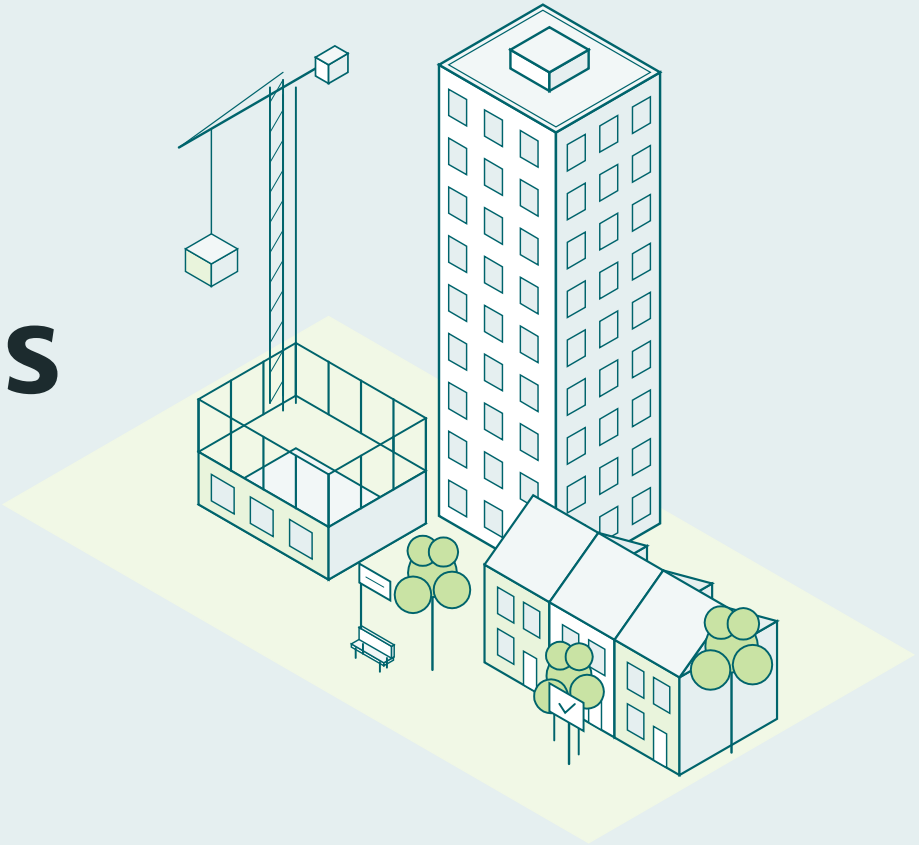
Beyond Emissions

Financial Summary for Municipal Decision-Makers



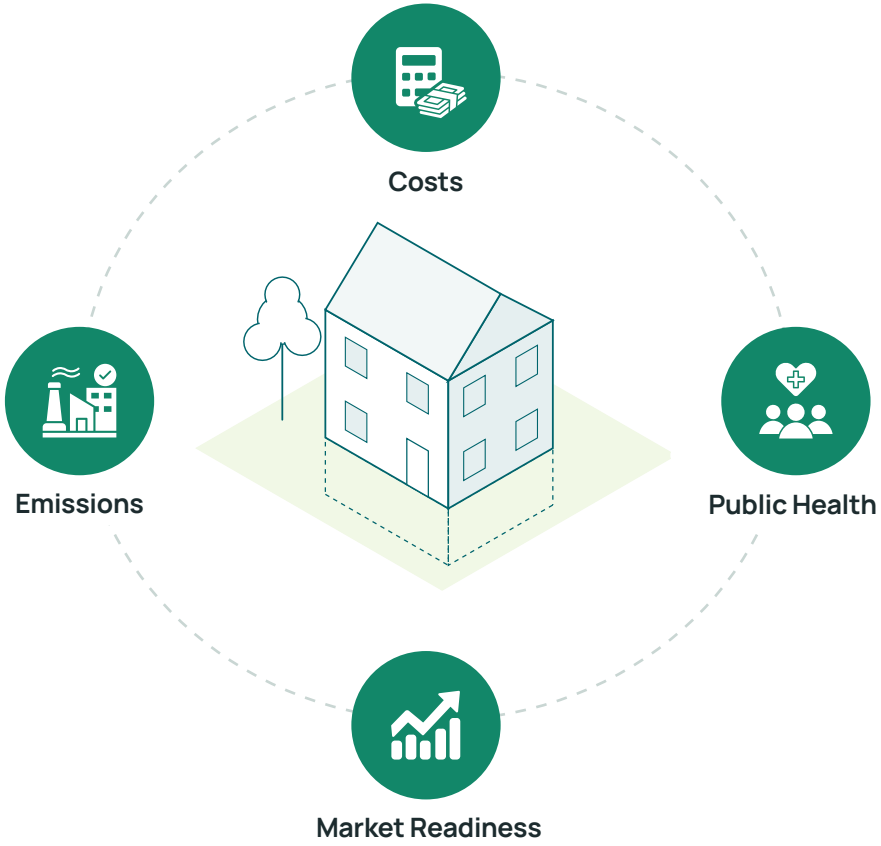


BUILDING TO NET-ZERO

ICLEI Local Governments for Sustainability
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CANADA

Beyond Emissions

Financial Summary for Municipal Decision-Makers



The design and construction of new homes and buildings today will shape communities for decades to come. Supporting high performance buildings represents a significant opportunity for Canadian municipalities to advance a wide variety of local priorities. However, questions about cost, and who pays for higher performance, are often the first ones raised.

> **This summary presents the financial findings from Beyond Emissions: The Full Case for High Performance Buildings in Canadian Municipalities to help answer these questions.**

The full *Beyond Emissions* report makes the case for high-performance buildings across four dimensions: costs, emissions, public health, and market readiness. In this summary, we focus on costs because they are often central to conversations with Council, developers, and residents. The tables and figures below summarize what that analysis found, first by building archetype, and then by province.

Learn More

This summary was developed by ICLEI Canada as part of the Building to Net-Zero (BNZ) project—a four-year initiative funded by Natural Resources Canada's Codes Acceleration Fund. Visit ICLEICanada.org/project/bnz/ to learn more and connect with us online.

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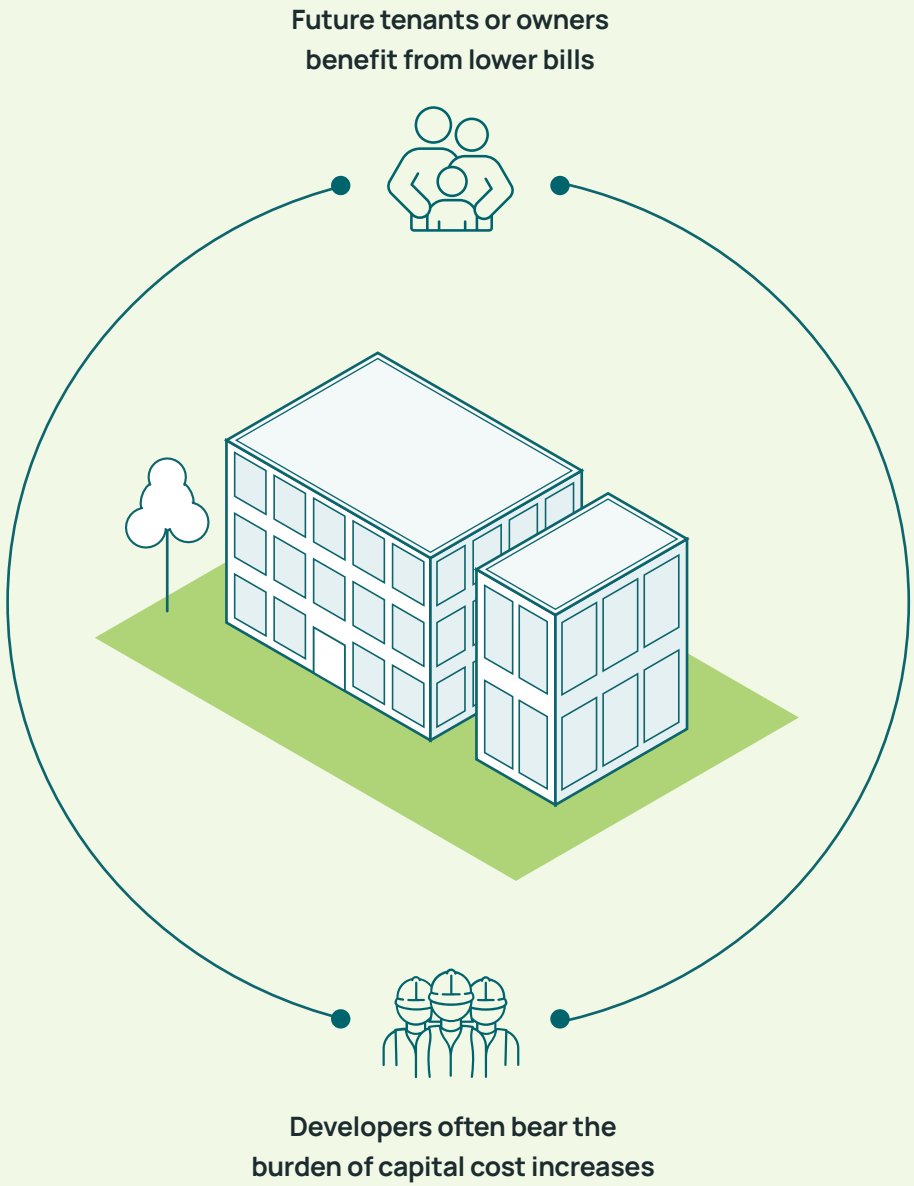
Findings At-a-Glance

The lifecycle economics of higher performance buildings are favourable in most cases, but who pays the upfront premium and who benefits from the savings aren't always the same party.

Capital cost premiums are modest: 0–2% for modest efficiency improvements across all building types, and typically 4–6% for net-zero ready buildings (with an exception of 7–12% for townhomes), relative to code-minimum construction.

Operating cost savings are often substantial, though how much depends on local heating fuel and energy prices. Large buildings are the most consistent case in the study (these operating costs fall at both performance levels in every province modelled).

The split incentive is a key barrier: developers often pay the upfront premium, while tenants or future owners benefit from the lower energy bills. Municipal policy tools can help close that gap—see Table 9 in the full *Beyond Emissions* report for examples of tools municipalities are using.



Summary of Financial Findings

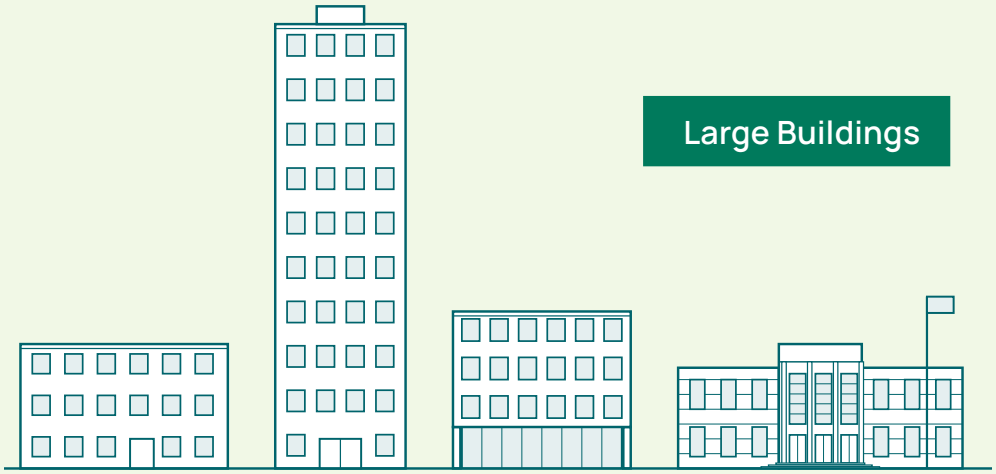
A lifecycle cost modelling analysis was completed across eight building archetypes and 16 municipalities in seven provinces. The analysis compared capital costs, 20-year operating costs, and total lifecycle costs at three performance tiers:

- **Baseline** (NBC/NECB 2020 Tier 1);
- **Mid-Range (MR)** (NBC 2020 Tier 3/NECB Tier 2); and
- **Net-Zero Ready (NZR)** (NBC 2020 Tier 5/NECB Tier 4).

Tables 1 and 2 show the range across all communities modelled, relative to the study's Baseline: "−" is a cost reduction (denoted in green), "+" is a cost increase (denoted in orange), and mixed results are denoted in grey.

Next, Figures 1 and 2 show how operational savings vary widely by province, driven mainly by local heating fuel and energy prices.

The building archetypes included in our analysis:



Large Buildings

Low-rise multi-unit residential | High-rise multi-unit residential | Commercial office | Municipal office (institutional)

Residential



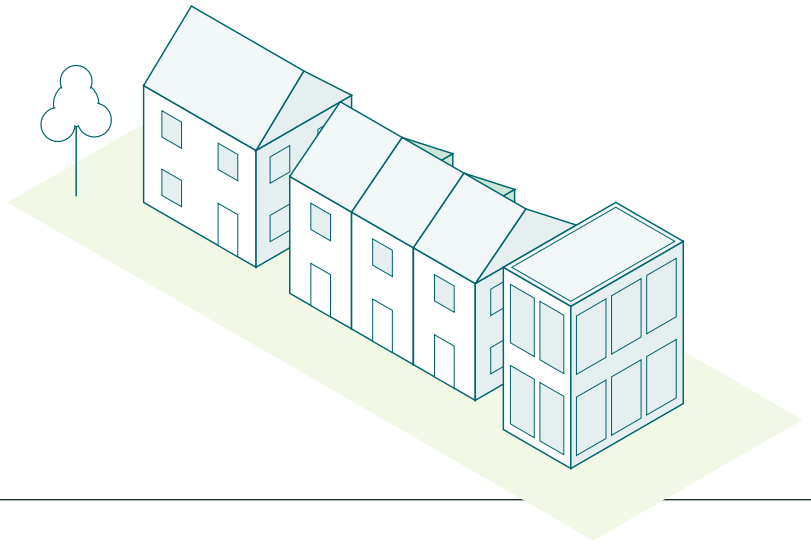
Detached house | Townhome (middle unit) | Townhome (end unit) | Quadplex

MR and NZR vs. Baseline in Residential Building Archetypes

Table 1. Financial findings across residential archetypes, MR and NZR vs. Baseline

Building type	Capital cost	MR operational cost	MR total cost	NZR operational cost	NZR total cost
Detached	+1 to +2% (MR) +5 to +6% (NZR)	−23% to +5%	-3% to +2%	−16% to −61%	-9% to +1%
Townhome middle unit	+1 to +2% (MR) +8 to +12% (NZR)	−17% to +5%	-3% to +2%	−25% to −54%	-4% to +2%
Townhome end unit	+2% (MR) +7 to +10% (NZR)	−20% to +6%	-3% to +3%	−20% to −56%	-7% to +1%
Quadplex	+1% (MR) +4 to +6% (NZR)	−30% to +8%	-4% to +2%	−72% to +8%	-9% to +5%

Residential archetypes show varied results depending on local context—see provincial variations shown in Figure 1 and 2 for the geographic picture. Capital premiums stay modest at the Mid-Range tier (1–2%) across all archetypes, but rise at the Net-Zero Ready tier, reaching 4–6% for detached homes and quadplexes, and 7–12% for townhomes. Operating savings are fairly consistent at the Net-Zero Ready tier, but mixed at Mid-Range, which only partially electrifies (pairing a heat pump with a fossil-fuel backup) rather than replacing fossil fuel-based systems outright.

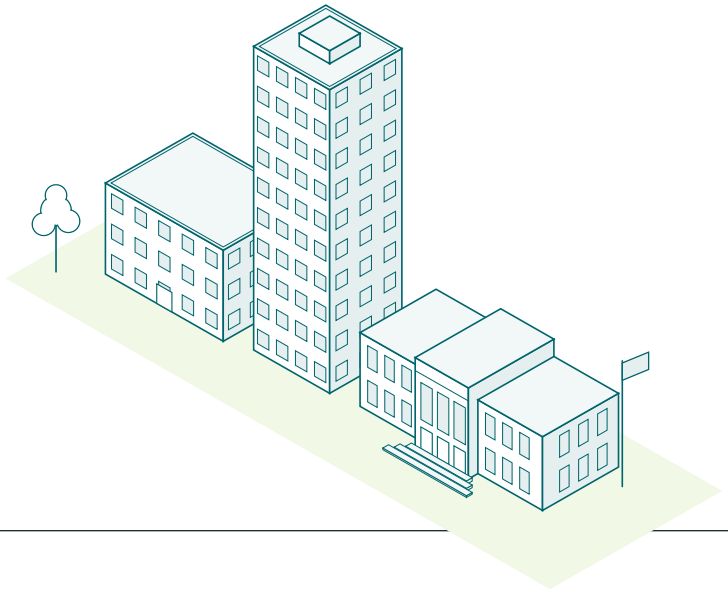


MR and NZR vs. Baseline in Large Building Archetypes

Table 2. Financial findings across large building archetypes, MR and NZR vs. Baseline

Building type	Capital cost	MR operational cost	MR total cost	NZR operational cost	NZR total cost
Low-rise multi-unit residential	+0 to +1% (MR) +4 to +6% (NZR)	−23% to −40%	-7% to -3%	−22% to −69%	-9% to +1%
High-rise multi-unit residential	+1 to +2% (MR) +4 to +6% (NZR)	−21% to −31%	-4% to -1%	−19% to −67%	-5% to +2%
Commercial office	+2% (MR) +6 to +8% (NZR)	−22% to −34%	-4% to -1%	−50% to −64%	-4% to 0%
Municipal office (institutional)	+1 to +2% (MR) +4 to +5% (NZR)	−22% to −34%	-3% to -1%	−50% to −64%	-3% to 0%

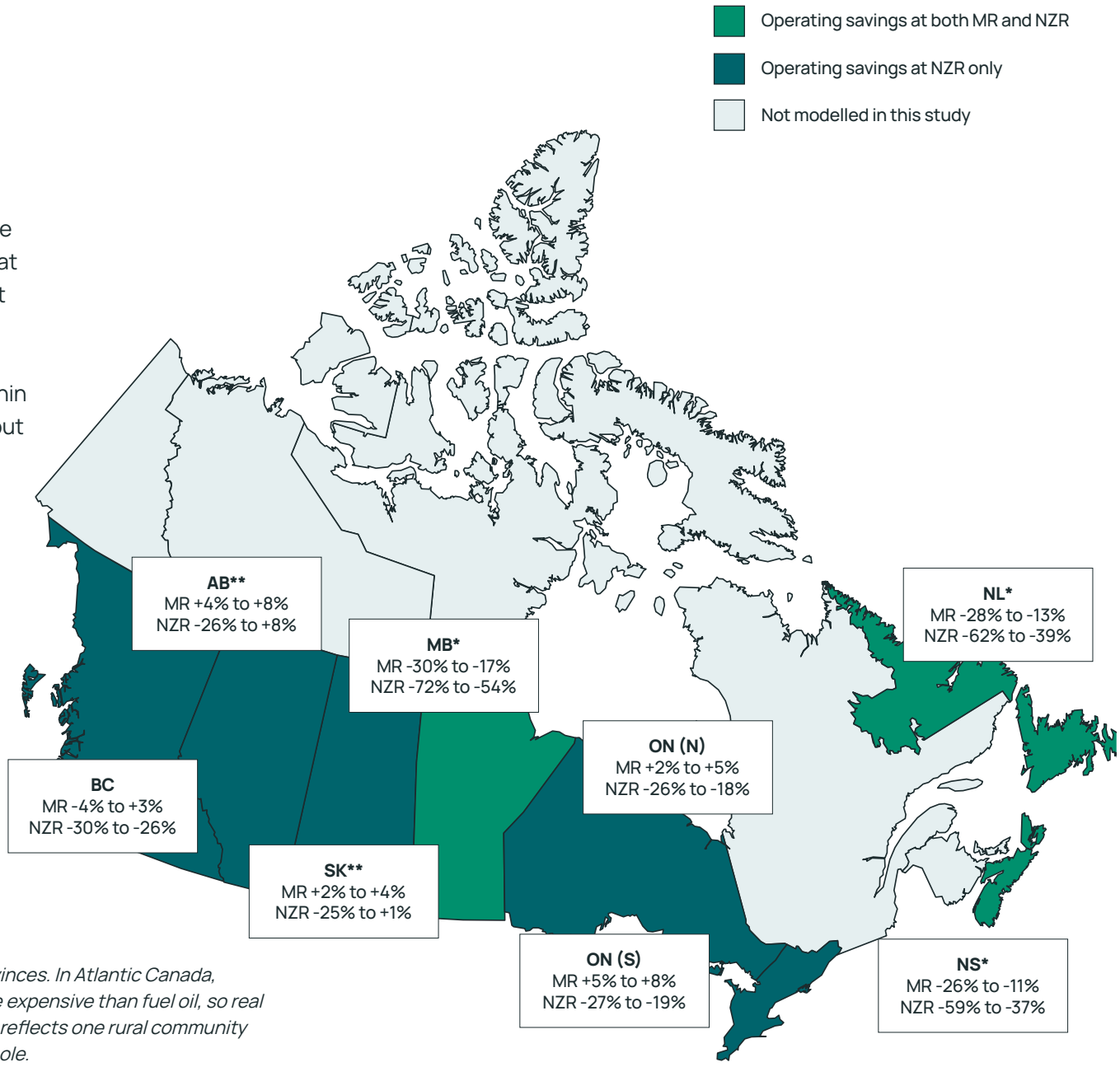
Large buildings deliver the most consistent financial case in the study. Net-Zero Ready large buildings deliver the deepest operating savings in this analysis, but in terms of total lifecycle cost, the Mid-Range tier is often just as strong or stronger—particularly for office and municipal buildings. For all municipalities in the study, prioritizing large buildings as a first step offers a reliably strong return, with the Net-Zero Ready tier adding the deepest operating savings on top.



Savings Potential for Residential Building Archetypes

For residential building archetypes, savings are largest in provinces where homes typically heat with fuel oil or electric baseboard, since a heat pump delivers the same heat for a fraction of the energy. Where natural gas dominates, the Mid-Range tier's partial electrification yields thin savings or can slightly raise operating costs, but the Net-Zero Ready tier's fuller electrification and deeper envelope improvements generally provide strong savings.

Figure 1. Provincial variation of operational savings in residential archetypes (detached homes, townhomes, and quadplexes)



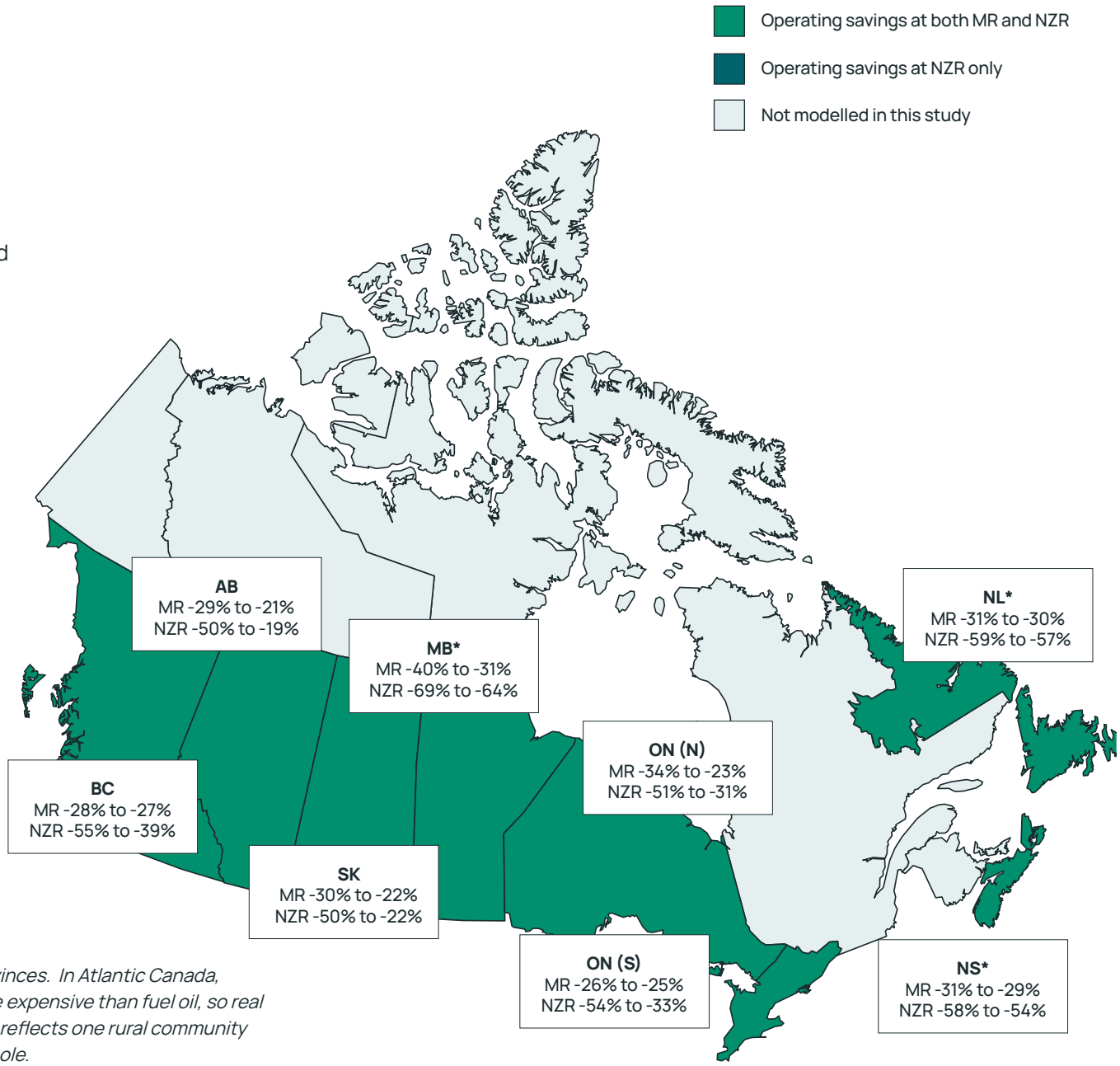
** Fuel oil was modelled as the baseline for these provinces. In Atlantic Canada, electric baseboard heating is also common and more expensive than fuel oil, so real savings may be larger than shown. Manitoba's figure reflects one rural community without natural gas access, not the province as a whole.*

*** NZR savings apply to most archetypes studied; quadplex is the exception.*

Savings Potential for Large Building Archetypes

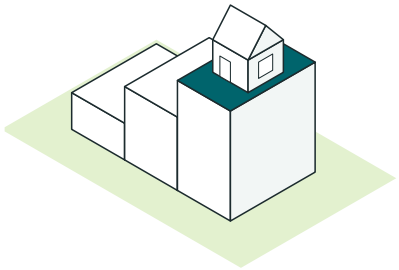
Large building archetypes are the clearest case in the study: operating costs are reduced at both tiers in all communities modelled, across every province.

Figure 2. Provincial variation of operational savings in large building archetypes (low- and high-rise multi-unit residential, commercial office, municipal/institutional office)



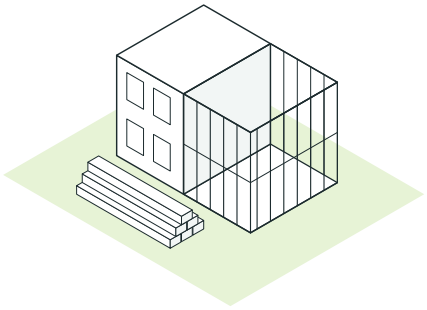
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What Municipalities Can Do



Encourage uptake of higher code tiers:

Depending on municipal authority, municipalities can adopt advanced tiers of the NBC and NECB, or implement municipal frameworks that encourage and incentivize high performance.



Build market capacity:

Work with builders, developers, and trades to raise awareness and develop skills in higher-performance construction through clear communication on code requirements and cost benefits, workshops, pilot projects, and recognition for early adopters.



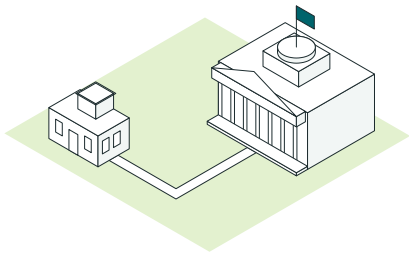
Create incentives:

Financial tools help offset the capital premiums, while non-financial tools cost the municipality little but still deliver value to developers—see the full *Beyond Emissions* report (Table 11) for examples.



Measure and share results:

Even municipalities with limited capacity can ask builders for more data on what's being built and how it performs. For large buildings, tracking and reporting programs are already emerging; sharing that data helps residents make informed choices and builds a local evidence base.



Advocate for provincial leadership:

Many provinces haven't adopted higher NBC/NECB tiers despite a strong local financial case, leaving smaller municipalities without the capacity to act alone at risk of falling behind. Backed by local evidence, municipalities can advocate and partner with others to build the momentum needed to shift policy.

Looking for a Deeper Dive?

Explore the full case for high performance buildings in Canadian municipalities.

Beyond Emissions: The Full Case for High Performance Buildings in Canadian Municipalities assembles the case across four dimensions:

- **The energy and emissions dimension**, where climate stakes are growing;
- **The financial dimension**, which is strong in most contexts, though who benefits is not always who pays;
- **The public health dimension**, where high performance buildings offer real public health benefits; and
- **The market dimension**, where local supply chains can largely support this shift.

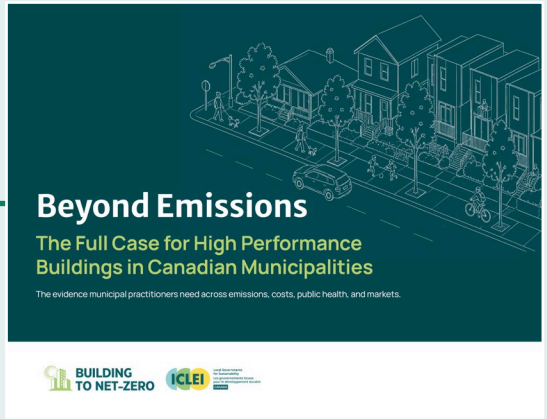
Together, the findings show that these priorities can often complement each other rather than compete.

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Beyond Emissions: The Full Case for High Performance Buildings in Canadian Municipalities

ICLEI Canada, 2026



Visit icleicanada.org/project/beyond-emissions/ to download the full *Beyond Emissions* report and see the detailed data, methodology, and province-by-province findings behind this summary.