, is an asset for taking bold and decisive action on the delivery side of the economic development strategy.

Success on the delivery side of the equation, would need to include end-to-end scalable capabilities to design, install, support and finance heat pump upgrade retrofits to the aggregated goal of 5,000 buildings. We have also noted that successful delivery side conditions could unlock the potential for a heat pump and building electrification industrial policy in BC creating investment opportunities for Canadian pension plans, banks, philanthropic and social impact investors.

This made in BC economic development strategy for accelerating heat pumps adoption in lowrise MURBs would move this group from trying to solve for heat pumps on a building by building basis, to a much bolder ask of our provincial government. It would entail working across municipalities to forge a strong consensus on the policy levers that could be used to accelerate heat pump adoption. It would rely on our ecosystem of solution providers - across all building tenures including landlord, strata, non-profit and cooperatives - to identify the buildings to aggregate in the province. And, it would require defining the steps that would be needed to enable the workforce development and the concierge services to meet the need.





#### To this end, UCL is recommending that:

- The BC government announces aggregation of 5,000 low-rise MURBs in BC to transition to heat pumps to send clear demand signal to accelerate market response.
- Urban Climate Leadership works with lowrise MURB heat pump cluster to coordinate target buildings across tenure types, workforce training, concierge services, private capital investors, testing and potentially manufacturing services.
- BC government works with utilities and others to target programs to leverage private capital.
- BC government works with other provinces to champion a made-in Canada solution to heat-pump transition emphasizing the economic sovereignty, health, safety, workforce development, equity and climate imperatives.

This "big idea" needs to be developed and refined in consultation with you and others within government, and further with other private and non-profit leaders who are working in this space. It is also an initiative that needs to be driven by an "urgency of now" with an eye toward market transformation and long-term benefits for British Columbia and Canada.

Urban Climate Leadership, with our collaborators and partners, recognize that the social and economic terms of engagement have changed with our major ally and trading partner. Yet with this shift away from the US, new opportunities emerge that can meet this moment. A robust and bold initiative like a made in BC economic strategy to transition to heat pumps in low-rise MURBs, supports our province's commitment to advancing the health, safety, affordability, economic development and resilience of our communities and our workforce and it accelerates our commitment to climate change by decarbonizing the most underserved asset class of buildings where so many British Columbians reside.



# Appendix

# Table 1.0

#### FINANCING AND FUNDING HEAT PUMPS IN LOW RISE MURBS - VIABLE ACTIONS

What is the Action?	What Does the Action Entail?	Who are the lead actors?	Who are the supporting actors?
Expand Loan Loss Reserves and Risk-Mitigation Strategies	Increase public and philanthropic capital to backstop lender risk and unlock more financing for heat pump retrofits	Federal & Provincial Governments	Foundations, Financial Institutions, Impact Investors
Develop Specialized Strata Financing Solutions	Introduce tools like strata loan guarantees, hardship funds and standardized products that work within strata governance	Provincial Governments	Strata Councils, Credit Unions, Lenders, CHOA, VISOA
Scale Utility — Backed and Green Bank Financing Models	Use utility bills as repayment tools (on-bill financing) and create cen- tralized green banks to pool and deploy capital	Utilities, Municipalities	Provincial Government, Financial Institutions
Pilot Energy-as-a- Service Models	Shift capital and performance risk to third-party providers who install and maintain equipment, paid through savings	Private Energy Service Companies (ESCOs)	Municipalities, Provincial Agencies, Building Owners
Align Provincial and Federal Incentive Programs	Streamline heat pump financing programs across agencies (e.g., CMHC, FCM) and coordinate rebates and timelines	Federal & Provincial Governments	Utilities, Municipalities, Industry Associations
Reduce Regulatory and Borrowing Barriers for Strata Councils	Reform policies that block bor- rowing, simplify voting thresh- olds, and support mixed-tenure buildings	Provincial Governments	Utilities, Regulatory Bodies

What is the Action?	What Does the Action Entail?	Who are the lead actors?	Who are the supporting actors?
Incentivize and Regulate Heat Pump Adoption	Use tools like benchmarking, tax incentives and "like-for-like" phaseouts to steer market toward decarbonized solutions	Provincial & Municipal Governments	Utilities, Regulatory Bodies
Establish Low- Income Financing Programs	Offer deeply concessional or interest-free loans and ensure landlords maintain affordability for tenants	CMHC, Provincial Housing Authorities	Non-Profits, Co-ops, Landlords, Tenant Advocates
Develop Targeted Support for Non- Profit and Below- Market Housing Providers	Create long-term, flexible loan products and concierge supports tailored to affordable housing	CMHC, Provincial Housing Ministries	BCNPHA, AHMA, CHFBC, Foundations
Improve Awareness and Accessibility of Financing Options	Strengthen existing concierge programs and build outreach campaigns to support market navigation	Provincial Agencies, Utilities	Non-profits, Industry Associations, Municipalities
Leverage Pension Funds and Institutional Investors	Mobilize large-scale capital for low-interest loans via climate investment funds or blended finance vehicles	Green Banks, Investment Intermediaries	Pension Funds, Impact Investors, Governments
Expand Carbon Credit and Market- Based Incentives	Pool credits from small buildings to make them marketable and integrate them into financing models	Carbon Credit Aggregators	Municipalities, Ontoly, Developers, Regulatory Bodies
Encourage Lender Participation Through Standardized Financial Products	Work with banks to co-de- velop green mortgage products and underwriting standards for retrofits	Financial Institutions	CMHC, Provincial Governments, Mortgage Brokers

# Glossary of Terms

## **Financing Models & Mechanisms**

#### **BLENDED FINANCE:**

A model that combines public capital (e.g. grants), concessional funding (e.g. low-interest loans) and private capital (e.g. commercial investment) to make financing more affordable and to reduce risk for lenders.

For more detail, see Financing and Funding Heat Pumps in MURBs (Discussion Primer) (pp. 14–16)

#### **CONCESSIONAL FINANCE:**

Below-market-rate financing offered by governments or philanthropic sources to make retrofits more affordable. These products often feature favourable terms, such as interest-free loans or flexible repayment timelines.

Discussed in: Financing and Funding Heat Pumps in Low-Rise MURBs (Discussion Primer) (pp. 14-16) + Solutions Pathway: Transitioning to Heat Pumps in Low-Rise MURBs (Dialogue Summary) (pp. 33-36)

#### **CARBON CREDITS:**

Tradable certificates representing one tonne of CO<sub>2</sub> reduced. While potentially a revenue stream, participants in this dialogue flagged challenges like low returns and high certification costs. Aggregation across buildings was suggested to boost market value.

#### **COMMUNITY BONDS:**

A social finance tool allowing non-profits or co-ops to raise capital from local residents or institutions, often for infrastructure upgrades. Keeps funding local and aligned with community objectives.

#### **GREEN BANK:**

A financial intermediary that blends public and private capital to fund clean energy upgrades. Helps aggregate capital and streamline financing for markets like low-rise MURBs.

#### LOAN LOSS RESERVE (LLR):

A financial backstop, usually funded by governments or foundations, that covers potential loan defaults. Reduces perceived risk for lenders and encourages them to offer retrofit financing.

See: Financing and Funding Heat Pumps in Low-Rise MURBs (Discussion Primer) (pp. 14-16, 19-20)

#### PACE FINANCING (PROPERTY ASSESSED CLEAN ENERGY):

A financing model where building owners repay loans for energy retrofits through their property taxes. Not currently available in B.C. due to legal and administrative constraints.

Introduced in: Financing and Funding Heat Pumps in Low-Rise MURBs (Discussion Primer) (pp. 15)

#### **ON-BILL FINANCING:**

A repayment model where loan repayments are added directly to the utility bill, improving accessibility through a familiar channel.

See: Financing and Funding Heat Pumps in Low-Rise MURBs (Discussion Primer) (pp. 15)

#### ENERGY-AS-A-SERVICE (EAAS): :

A model where third-party providers finance, install and maintain energy systems (like heat pumps) in exchange for a service fee or share of energy savings. Reduces upfront cost and risk for owners.

Mentioned in: Solutions Pathway: Transitioning to Heat Pumps in Low-Rise MURBs (Discussion Primer and Dialogue Summary)

### Financing Concepts & Lending Criteria

#### NET OPERATING INCOME (NOI):

A property's revenue after subtracting operating costs. Used to determine borrowing capacity in commercial financing.

Detailed in: Financing and Funding Heat Pumps in Low-Rise MURBs (Discussion Primer) (lending fundamentals section)

#### **DEBT SERVICE COVERAGE RATIO (DSCR):**

A metric used by lenders to assess whether a property's income can cover its debt payments. Most lenders require a ratio above 1.2.

See: Financing and Funding Heat Pumps in Low-Rise MURBs (Discussion Primer) (lending fundamentals section)

#### LOAN-TO-VALUE RATIO (LTV):

A metric representing the loan size as a percentage of the building's value. Often capped at 60–80% for commercial mortgages.

See: Financing and Funding Heat Pumps in Low-Rise MURBs (Discussion Primer) (lending fundamentals section)

#### MINIMUM VIABLE PRODUCT (MVP):

A stripped-down but functional version of a financing program that can be launched quickly and refined over time.

## **Ownership Models & Retrofit Delivery**

#### MURBS (MULTI-UNIT RESIDENTIAL BUILDINGS):

Includes strata, co-ops and rental buildings with multiple units. MURBs present complex governance and financing barriers.

Defined in: Transitioning to Heat Pumps in Low-Rise MURBs (Discussion Primer)

#### **COMMUNITY ASSET OWNERS:**

Non-profits, Indigenous housing providers, and co-ops that own residential properties and face distinct financing barriers.

Framing introduced in: Transitioning to Heat Pumps in Low-Rise MURBs (Discussion Primer)

#### STRATA-SPECIFIC FINANCING:

Tools designed to help strata councils overcome governance and borrowing challenges. May include loan guarantees, hardship funds or lower approval thresholds.

See: Solutions Pathway: Transitioning to Heat Pumps in Low-Rise MURBs (Discussion Primer) + Financing and Funding Heat Pumps in Low-Rise MURBs (pp. 19–22)

#### **SPLIT INCENTIVE:**

A barrier in rental housing where landlords pay for retrofits but tenants benefit from savings. Reduces motivation to invest.

#### **TURNKEY SOLUTION:**

A streamlined approach where a single provider manages financing, project design, installation and maintenance.

#### ESCO (ENERGY SERVICE COMPANY):

A third-party entity that delivers retrofits and recovers costs through energy savings over time.

Explored in: Solutions Pathway: Transitioning to Heat Pumps in Low-Rise MURBs (Dialogue Summary)

# Policy, Market Readiness & Systemic Shifts

#### **REGULATORY SIGNALS:**

Policies or mandates (e.g. bans on gas systems or performance requirements) that encourage the market to adopt clean technologies like heat pumps.

Discussed throughout all discussion primers; especially in: Transitioning to Heat Pumps in Low-Rise MURBs and Financing and Funding Heat Pumps in Low-Rise MURBs

#### MARKET TRANSFORMATION:

The systemic shift in technologies, financing models and regulations that moves the building sector toward electrification.

#### **ECONOMIES OF SCALE:**

Cost savings achieved when retrofitting multiple buildings or units at once—important for MURB strategies.

Referenced in: Transitioning to Heat Pumps in Low-Rise MURBs (Discussion Primer) (p. 18)

