



B2E

Building to
Electrification
Coalition

2026

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ZERO EMISSIONS INNOVATION CENTRE

British Columbia's Building Electrification Roadmap

Acknowledgments

The Zero Emissions Innovation Centre acknowledges and is honoured to work on the unceded and traditional territories of the xʷməθkʷəy̓əm (Musqueam), Skwx wú7mesh (Squamish), and səliłwətaɪ (Tsleil–Waututh) Peoples. Our staff and collaborators live and work across British Columbia on the territories of many First Nations, who have stewarded these lands and waters since time immemorial.

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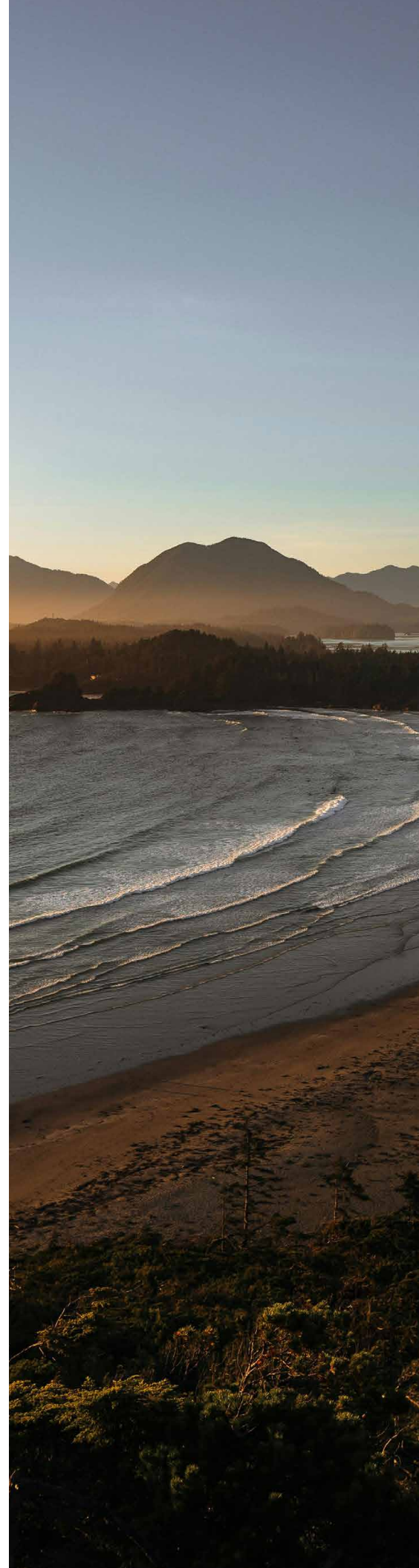
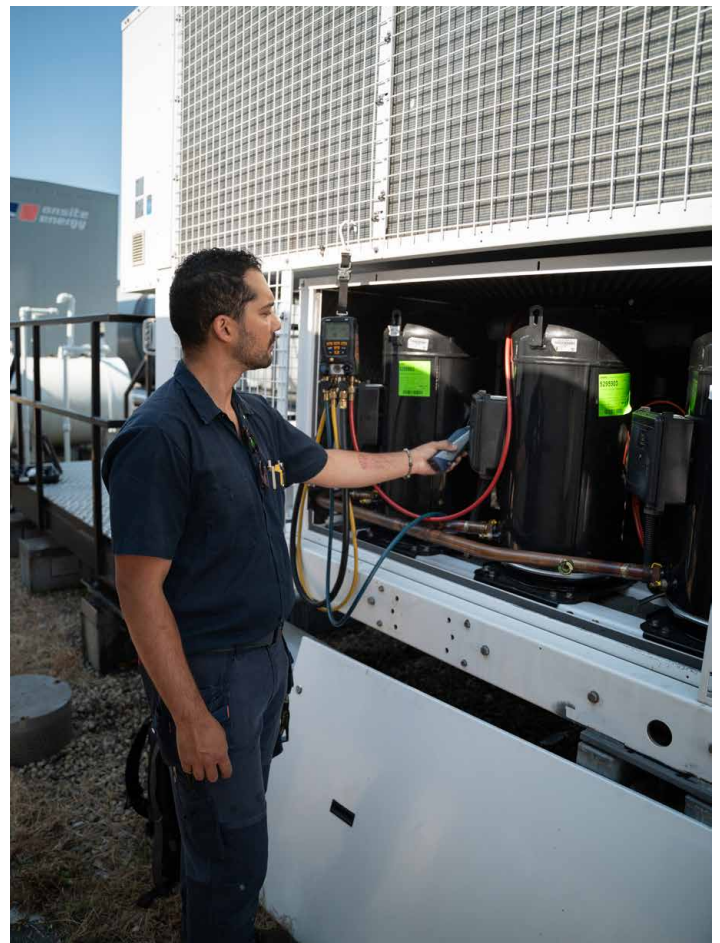


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Building Sector Legend

	Existing commercial and institutional buildings
	Existing apartment-style residential buildings
	Existing ground-oriented residential buildings
	New construction

Executive Summary

A Building Electrification Roadmap for BC

The 2026 BC Building Electrification Roadmap (“Roadmap”) calls on actors across the province – including governments, utilities, buildings owners and managers, trades and professional associations, and others – to continue to accelerate efforts to transition BC’s building stock to high-efficiency electric systems for space and water heating within 20 years.

It outlines key steps and critical actions to sustain momentum over the next five years and reap the benefits of a largely electrified building sector, including:

- Improving building energy efficiency by replacing conventional systems with heat pumps
- Reducing reliance on volatile international energy markets by leveraging BC’s reliable and abundant electricity, stabilizing utility rates for users
- Achieving deep reductions in greenhouse gas emissions by shifting from fossil fuels (including natural gas) to clean electricity
- Improving health and comfort by shifting to systems that provide both heating and cooling, protecting occupants in times of extreme heat and poor air quality
- Growing the number of local jobs, especially in skilled trades for heating, refrigeration and air conditioning mechanics, electricians and plumbers

Building on our Momentum

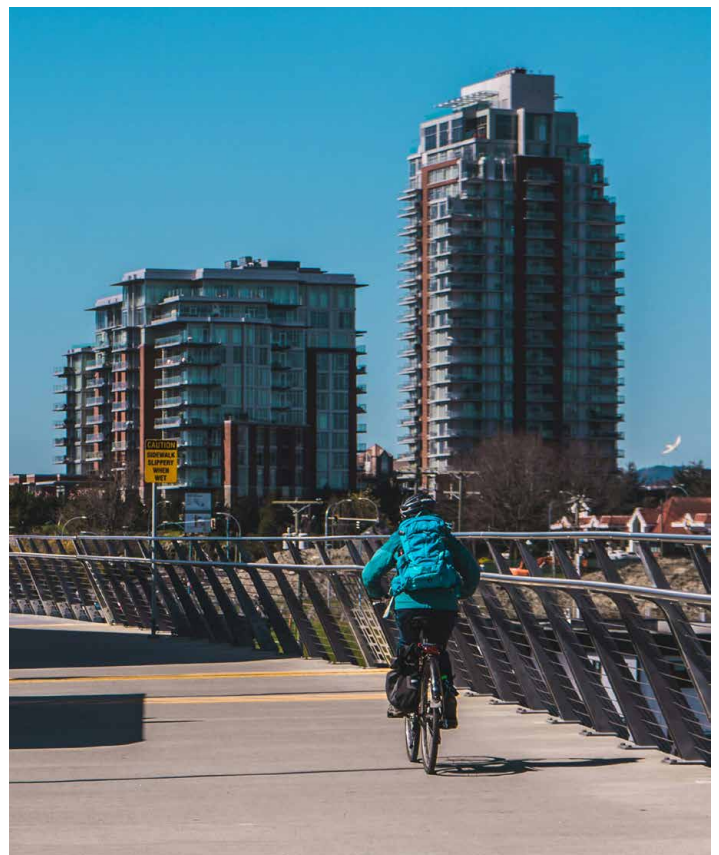
Fortunately, there’s already strong progress to build on. Municipalities across BC are leading the way by adopting the Zero Carbon Step Code, encouraging all-electric buildings. Multiple retrofit accelerator programs are helping owners—from single-family homes to large commercial buildings—understand and pursue electrification options. At the same time, utility connection timelines and costs are reducing, thanks to improvements in policy and processes. Industry knowledge has advanced rapidly through industry organizations and networks like the Home Performance Contractor Network, Community Energy Association, BOMA BC, and many others. Equity-oriented CleanBC incentives mean a more diverse range of households can take advantage of building electrification opportunities. Together, these efforts are resulting in increasing rates of electrification in new and existing building projects.

Supporting a Province-Wide Transition

Despite these many advances, significant challenges remain. Barriers vary by region and building type, with further action needed to enable a province-wide transition to an all-electric building sector. In response, the Roadmap identifies specific actions for BC’s four main building sub-sectors:

- Existing commercial and institutional buildings
- Existing apartment-style buildings
- Existing ground-oriented residential buildings
- New construction

The actions contained in the Roadmap also acknowledge the very real concerns around affordability in BC by outlining multiple ways to reduce the costs of electrification projects – both capital and operating. These actions have also been designed to ensure that people of all ages, income, and backgrounds can access and benefit from building electrification.



One Roadmap, Multiple Regions

What works for milder climates in the more densely populated southern regions of BC may not directly fit in the north or in BC's interior. The Roadmap identifies where and how actions should be tailored to reflect regional specific needs and opportunities.

Education, training programs and facilities that help build market and industry readiness must be accessible to northern and interior communities, while accounting for region-specific electrification challenges and opportunities. Regulations may also need to be phased in or adapted across regions to allow time for technologies to become available and industry capacity to grow.

A Framework and a Call for Action

The Roadmap uses a market transformation framework to show how thoughtful market interventions and supports can be used to accelerate the adoption of building electrification technologies and increase their overall uptake. Recommended actions are organized into four market transformation categories:

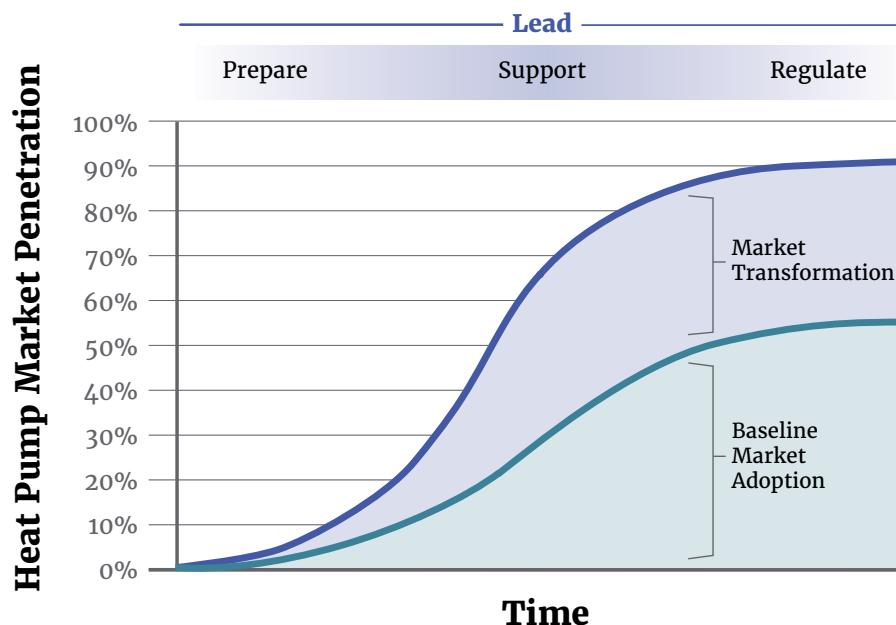
LEAD: Actions that signal interest in, and commitment to building electrification on the part of key decision makers and regulators – including the Province of British Columbia

PREPARE: Actions that build awareness and knowledge about building electrification and help to achieve lower cost and higher quality installations over the long term

SUPPORT: Actions that grow the market for building electrification by removing barriers faced by building owners and industry actors

REGULATE: Actions that shape the pace and scale of building electrification over the longer term, phased in by region as appropriate.

The Market Transformation S-Curve



The Roadmap outlines **seven core strategies and 30 actions** to address key barriers facing BC's four main building subsectors.

THE BC BUILDING ELECTRIFICATION ROADMAP (“*” INDICATES AN ACTION REQUIRING PROVINCIAL LEADERSHIP)

LEAD

Strategy 1: Establish strong and persistent leadership on the part of key actors

1. Reestablish the Province of BC's long-term commitment to building electrification.*
2. Continue to invest in electricity grid readiness and demand management strategies.
3. Commit funding to support building electrification over the next five years, including LGCAP and designating Innovative Clean Energy (ICE) Levy funds for building revitalization.*
4. Continue to grow and support the diverse coalition of organizations and individuals who advance and advocate for decarbonizing BC's building sector.
5. Deliver clear and timely communications about the benefits and opportunities of building electrification, as well as the challenges and options for overcoming these.

PREPARE

Strategy 2: Improve access to building energy data and require energy and emissions reporting

6. Establish guidelines and require utilities to share whole building energy data with building owners.*
7. Require energy and emissions reporting for commercial and institutional buildings.
8. Require all ground-oriented homes to provide a home energy label at time of sale.*

Strategy 3: Create permanent reductions in the cost of building electrification projects

9. Update the BC and Canadian Electric Codes to allow more load management options.*
10. Adopt streamlined municipal heat pump permitting.
11. Increase the ability for small residential heat pump contractors to complete multiple installation tasks.
12. Continue to improve processes to align electrical connections with scheduled building occupancy.

Strategy 4: Support workforce readiness and improve the quality of installations

13. Establish and reference dual-fuel performance design standards for different equipment types.
14. Establish minimum training and qualifications for installing small residential heat pumps.*
15. Enable local governments to adopt performance commissioning and retro-commissioning requirements.*

SUPPORT

Strategy 5: Dedicate resources to ensure equitable access to building electrification opportunities and benefits

16. Develop guidelines for the fair and transparent allocation of costs of building electrification projects between tenants and landlords.*
17. Continue incentives for lower-income households and buildings, including social housing.

Strategy 6: Continue to commit resources and unlock financing to support building electrification market growth

18. Provide incentives that focus on supporting market readiness for upcoming equipment regulations.
19. Provide municipal incentives for all-electric new construction projects.
20. Enable local governments to offer property-secured improvement financing.*
21. Explore on-bill utility financing for residential projects and amortizing the cost of upgraded distribution transformers for larger projects.
22. Set up an innovative financial mechanism (e.g., loan guarantee for strata building electrification projects).
23. Continue to support building electrification related training.
24. Continue to provide funding for retrofit concierge services.
25. Continue to provide funding for demonstration and pilot projects.

REGULATE

Strategy 7: Establish standards and regulations for long-term market transformation

26. Set a highest efficiency equipment standard for packaged roof top units and ground-oriented residential space and water heating, starting in 2030 for Climate Zones 4 and 5.*
27. Set a minimum emissions performance standard by 2030 for commercial and institutional buildings.*
28. Set a requirement in the BC Energy Efficiency Standards Regulation for any permanently installed air conditioners to include a reversing valve to enable it to heat or cool an indoor space.*
29. Require all new buildings in Climate Zones 4 and 5 to meet or exceed Emissions Level 3 of the Zero Carbon Step Code starting in 2027. Conduct a cost-benefit analysis to assess the cost and GHG implications of moving to Emissions Level 4 in Climate Zones 4 and 5 by 2030, and Emissions Level 3 or 4 in the rest of the province by 2030. Continue to allow local governments to voluntarily implement ZCSC on an accelerated timeline.*
30. Prioritize the use of high-efficiency heat pumps for any policies, programs, and training intended to advance mechanical cooling retrofits in residential buildings.

Several actions fall under the authority and responsibility of the Province of BC, making it a key player in the successful transformation of the market.

Its leadership to date demonstrates how the regulatory authority, resources, and expertise that exist at this scale can accelerate progress and align electrification with other province-wide priorities.

Progress will not be linear, with some actions advancing faster than others. **The Roadmap acknowledges the need for this flexibility and shows that meaningful progress can continue even in the absence of short-term movement on every action or full provincial government support.** There is a crucial role for actors across the building sector, including utilities,

local governments, industry organizations, financial institutions, not-for-profits, designers, contractors and importantly – building owners, managers and tenants themselves.

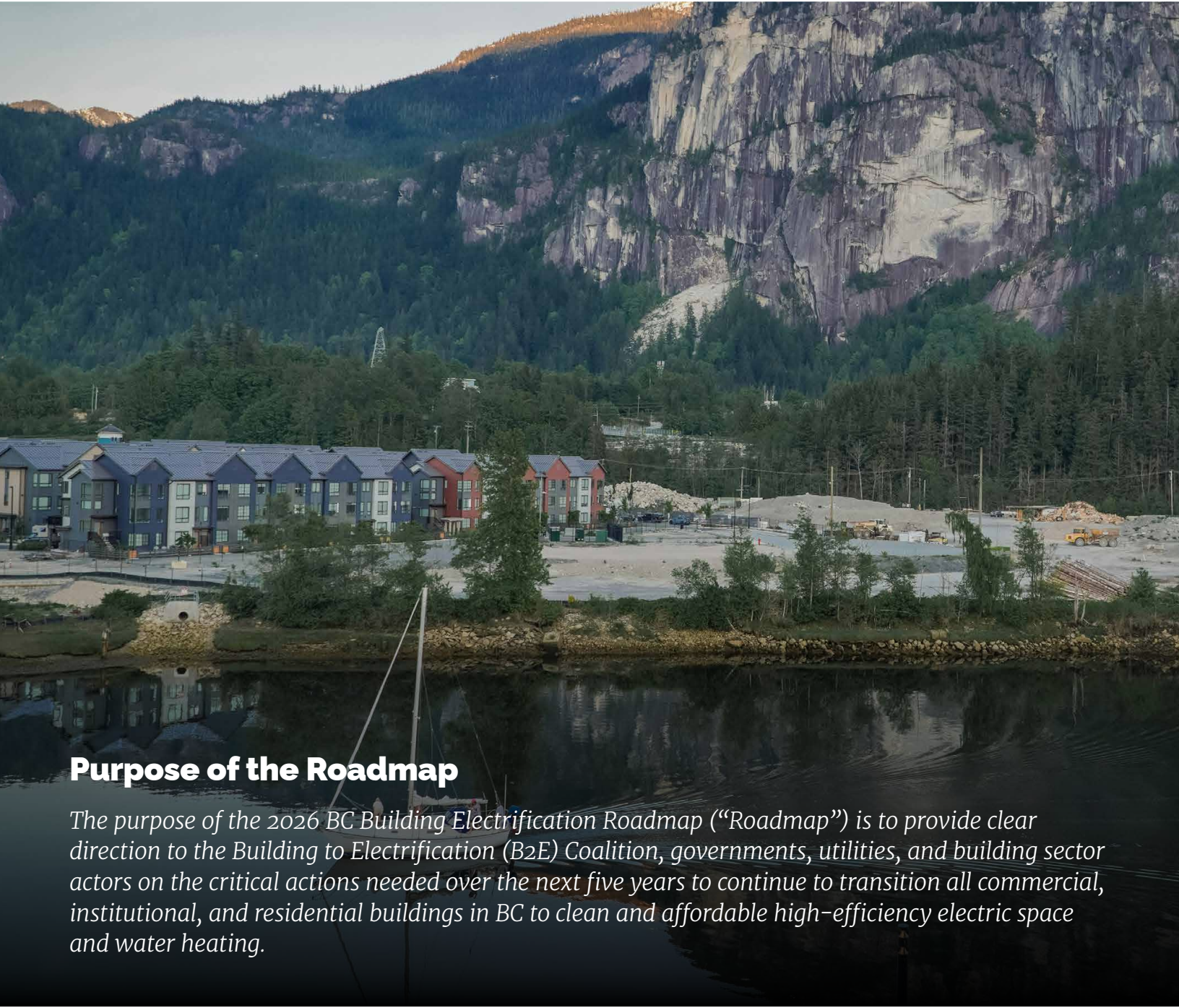
Overall, BC is already well on the path to widespread building electrification. The Roadmap provides a clear direction for the next five years to meet the goal of a largely electrified building sector within 20 years. Hosted by the Zero Emissions Innovation Centre, the B2E Coalition will continue to play a critical role in organizing key actors and tracking progress on Roadmap implementation. However, achieving this goal will require sustained collaboration across the sector.

Alignment with the CleanBC Independent Review

In 2025, the Province of BC launched an independent review of its CleanBC policies and programs to assess their effectiveness in reducing emissions, improving affordability, and supporting a strong economy. The review process included extensive consultation with stakeholders and government officials across a broad swath of economic sectors and was published in November 2025. While developed independently, this Roadmap aligns closely with the findings of the CleanBC review, highlighting broad consensus among engaged parties in the necessary actions to promote the strength and sustainability of the building market.



1. Introduction



Purpose of the Roadmap

The purpose of the 2026 BC Building Electrification Roadmap (“Roadmap”) is to provide clear direction to the Building to Electrification (B2E) Coalition, governments, utilities, and building sector actors on the critical actions needed over the next five years to continue to transition all commercial, institutional, and residential buildings in BC to clean and affordable high-efficiency electric space and water heating.

The long-term objective is for the vast majority of heating to come from high-efficiency electric equipment within 20 years, supported by complemented strategies such as building efficiency, peak load-management, and alternative clean energy sources (e.g., on-site renewables, thermal energy networks, and renewable natural gas). This transition will deliver significant benefits, including reductions in greenhouse gas (GHG) emissions, increased energy efficiency, improved occupant comfort and safety, job creation, and greater energy security. Done properly, it can improve affordability and equity outcomes for British Columbians.

The 2026 Roadmap is intended for all levels of government, energy utilities, building owners and managers, and trades and professional associations (including their membership).

Building On Past Successes

The 2026 Roadmap builds on the success of its first iteration, published in 2021.¹ Actions identified in the original Roadmap, as well as those that were already underway at local or provincial government levels, have helped advance building electrification across the province. BC's B2E Coalition has been tracking implementation over time,² which shows steady progress in many areas:

- **Workforce knowledge:** The publication of numerous best practices guides and bulletins for contractors and building owners.^{3 4}
- **Market cohesion:** The introduction of the Home Performance Contractor Network (with over 800 residential heat pump contractor companies)⁵ and the B2E Coalition (with over 250 members).⁶
- **Equity-based incentives:** CleanBC incentives for income-qualified households and apartment buildings.⁷
- **Building owner supports:** Low-carbon, concierge style programs for most major building types.^{8 9 10 11}
- **Levelized playing field:** BC Hydro's updated Extension Policy¹² and the discontinuation of incentives for conventional gas-burning equipment.¹³
- **Building sector data:** Energy and emissions reporting requirements for larger buildings in the City of Vancouver,¹⁴ City of Victoria, and the District of Saanich.¹⁵
- **Regulations:** The Zero Carbon Step Code adopted by more than 30 communities,¹⁶ as well as Vancouver's Building Performance Standard.¹⁷

Critical to the success of this market transformation has also been the increased depth of knowledge and the rapid growth of hands-on experience across the sector. Thousands of professionals across BC have now worked on electrification projects, with tens of thousands of homes and buildings retrofitted or built to be heated primarily by clean, high-efficiency systems.

Supporting a Sector-Wide Transformation

The 2026 Roadmap uses the concept of market transformation to explore how sector-wide electrification can be achieved over a relatively short period of time (Figure 1). An underlying principle of this concept is that successful new technologies follow a predictable "S-Curve" pattern over time. Adoption starts slowly, then accelerates as familiarity and confidence grow until they become standard practice. This transformation can take place over many decades (e.g. landline telephones, automobiles), or over several years (e.g. microwave ovens and smart phones).¹⁸

Market transformation is an approach used to accelerate and increase the market penetration of preferred technologies (such as LED lightbulbs, more fuel-efficient vehicles, and heat pumps). For the purpose of the Roadmap, market transformation is understood to take place over four integrated phases:

- **Lead** – This overarching phase recognizes that persistent leadership from governments, utilities, industry, and others is needed to support the other three phases of a market transformation.
- **Prepare** – These are actions that help ready the market for more rapid uptake of electrification, such as research, trials and pilot projects, industry education, and aligning relevant standards.
- **Support** – These are actions that boost market growth and help steer it toward future regulations, such as incentives, financing, promotions, and broad industry training.
- **Regulate** – This phase is characterized by the establishment of minimum requirements aligned with improved technology. In general, any new requirements should be signalled well in advance of their effective date to prepare the market for change.

The Market Transformation S-Curve

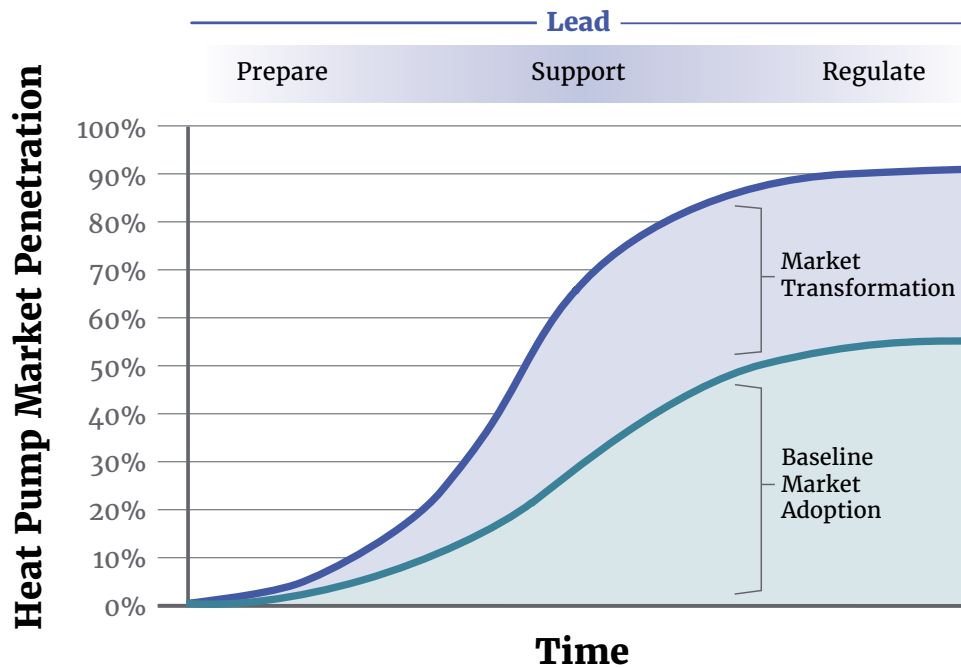


Figure 1 - The market transformation S-curve

While these phases of market transformation are shown sequentially, in practice they can and often do occur simultaneously. This is in large part because there is not one single market but rather several markets, each with its own opportunities, challenges, and level of readiness. Many electrification technologies and practices are already proven and widely available in BC; the Roadmap focuses on accelerating their adoption over the next five years.

A critique that has been leveled at the market transformation approach is that it can fail to account for the ability of lower income and other equity-seeking communities to take part in, and ultimately benefit from, the desired shift in technology.¹⁹ The Roadmap was developed with these concerns in mind and includes several recommendations aimed at ensuring all British Columbians have an opportunity to participate in and benefit from the transition to high-efficiency building electrification.



Creating the Roadmap

The 2026 Roadmap was developed between June 2025 and March 2026 using feedback from representatives of BC's building industry, including governments, industry, utilities, building owners and developers, tenant groups, public interest groups, and financial institutions. As a result of this broad engagement, the Roadmap's actions reflect the concerns and ideas of over 200 unique stakeholders from across the province. They aim to provide clear direction on how to accelerate the electrification of BC's building stock, while also carefully balancing ambition with pragmatism, and considering their impacts on affordability and regional capacities.

Five primary methods were used to collect information and feedback:

- A literature review and jurisdictional scan
- Over 25 interviews with subject matter experts
- Four sector-specific focus groups and one tenant-focused focus group
- Three regional workshops (Vancouver Island, Lower Mainland, and the North and Interior)
- Written feedback on a complete draft invited from all participants of earlier rounds of engagement

The process was additionally overseen by a Steering Committee with representatives from each of the four building subsectors, local government, and BC Hydro. The Province of BC was asked to participate on the Steering Committee but declined. Many of the recommendations were likely to be directed at the provincial level, so it was deemed not appropriate for it to provide structural input.

Alignment with the CleanBC Independent Review

In 2025, the Province of BC launched an independent review of its CleanBC policies and programs to assess their effectiveness in reducing emissions, improving affordability, and supporting a strong economy. The review process included extensive consultation with stakeholders and government officials across a broad swath of economic sectors and was published in November 2025. While developed independently, this Roadmap aligns closely with the findings of the CleanBC review,²⁰ highlighting broad consensus among engaged parties in the necessary actions to promote the strength and sustainability of the building market. There are also a few differences between the two sets of recommendations, mainly as they relate to the regulatory approach for decarbonizing existing large buildings (see [Appendix A](#) for a comparison).

Roadmap Structure

BC's existing building stock exhibits incredible diversity – in original heating systems, overall building efficiency, electrical capacity, geography, and type of ownership – making some buildings (and building subsectors) more straightforward to electrify than others. The 2026 Roadmap has tried to capture some of this diversity by developing separate roadmaps for each of the following four building subsectors:

- Existing commercial and institutional buildings
- Existing apartment-style buildings
- Existing ground-oriented residential buildings
- New construction

The 2026 Roadmap is therefore both a unified set of recommendations for the building sector at large, as well as four additional unique but closely related sub-sectoral roadmaps.

It is organized as follows:

- **Chapter 2:** A background on building electrification, its benefits, and some implementation challenges
- **Chapter 3:** An overview of current state of building electrification for each of the four subsectors
- **Chapter 4:** Recommended actions and individual subsector roadmaps
- **Chapter 5:** An implementation plan for Roadmap actions

2. Defining the End Goal



What is Building Electrification?

Building electrification refers to the use of electricity to provide building energy services such as space and water heating and cooking, instead of fossil fuels like natural gas. In existing buildings, building electrification means replacing fossil fuel systems to electric ones; for new construction projects, it means designing and constructing buildings that maximize the use of this equipment.

However, building electrification isn't simply about making the switch away from fossil fuels to electricity – it also has to prioritize the use of modern, high-efficiency electric equipment and appliances (e.g., heat pumps) over conventional electric resistance equipment (e.g., baseboards). Increasing the efficiency of mechanical and other systems reduces a building's overall energy demand, which in turn results in energy cost reductions for owners and tenants and reduces demand on the electrical grid. Switching to high-efficiency electric heat pumps yields three to five times more efficient performance than conventional gas or electric resistance heating systems.²¹

When possible, building electrification should be paired with energy efficiency improvements, such as insulation, high-performance windows, and heat recovery ventilation. Reducing heating demand improves overall occupant comfort, reduces energy use and peak load demand, and lowers heating bills. A more efficient building also needs less energy to heat it, making it possible to install smaller heat pumps and/or avoid a supplemental heating source, further reducing costs.

The combined impact is significant: one Canada-wide study estimated that a widespread adoption of electric heat pumps alongside efficiency upgrades and higher-performing new buildings could reduce total building heating energy use by 50% by 2050 – even as the total number of buildings increases.²²

ⁱ In comparison, gas absorption heat pumps are only about 1.3 times more efficient than conventional equipment (see the Gas Absorption Heat Pumps Best Practices Guide (2023). While this is an improvement, it is nowhere near the gains of electric heat pumps. Gas absorption heat pumps are also more expensive, less widely available, and more limited in their applications.

Heat pumps in cold climates

While the efficiency of air-source heat pumps declines in colder temperatures, most buildings in BC are in climate zones where winter conditions remain well within heat pumps' effective operating range. For example, in the Lower Mainland and southern Vancouver Island (home to 75% of the province's population), only 1% of the days are colder than -2°C . In Kelowna, 80% of the days are above 0°C and just 1% of days are colder than -15°C . Cold climate air-source heat pumps can operate efficiently at temperatures as low as -25°C and even colder without the need for a supplemental heating source. Meanwhile, ground-source heat pumps continue to efficiently provide heat in temperatures much colder than these. Where additional capacity is needed, other strategies can be explored, such as improved building envelope efficiency, coupling heat pumps with some electric resistance heating capacity, thermal storage, or dual-fuel systems.

Why Building Electrification?

Heating BC's buildings with high-efficiency electric systems – such as heat pumps – has a wide range of benefits compared to heating with fossil fuels.

Reduced GHG Emissions

Energy use in buildings accounts for 15% of BC's GHG emissions (Figure 2). This makes the building sector the province's third highest emitting sector after transportation (34%) and the fossil fuel industry (25%).²³ Nearly all the sector's emissions are the result of burning fossil fuels for space and water heating.

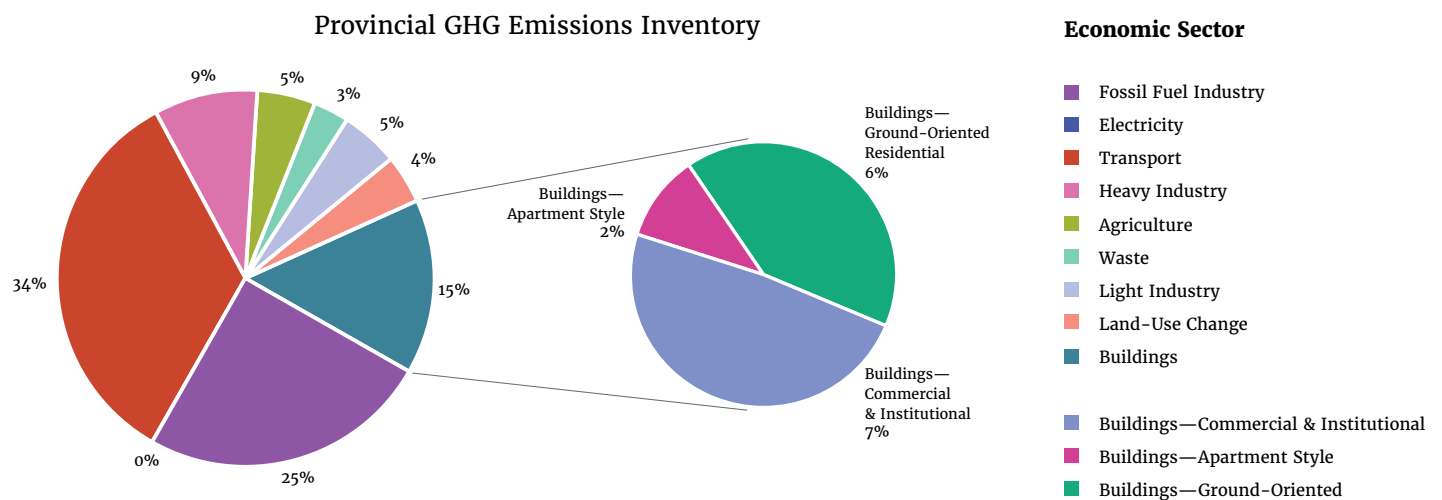


Figure 2 – Percentage of provincial GHG emissions attributed to BC's building sector

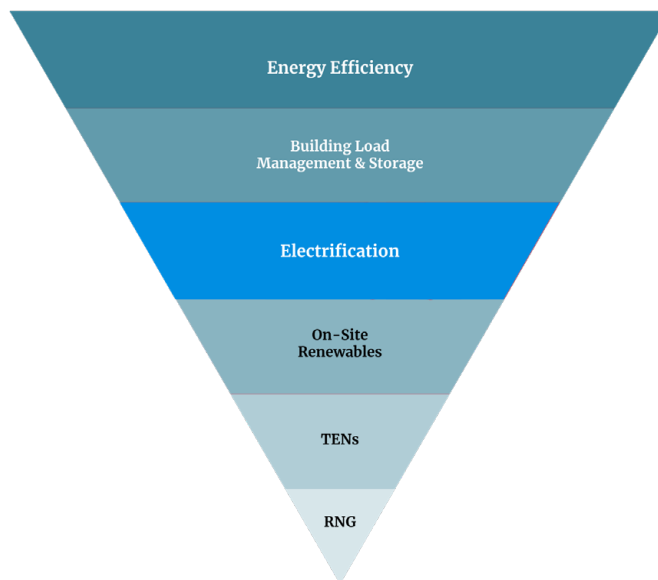
BC is blessed with an abundance of 98% renewable electricity, making it one of the cleanest electricity grids in the world. In fact, if all buildings in the province used high-efficiency, electric space and water heating, the sector's GHG emissions would fall to almost zero. BC also has the natural resources and ability to build new, clean electricity generation when we need it. To meet growing demand, BC Hydro announced two Calls for Power in 2024 and again in 2025, each targeting 5,000 GWh of renewable energy annually. The 2024 Call led to the approval of power purchase agreements with nine wind farms and one solar project for a total of 4,830 GWh per year of electricity. BC Hydro estimates these projects will attract between \$5-\$6 billion in private capital and create up to 1,500 jobs annually during their construction.²⁴ Most projects from the 2024 Call are also majority-owned by First Nations.

Bids for the 2025 Call for Power closed in January 2025 and received 14 proposals (13 wind generation project and one solar) representing 9,100 GWh per year of electricity.²⁵

The Building Decarbonization Landscape

While it represents a crucial step, building electrification is not the only way to decarbonize a building. It is most effective when combined with other measures.

Building Decarbonization Stacking Order



Energy efficiency: As noted above, making a building more efficient will reduce the size of heating equipment and the amount of energy needed to heat it. In new construction projects, the BC Energy Step Code (especially the higher steps) helps ensure the use of energy-efficient building enclosures and mechanical equipment, regardless of heating source.

Building load management and storage: Measures such as thermal and electrical storage, as well as participating in electricity utility peak management programs, can help flatten BC's peak demand curve and reduce the amount electricity utilities need to invest in new generation and distribution networks. Reducing peak electrical loads helps keep capital and operational costs down for building owners and tenants.

On-site renewables: Generating renewable energy close to where it is used (especially when paired with batteries and thermal storage) is a good strategy for mitigating some of the new infrastructure demand on our electricity system that come with electrifying buildings and other sectors of our economy. Examples include solar photovoltaic (PV) systems – including innovative building-integrated solar.²⁶

Thermal energy networks (TENS): Also known as district energy systems, TENS provide heat to groups of buildings through a shared network of pipes. Many newer networks use heat pumps to extract heat from the sewer system, waste heat from buildings or industrial processes, the ground, and/or large bodies of water. These newer systems are also extremely efficient, benefiting from heat pumps and a mix of heating and cooling loads found in the system. When twinned with non-electric and clean supplementary heating sources (e.g., renewable natural gas), the networks can also help manage peak loads by switching them to other heating sources during the coldest days of the year.

Renewable natural gas (RNG): Given the other measures described above, the role of RNG can and should be limited to helping to manage peak heating demand and decarbonizing extremely difficult to electrify buildings, such as historical buildings equipped with steam heating systems. In modelling the cost-optimal path for achieving net-zero emissions in buildings by 2050, the Canadian Climate Institute projects natural gas consumption by buildings in BC would drop by 98% from present levels by 2050.²⁷ This aligns with a study on renewable natural gas that was commissioned by the BC Utilities Commissions that concluded it will be a very limited and costly resource to acquire for use in buildings, especially if generated in BC.²⁸

Increased Rate Stability

Switching to clean and efficient “made-in-BC” electricity also benefits ratepayers. BC produces and exports significantly more volumes of natural gas each year than is needed for its domestic market. From an energy security perspective, this is good news; however, the price of natural gas is determined by global commodity markets, which are inherently volatile. Between 2021 and 2023, the commodity price charged to FortisBC residential customers increased more than 80%, followed by a 55% decrease in 2024, and has remained stable over the past three years.²⁹ In contrast, the price of electricity generated in BC is more predictable, as it is built and supplied in a way that keeps prices more stable.

Table 1 compares the volatility of natural gas and electricity rates, including the average annual and six-year cumulative compounded residential rate changes for FortisBC Energy Inc (gas) and BC Hydro from 2021 to 2026 (see [Appendix B](#) for sources). Rate increases for FortisBC in 2025 and 2026 were fully attributed to delivery, storage, and transport costs rather than commodity prices, demonstrating that gas price volatility can be significantly impacted by multiple factors.³⁰

Overall, this shows that while the delivered cost of natural gas at the time of writing is at least 2.7 times lower than electricity, it is subject to greater price volatility. This increases the risk of cost fluctuations for residents and businesses who rely on it for heating. This risk is expected to intensify as more North American gas is exported to higher-priced global markets through liquified natural gas (LNG) facilities.

Table 1 - Comparison of annual residential rate increases

YEAR	FORTISBC ENERGY INC (JAN 1)	BC HYDRO (APR 1)
2021	+8%	+1.16%
2022	+9%	-1.4%
2023	-4%	+2.0%
2024	-1.1%	+2.7%
2025	+17.5%	+3.75%
2026	+11.1%	+3.75%
Cumulative (Compounded)	+46.0%	+12.5%

Improved Health

Most electric heat pump systems provide cooling in addition to heating. This capability became critical during the June 2021 heat dome, which resulted in 619 heat-related deaths in BC.³¹ Being able to access and afford active cooling during extreme heat events can dramatically improve the health and safety of building occupants. During wildfire events or other periods of low air quality, central or mini-split heat pumps allow people to close their windows to minimize exposure to outdoor air, while maintaining a comfortable temperature indoors, and recirculating indoor air. While most small residential systems are not equipped with significant filtration, closing a building or unit for short periods of time reduces exposure to outdoor pollutants.

Electric cooking equipment can also improve our health. A 2024 study of natural gas composition in homes across 17 North America cities found the benzene (C6H6) concentrations in gas in Vancouver and Calgary homes were at least twice as high as other cities sampled.³² The World Health Organization classifies benzene as a genotoxic carcinogen with no safe level of indoor exposure.³³

Increased Job Creation

The province-wide shift to high-efficiency electric systems has strong economic implications. A 2024 BuildForce Canada green buildings employment study estimates that fuel switching and energy efficiency retrofits could create approximately 7,900 direct new employment opportunities in BC’s residential housing sector by 2032.³⁴ Most roles are expected in skilled trades, including heating, refrigeration and air conditioning mechanics, electricians, and plumbers (Figure 3). A separate analysis estimated that retrofitting 5,000 BC low-rise apartment buildings with electric heat pumps will generate over 1,700 construction jobs per year.³⁵ For perspective, the largest data centres (around 250,000 ft²) employ up to 1,500 people during the height of their construction and approximately 50 permanent jobs once operational.³⁶ ³⁷ At time of print, no BC economic development estimates were found for electrifying larger apartment-style buildings or commercial and institutional buildings.

Direct New Employment Created for Top Trades & Occupations by Green Building Activity in BC, 2023–2032

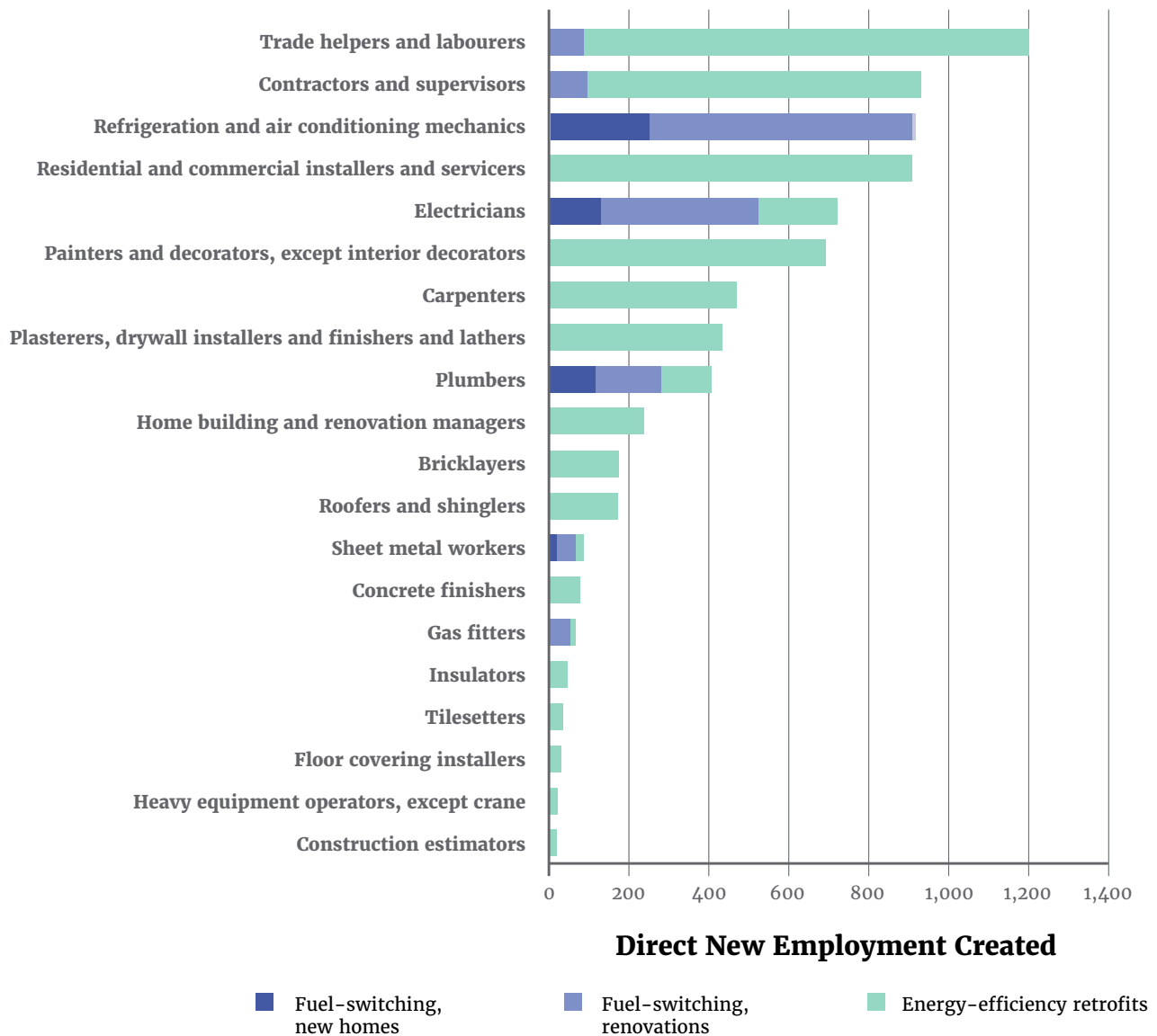


Figure 3 – Direct new employment created for top trades and occupations, by green building activity, British Columbia, 2023-2032 (Source: BuildForce Canada)

How Will Building Electrification Affect Affordability?

Despite the many benefits outlined above, building electrification can present cost-related challenges. A 2025 Clean Energy Canada survey of 3,000 households in the Greater Toronto and Vancouver regions, found cost as the number one barrier to heat pump adoption, compared to “like-for-like” gas equipment replacements.³⁸ Similar upfront cost barriers exist for apartment-style and commercial buildings. How best to overcome this barrier is one of the core areas of focus of this Roadmap.

Another affordability-related challenge for building electrification is the low cost of natural gas compared to electricity. As noted in [Chapter 2](#), despite having one of the lowest electricity rates in North America,³⁹ it currently costs a BC homeowner about 2.7 times more to use a gigajoule of electricity (\$35.08/GJ) than to use a gigajoule of natural gas (\$12.95/GJ). To achieve utility bill savings, a heat pump must use 2.7 fewer gigajoules of energy than a fossil fuel heating system over the course of a season.

This utility cost differential influences adoption. Jurisdictional comparisons in Europe as shown in Figure 4 indicate that heat pump uptake increases as the electricity-to-gas price gap narrows. As the difference between the two rates closes, high-efficiency heat pumps become the superior technology on both a performance and economic basis, increasing their market share.

Europe Heat Pump Uptake Compared to BC & Electricity to Gas Price Ratio in 2023

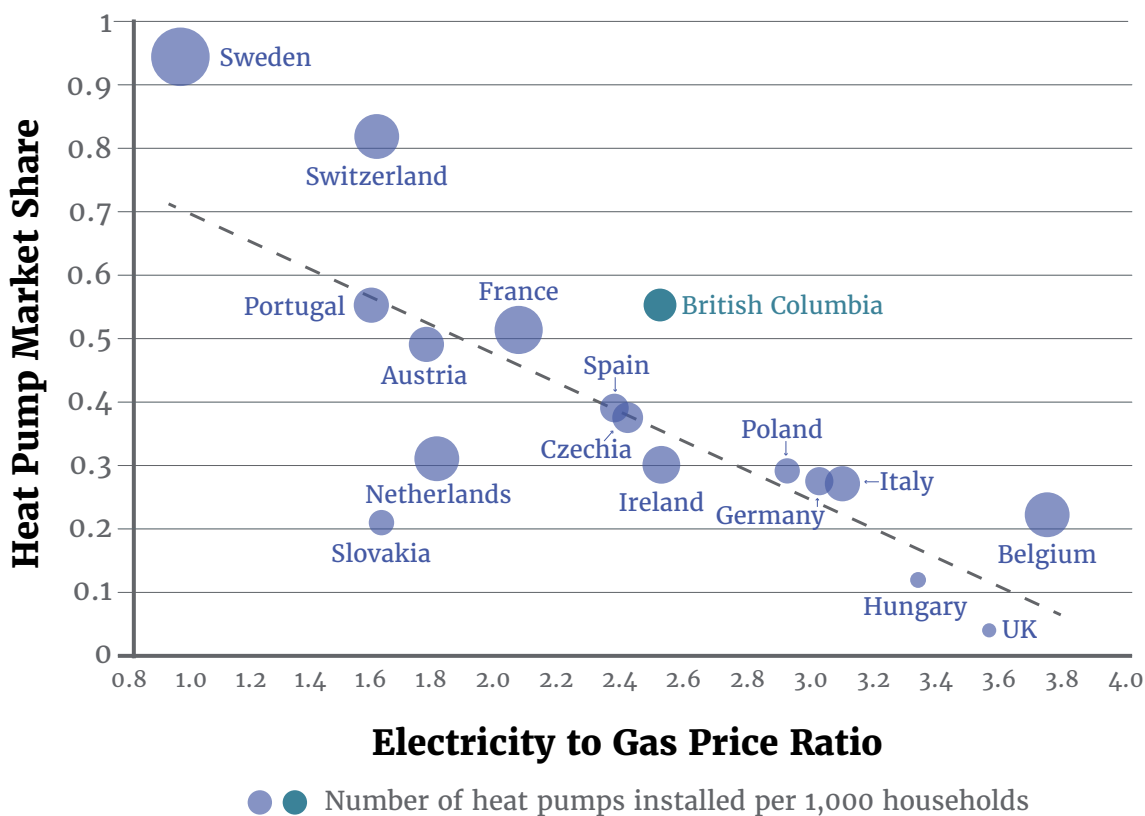


Figure 4 - Comparison between the heat pump market share and electricity and gas price ratios for countries in Europe 2023 [adapted from the UK Climate Committee⁴⁰]. A teal circle has been added to the original chart to show the electricity to natural gas price ratio in BC when the BC Carbon Tax was still in effect (2.5 times higher) and the approximate market share of residential heat pumps in 2023 based on shipping data for residential forced air space heating systems.⁴¹

A 2023 study of BC residential energy bills found that while the BC Carbon Tax was in effect, 66% of homes experienced the same or lower energy costs after switching from natural gas heating to high-efficiency heat pumps.⁴² While no comparable study has been conducted since the carbon tax was eliminated in April 2025, a 2025 post-elimination modelling study found that residential buildings using heat pumps for space heating and cooling have lower energy costs than the same buildings using natural gas for heating and conventional air conditioning. (Figure 5)⁴³ At a provincial scale, Clean Energy Canada estimates that if all homes, including electric and fossil fuel heated ones, converted to electric heat pumps it could save consumers \$675 million in annual energy bills.

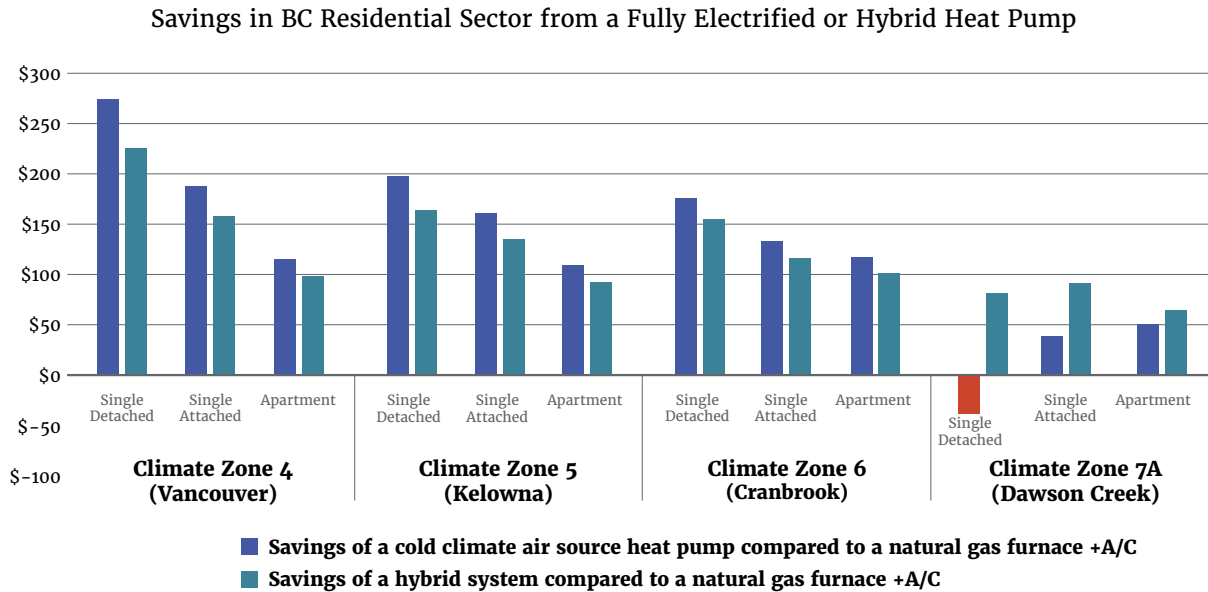
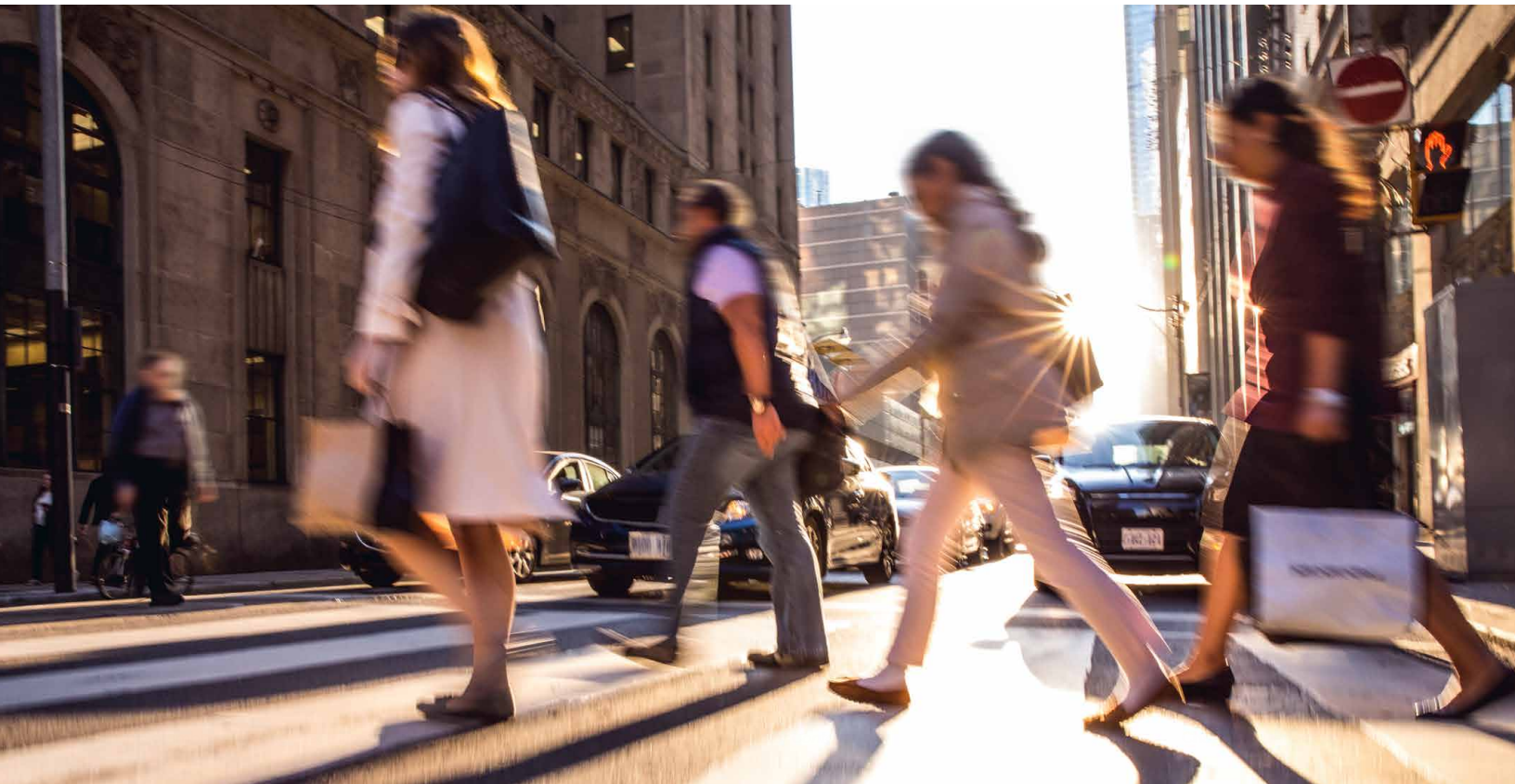


Figure 5 - Savings in BC's residential sector from a fully electrified or hybrid heat pump (Source: Clean Energy Canada)

From a utility bill perspective, the threshold between gas-heated and electric heat pump-heated residential buildings is quite similar. With the removal of the carbon tax, any remaining gap will now need to be closed by continued improvements in equipment and system efficiencies – something manufacturers and mechanical designers are continually striving for.



Is There Enough Electricity to Support a Market-Wide Shift to High-Efficiency Building Electrification?

Several concerns have been raised about the ability of BC Hydro’s electricity grid to support sector-wide electrification, particularly as other sectors add significant new loads (e.g., data centres, liquid natural gas facilities).

BC Hydro’s 2025 Integrated Resource Plan (IRP; see Table 2) provides the most comprehensive estimate.⁴⁴ According to the IRP, if the Zero Carbon Step Code for new construction and the Highest Efficiency Equipment Standard for existing buildings were both adopted province-wide by 2030 (two policies that would effectively electrify most of BC’s building stock by 2050), they would add 1,000 GWh per year by 2035 (1.5% of the total Reference Load) and 10,300 GWh per year by 2050 (12% of the total Reference Load). By 2050, this increase would be comparable to the energy procured through BC Hydro’s 2024 and 2025 Calls for Power (see [Chapter 2](#)).⁴⁵

Table 2 - Estimated incremental demand impacts of the Zero Carbon Step Code and the Highest Efficiency Equipment Standard (Source: BC Hydro 2025 IRP)

	2035 (GWH/YR)	2050 (GWH/YR)
Zero Carbon Building Code – Incremental Load	700	2,400
Highest Equipment Efficiency Standard – Incremental Load	300	7,900
Total Incremental Load from Building Electrification Policies	1,000	10,300
Total Reference Load Estimated Demand	73,586	83,526
Percentage demand Increase Over the BC Hydro Reference Scenario	1.4%	12.3%

For the IRP’s 2035 scenario, the projected increase is modest and sufficiently long-term to be effectively managed through BC Hydro’s energy planning. While demand growth for 2050 is more substantive, it would occur gradually and predictably as equipment is replaced and new electrically heated buildings are constructed. This allows BC Hydro sufficient time to expand resources to meet demand as it comes online. This is a very different situation compared to new demand from large industrial facilities which come online all at once. Utilities have multiple strategies to address forecasted energy demand increases. For example, one study estimates that if all BC households that currently use electric baseboard heating moved to heat pumps, the overall impact on the grid would be a reduction of 4,200 GWh/yr.⁴⁶ Over time, many newly electrified homes and buildings will likely conduct some form of energy efficiency retrofit and/or install on-site solar PV and batteries to generate and store their own electricity. What incremental demand remains could then be addressed through future calls for clean electricity (e.g., wind and solar).

In addition to these energy increases, building electrification can also be expected to increase grid capacity demand during peak load events, particularly during extreme cold periods. To date, BC Hydro’s highest recorded peak demand was 11,300 megawatts in January 2024.⁴⁷ Modelling by Clean Energy Canada and Dunsky Consulting estimate accelerated electrification in buildings and transportation would add about 1,100 MW to BC’s peak electricity demand by 2040 compared to a more moderate reference scenario.⁴⁸ However, the same study also identifies about 1,760 MW of cost-effective peak reduction by the same year from measures such as residential battery energy storage, residential electric vehicle load management, commercial and institutional sector storage and curtailment, and residential space and water heating demand management. Another study suggests dual-fuel systems that switch from heat pumps to renewable gas at below zero temperatures can play an important role in mitigating the strain on the province’s electricity grid during peak load events.⁴⁹ Deep energy retrofits and demand reduction incentives for industrial, commercial, and residential customers will likely play a bigger role in the future. Utilities, including BC Hydro, are already actively exploring and deploying these distributed capacity resources.ⁱⁱ

ii Concerns regarding potential local electricity distribution constraints, especially for larger buildings, were raised during the Roadmap engagement. These are identified in Chapter 3 and included in the Roadmap’s set of actions.

3. The Current State of Building Electrification in BC



This chapter reviews current trends in building electrification in BC, for both existing buildings and new construction projects.

Commercial and Institutional Buildings 🏢

Commercial and institutional (C&I) buildings are highly diverse in terms of size, function, and mechanical building systems. This sector includes hospitals, hotels, stadiums, schools, office towers, retail spaces, and everything in between. Many buildings in this sector receive their heat from district energy systems, most of which use natural gas as their primary fuel source. C&I buildings account for 7% of BC's GHG emissions, slightly less than half of all building sector GHG emissions.

Figure 6 shows the most common types of primary heating equipment used, which include a mix of gas and electric systems, in a select number of C&I building types.⁵⁰ There is a higher prevalence of gas equipment in colleges and universities, schools, and commercial landlord properties, with electric equipment more commonly found in office buildings and hotels and motels. Of note are the number of packaged and central heat pump systems being used: commercial landlord-owned buildings at 15% market penetration, office buildings at 16%, retail buildings at 17%, hotels & motels at 7%, schools at 19%, and colleges and universities at 10%. As this is based on 2019 data, these percentages are likely higher today.

To date, electrification in C&I buildings is often led by public and private organizations with strong corporate environmental, sustainability, and governance mandates and offer real examples of how electrification can be implemented.

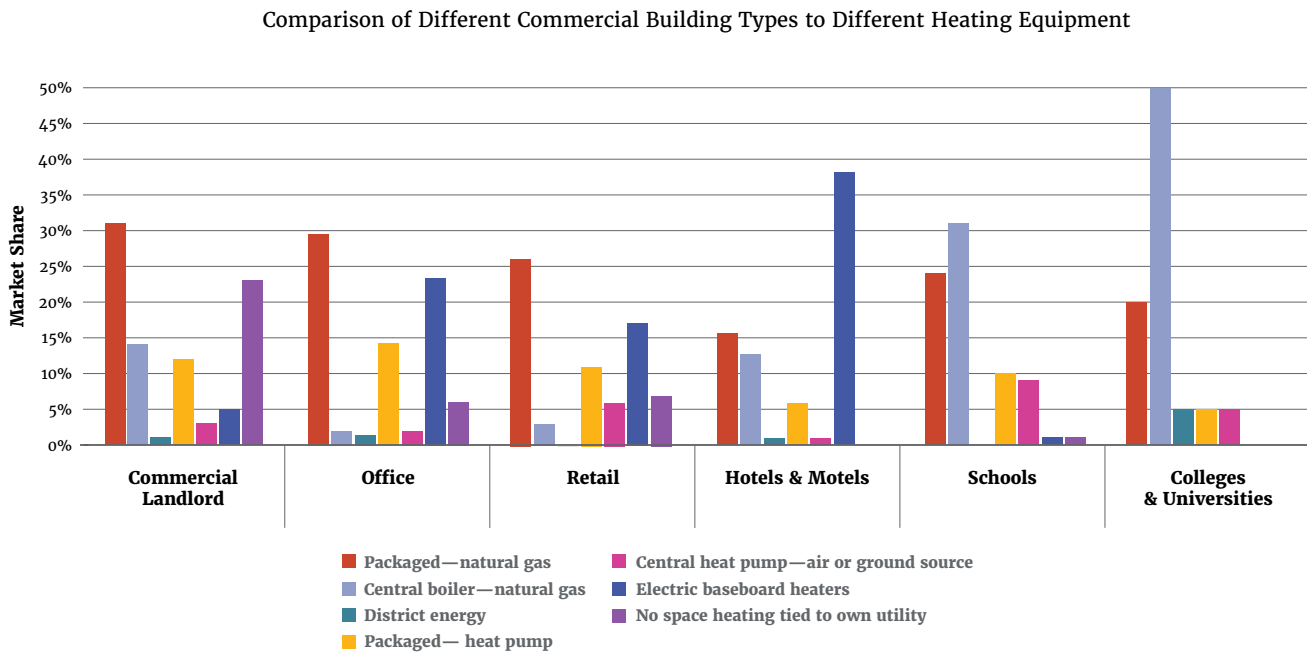


Figure 6 – Equipment used for main space heating in different types of commercial and institutional buildings (Source: BC Hydro)

Key trends and considerations for C&I buildings:

- The majority of GHG emissions come from burning natural gas in boilers, furnaces, roof-top units, make-up air units, domestic hot water heaters (low-volume, e.g., office), domestic hot water boilers (high-volume, e.g., hotel)
- High-efficiency electrification alternatives exist for all the major technology categories; however, high-temperature applications (such as boilers) are more challenging to implement because of limited technology options and higher incremental cost. More options are quickly coming to market to address this gap.
- While full building electrification is possible, many decarbonization projects conducted in large C&I buildings to date have retained some level of supplemental natural gas heating to make the project more financially feasible. Reasons include sizing the heat pump to stay within a building’s existing electrical service size, structural limitations that limit the total weight of equipment installed, pre-existing local electricity distribution grid capacity restrictions, and more generally reducing a project’s total capital expenditure. In an ideal situation, dual-fuel systems would be designed and operated to allow heat pumps to meet the majority of the building’s heating load. However, this is not necessarily the case in practice, posing a risk of overreliance on gas.
- The potential to decarbonize existing TENs varies by system. In some cases, pathways for decarbonization systems are already under development, largely driven by municipal regulations mandating zero emission standards for new buildings. In the meantime, owners of buildings connected to carbon intensive TENs who want to decarbonize more rapidly may face a complicated path forward due to contractual terms with the heating provider.
- Incentives, such as Fortis BC’s dual-fuel programs, have been well-used in the absence of CleanBC offerings for this sector.

Apartment-Style Residential Buildings 🏠

Apartment-style buildings contribute roughly 2% of BC’s GHG emissions.⁵¹ These are buildings with individual suites that are accessed through a common area (e.g., hallway, entranceway). Ownership models include strata title, landlord, market-rental landlord, social housing, and cooperative housing.

Heating systems vary by building age: pre-1980 buildings typically contain hydronic hot water systems that use central gas boilers, while post-1980 include electric resistance baseboards for in-suite heating and natural gas equipment for heating common areas (though some were built with central gas boilers). Decorative natural gas fireplaces are also common in post-1990 condominiums and are often used as secondary or even primary in-suite heating sources. Air conditioning is uncommon in most apartment buildings in BC, except in the newest buildings and in the central interior of the province where it has been common since at least the 1970s.

Figure 7 shows the prevalence of the different energy sources used to provide primary space heating within living units. In this case, electric systems are more commonly used but have dropped slightly since 2010.

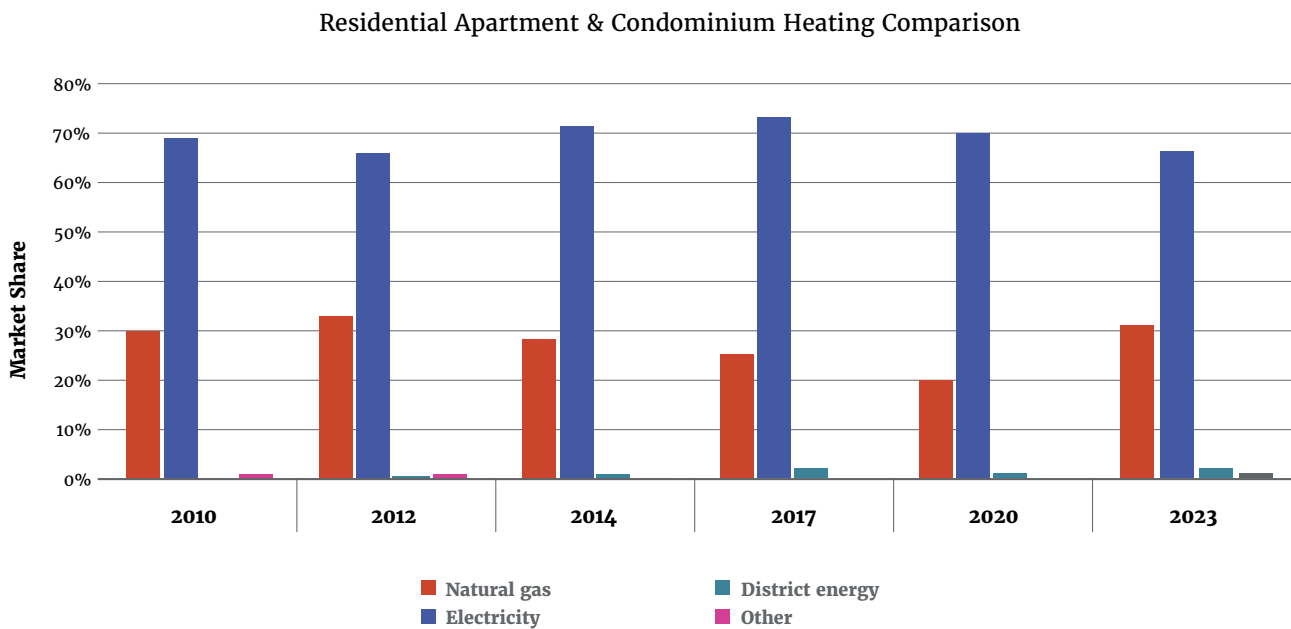


Figure 7 – Energy source used for in-suite, primary space heating for apartment-style buildings (Source: BC Hydro)

From a socio-economic perspective, most affordable housing in BC is found in apartment buildings constructed before 1990 or in social housing.⁵² These residents are particularly vulnerable to increases in the cost of living, and negative health impacts related to climate change (e.g., overheating, poor outdoor air quality events), inadequate air circulation (e.g., mould), and indoor air pollution (e.g., harmful emissions from aging natural gas stovetops and hood fans).

Key trends and considerations for apartment-style residential buildings:

- The majority of GHG emissions for this subsector come from burning natural gas in central boilers, roof-top units, make-up air units, and domestic hot water boilers.
- High-efficiency electric technologies exist for nearly all applications, with more apartment-appropriate technologies quickly becoming available. However, the business case for electrification remains challenging.
- Residents who want to retrofit their own units are often limited by tenancy and strata restrictions.
- The cost of electrical capacity upgrades is a major barrier for many buildings. Costs can range between CAD\$500,000 to \$2 million. Active load management strategies are a critical first step to mitigating these costs.
- Ensuring resident health and safety regarding overheating is a priority. Tenants and residential strata owners want to add cooling but are concerned about affordability. Market rental buildings may see rent increases, while some strata owners could be forced to sell their unit if an entire building decides to install cooling (due to their inability to afford the capital expenditure). In buildings switching from centralized in-suite heating to in-suite heat pumps, fair allocation of space heating costs currently embedded in rent or strata fees to residents' individual utility bills must be addressed.
- Electrification efforts in apartments have increased thanks to a combination of factors, including a growing recognition for the need for in-suite cooling, the introduction of decarbonization planning support services for apartment building owners (e.g., the Strata Energy Advisor and the Rental Apartment Retrofit Accelerator programs), new CleanBC and utility capital incentives, and various local government supporting measures.
- Complex governance structures and limited financing opportunities present barriers in stratified condominiums.
- Despite the challenges, several apartment buildings in BC have undergone electrification retrofits for both space and domestic hot water.

Image credit: Andrew Latreille



Ground-Oriented Residential Buildings

Ground-oriented homes are primarily accessed by a private entrance at ground level (e.g., single-detached, semi-detached, town homes, mobile homes, and some multiplexes), and account for 6% of BC's GHG emissions. Ownership models include freehold, strata title, landlord, market-rental landlord, social housing, and cooperative housing. Figure 8 shows that the use of electricity for primary space heating has grown from 28% of homes in 2010 to almost 35% in 2023. During the same period, fossil fuel space heating dropped from 66.5% of homes to 62.1%.

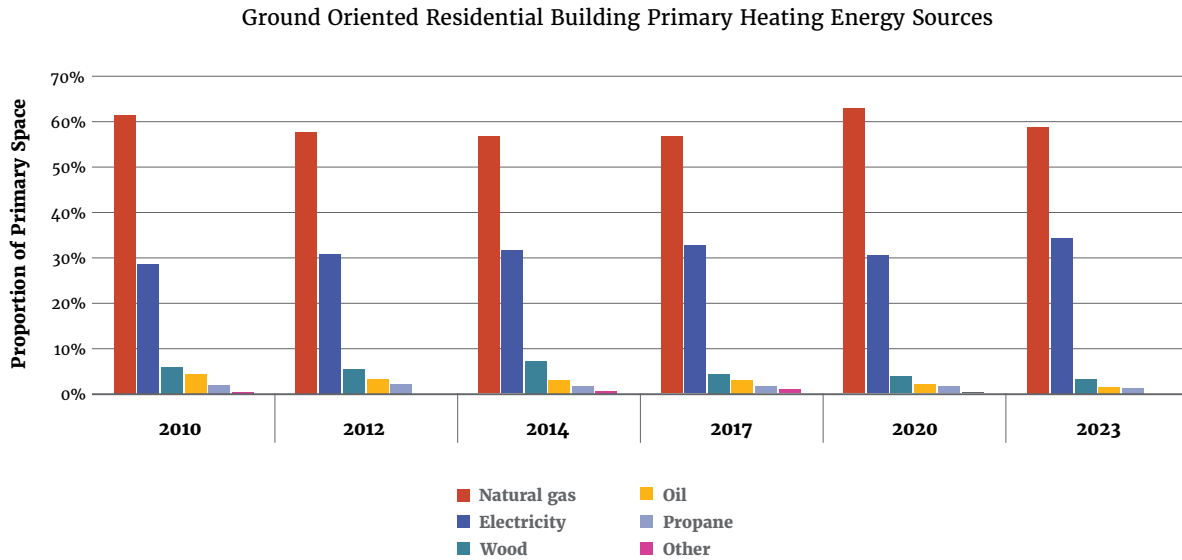


Figure 8 – Ground oriented residential space heating primary energy source (Source: BC Hydro⁵³)

The size and relative simplicity of heating systems in ground-oriented homes make them considerably more straightforward to electrify compared to larger buildings with more complex heating systems. Consequently, this sector has seen the most success to date with switching to high-efficiency electric heat pumps. Figure 9 shows how heat pumps replaced natural gas furnaces in 2022 and 2023 as the most commonly shipped residential air heating technology to the BC market,⁵⁴ a positive indicator of the growing use of heat pumps in both retrofit and new construction projects. Today, over 30% of electrically heated ground-oriented homes use either an air-source or a ground-source heat pump as their primary heating system.⁵⁵

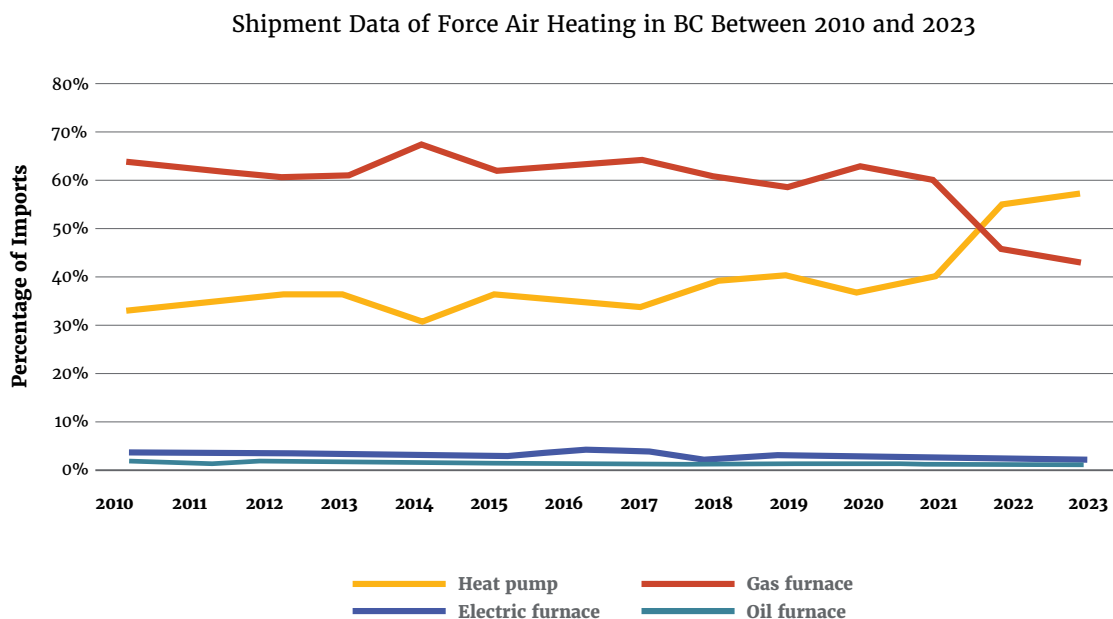


Figure 9 - BC shipment data - residential air heating equipment (Source: Province of BC, Powering Our Future: BC's Clean Energy Strategy, based on industry-provided data).

In recent years, the growth in heat pumps for this sector has been supported by generous CleanBC, utility, and local government incentives. Since it was first introduced in 2018, the base CleanBC incentive offer for small residential heat pumps has typically been \$3,000 per home and was as high as \$19,000 per home for the highest tier of its income-qualified Energy Savings Program. As of mid-2025, the CleanBC Better Homes program provided nearly 28,000 heat pump incentives to BC households.⁵⁶ While this is a positive accomplishment and has helped to build the market for small residential heat pumps, this represents about 4.5% of the more than 600,000 ground-oriented homes heating with gas or heating oil.⁵⁷ Achieving higher levels of adoption will clearly require more policy tools, although incentives will continue to play an important role, especially for lower income households.

Heat Pumps in Scandinavia

The adoption of heat pumps in Scandinavian countries offers an interesting case study. Despite similarly cold, northern climates to BC, these countries have the highest heat pump adoption rates in European countries. Market penetration in Norway, Sweden, and Finland is 98%, 94%, and 94%, respectively.⁵⁸ One reason for this is the early adoption of a consumer carbon tax. Sweden, for example, was one of the first countries in the world to place a consumer carbon tax on GHG pollution in 1991. In 2025, its consumer carbon tax was the equivalent of CAD\$230 per tonne of carbon dioxide equivalent (t/CO₂e). This has contributed to a lower electricity-to-gas price ratio ([Chapter 2](#)). This demonstrates that with the appropriate economic and policy conditions, high-efficiency heat pumps can achieve widespread adoption, even in colder climates.

Key trends and considerations for ground-oriented residential buildings:

- Many different heat pump technologies are available for this subsector, varying in cost, size, and quality.
- The same ownership model and rental related issues identified for apartment-style buildings, also exist for ground-oriented residential buildings
- Incentive availability influences adoption rates. Fewer non-income qualified incentives over the past year have led to lower demand, with the exception of dual-fuel systems. Fortis BC's dual-fuel incentive for existing homes (reaching as high as \$10,000 per home) led to a spike in demand.⁵⁹
- According to contractors, growing industry use of calculating electrical capacity based on historical utility data and familiarity with load management strategies is resulting in fewer unnecessary electrical upgrades.
- Most heat pumps manufactured in Asia are exported to the U.S. before entering Canada. At the time of print, these systems have increased by 7-10% due to tariffs.
- Contractors warn that seemingly minor requirements to improve quality installations can add increasing costs to projects. Some examples given include inconsistent and overly complicated municipal permitting; outdated noise bylaws; the time needed to complete F280-12 calculations for program requirements; and needing multiple trade designations involved in an installation.
- Ensuring that heat pumps are properly designed, installed, and serviced remains an ongoing priority.⁶⁰
- Incentive-based programs, delivered through the Home Performance Contractor Network (HPCN), include quality assurance mechanisms, such as training and consumer reporting (for poor installations, with follow-up).
- However, for homeowners who do not access these incentives, there are effectively no minimum training requirements for installers. This increases the risk of improperly sized and/or installed equipment. Until stricter requirements for heat pump credentials are implemented, this risk will increase, particularly if government incentives are reduced or narrowed in scope.

New Construction

For the purposes of this Roadmap, the new construction sector comprises all the building subsectors discussed above (i.e., commercial and institutional, apartments, and ground-oriented residential). While scale and technologies vary across these subsectors, one consistent finding is that new buildings are more straightforward and cost-effective to design for electrification than retrofitting existing buildings built for fossil fuel heating systems.

The most comprehensive publicly available data for Part 9 homes comes from Natural Resources Canada’s (NRCan) EnerGuide New Home Evaluations.⁶¹ Figure 10 shows that over the past five years, natural gas is still the most commonly listed source of energy for primary space heating, but its prevalence has dropped nearly 25% while electric space heating has increased by more than 20%. Heat pump adoption has also accelerated significantly: Figure 11 shows in 2025, 65% of EnerGuide registered new homes in BC included heat pumps, representing an increase of more than 45% in five years.

Comparable data for apartment building and commercial/institutional new construction is limited. However, increased adoption of the BC Energy Step Code, the Zero Carbon Step Code, and the BC Building Code’s overheating mitigation requirement for residential buildings indicates a shift towards all or nearly all-electric heating systems.

When considering cost, two BC studies demonstrate that new electrically heated apartment-style buildings are not more expensive to construct than gas heated ones. A 2024 BC Housing analysis of 38 new apartment buildings found no correlation between construction costs and GHG emissions,⁶² and reported that buildings with a greenhouse gas intensity (GHGI) of less than five kgCO₂e/m² cost on average 3% less to build. Similarly, a 2021 comparative costing study by BC’s Zero Emissions Building Exchange (ZEBx) assessed the construction cost of seven new mid-rise apartment buildings and concluded that “high-performance (Step 4), all-electric buildings can be constructed for less than the average cost of similar code-minimum buildings.”⁶³

Primary Heating Source Energy for Residential New Construction

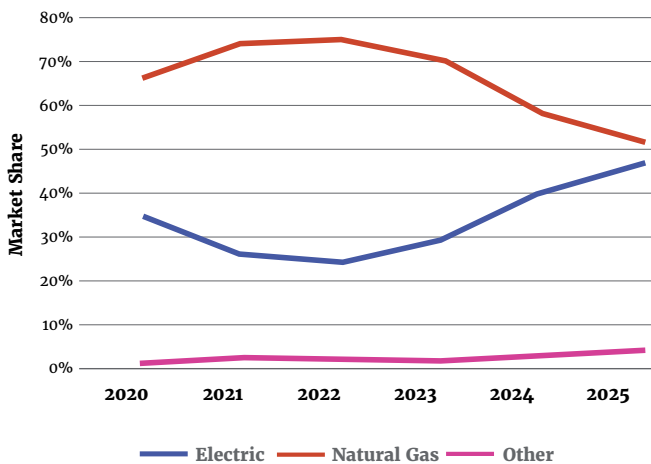


Figure 10 – Primary heating energy source for Part 9 new residential construction in British Columbia as per EnerGuide New Home Evaluations

Types of Heat Pumps Installed in New Homes in BC

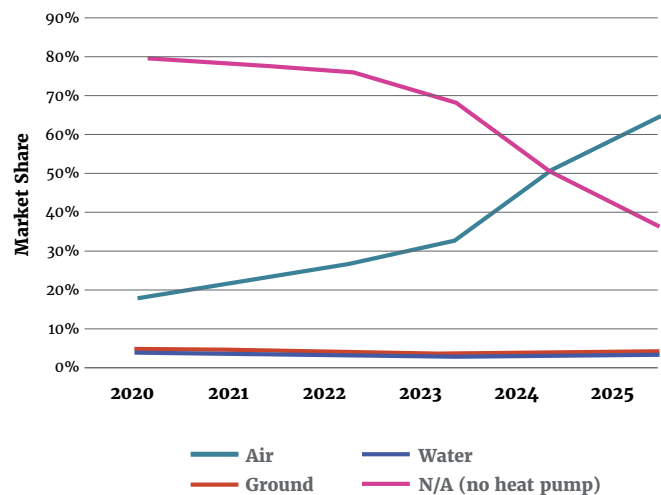


Figure 11 – Types of heat pumps installed in Part 9 new residential construction in British Columbia as per EnerGuide New Home Evaluations

Key trends and considerations for new construction:

- With the exception of mechanical cooling, there is currently little market demand for electric systems.
- Broader adoption requires increasing familiarity and comfort among builders and developers. While industry leaders and early adopters in BC are showing the way, quickly expanding beyond them is necessary to adopt Emissions Level 4 of the Zero Carbon Step Code (ZCSC) by 2030.
- A significant challenge facing builders is that the Zero Carbon Step Code is emerging alongside several other new building requirements (e.g., seismic, accessibility, radon, and energy performance). Despite evidence that all-electric buildings can deliver at a comparable cost, many in the development community perceive them to add cost and are frustrated by the need to change traditional construction methods under a compressed timeline.
- While the BC Energy Step Code was supported by strong provincial communication, education, and training, similar support for the ZCSC has been limited. This has resulted in a lack of familiarity within the development community and what they can do to address it.
- A better and more transparent understanding is needed of the costs and benefits between achieving Emissions Level 3 and 4 of the ZCSC, as well as how higher steps of the Energy Step Code influence their achievement.
- Builders often rely on established contractor relationships; resistance from mechanical contractors can limit electric systems' adoption.
- There are concerns that electric space and water heating will require larger and more costly electrical service connections, heightened by limited familiarity of load management strategies.
- Electrical service connections must be secured by the builder well in advance of a project's scheduled occupancy, yet there are still reported connection delays. Some developers are concerned that fully electrified buildings at scale will add significant delays, particularly if larger service connections are needed by multiple projects in the same area.
- Certain public institution projects (e.g. hospitals) have very high energy demands due to the types of services they provide. Fully electrifying these projects is sometimes impossible due to a lack of local electric infrastructure to support the load.
- New buildings connected to TENs will often have higher carbon footprints than a building providing its own all electric heating. More needs to be done to understand the pros and cons of connecting to these systems versus building-by-building electrification.

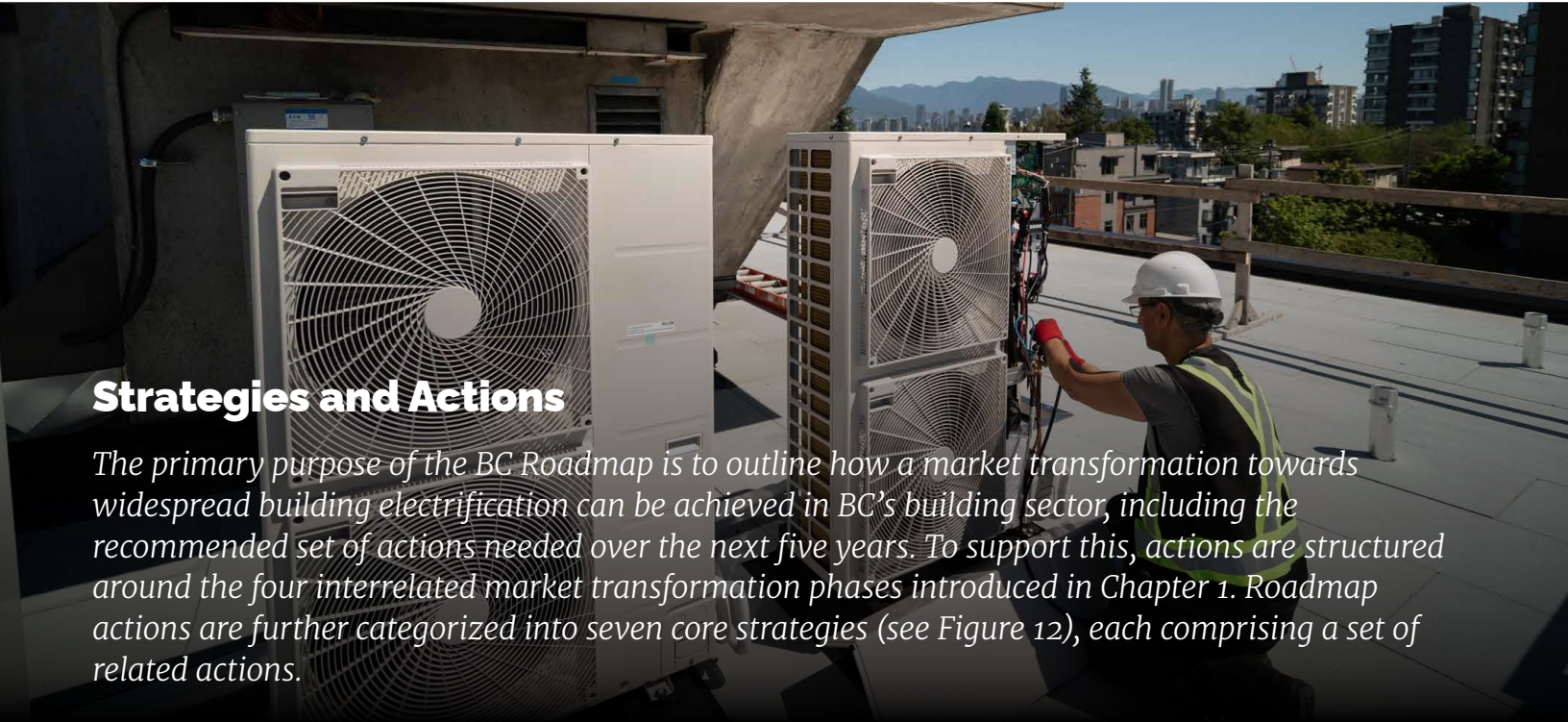
Summary of Overarching Challenges

This review of the state of the market shows that although BC's transformation to building electrification is making steady progress in most building sectors, crucial challenges still exist. While some of these challenges only apply to specific sectors, others are more overarching and can be summarized as follows:

- **Higher incremental capital cost** compared to “like-for-like” equipment replacements, including potential electrical service capacity upgrade costs.
- **The lower cost of natural gas** compared to electricity, except in regions such as Pacific Northern Gas's West Service Area (e.g., Kitimat, Prince Rupert), where natural gas rates are nearly twice as high as other parts of the province.
- **Limited market information and associated signals**, such as building-level energy and emissions scores and home energy labels, to create greater awareness and demand for building electrification projects.
- **Greater complexity** for building owners, contractors, operators, and tenants as compared to “like-for-like” equipment replacements.
- **Gaps in building electrification training and experience** among building professionals and contractors.
- **Uncertainty in political commitment** to building decarbonization in general and electrification specifically, including an absence of clear communication that the province's electrical grid can support a gradual shift to building electrification over the next 15 to 20 years.

The following chapter outlines a recommended set of actions that can be taken to address these barriers and accelerate the adoption of building electrification benefits.

4. The BC Building Electrification Roadmap



Strategies and Actions

The primary purpose of the BC Roadmap is to outline how a market transformation towards widespread building electrification can be achieved in BC’s building sector, including the recommended set of actions needed over the next five years. To support this, actions are structured around the four interrelated market transformation phases introduced in Chapter 1. Roadmap actions are further categorized into seven core strategies (see Figure 12), each comprising a set of related actions.



Figure 12 - Summary of the seven roadmap strategies






High-level information on each action, including their primary actor and suggested timeline, is provided in the sections below, with additional details in [Appendix C](#). As discussed in [Chapter 2](#), BC’s building sector is large and diverse, in terms of people involved and the kinds of buildings it encompasses. To reflect this complexity, the tables below indicate where recommended actions address one or more of the four core building subsectors:

	Existing commercial and institutional buildings
	Existing apartment-style residential buildings
	Existing ground-oriented residential buildings
	New construction

Each of the four unique subsector roadmaps are provided on the following pages.




LEAD

Market confidence is undermined when policies, regulations and supports are, delayed, revised, or disappear. Clear direction through consistent rules, defined timelines, and stable supports enables industry to plan and invest with certainty. This phase includes actions that signal commitment on the part of key decision makers and regulators. It also recognizes that persistent leadership from governments, utilities, industry, and others is needed to support the other three phases of market transformation.

ACTIONS TO PROVIDE STRONG AND PERSISTENT LEADERSHIP	PRIMARY ACTOR(S)	SUGGESTED TIMELINE	RELEVANT SECTORS
STRATEGY #1: ESTABLISH STRONG AND PERSISTENT LEADERSHIP ON THE PART OF KEY ACTORS			
1. Reestablish the Province of BC's long-term commitment to building electrification and build market-wide confidence that BC Hydro will be capable of delivering electricity when and where it is needed.	<ul style="list-style-type: none"> Province of BC 	2026/Ongoing	
2. Continue to invest in electricity grid readiness and demand management strategies.	<ul style="list-style-type: none"> Electricity utilities 	Ongoing	
3. Commit secured funding to support building electrification over the next five years, including maintaining the Local Government Climate Action Program (LGCAP) and designating and expanding the Innovative Clean Energy Levy for building electrification revitalization projects.	<ul style="list-style-type: none"> Province of BC 	2026–2031	
4. Continue to grow and connect the diverse coalition of organizations and individuals who advance and advocate for electrifying BC's building sector.	<ul style="list-style-type: none"> ZEIC CEA Industry associations 	2026–2031	
5. Deliver clear and timely communications about the benefits and opportunities of building electrification, as well as the challenges and options for overcoming them.	<ul style="list-style-type: none"> Province of BC Local governments Electricity utilities Industry associations Public interest groups 	Ongoing	

PREPARE

This phase is comprised of foundational, market-wide actions needed to build awareness and knowledge about building electrification and help industry achieve lower cost and higher quality installations over time. These actions help prepare the market for more rapid uptake of electrification. Early implementation will help accelerate market readiness and long-term growth.









ACTIONS TO PREPARE THE MARKET	PRIMARY ACTOR(S)	SUGGESTED TIMELINE	RELEVANT SECTORS
STRATEGY #2: IMPROVE ACCESS TO BUILDING ENERGY DATA AND REQUIRE MANDATORY ENERGY AND EMISSIONS REPORTING			
6. Establish provincial guidelines for sharing whole building energy data with building owners and require utilities to adhere to them.	<ul style="list-style-type: none"> Province of BC Utilities 	2026	
7. Introduce mandatory provincial energy and emissions reporting for large buildings (100,000 ft ² or greater) by 2028 and scale up over a three-year period to include all mid-sized buildings. In the interim, support municipal reporting programs to help prepare the market.	<ul style="list-style-type: none"> Province of BC Local governments Building owners 	2028/Ongoing	
8. Require all ground-oriented homes to provide a home energy label when advertised for sale or rent.	<ul style="list-style-type: none"> Province of BC Realtors Homeowners 	2028/Ongoing	

ACTIONS TO PREPARE THE MARKET	PRIMARY ACTOR(S)	SUGGESTED TIMELINE	RELEVANT SECTORS
STRATEGY #3: CREATE PERMANENT REDUCTIONS IN THE COST OF BUILDING ELECTRIFICATION PROJECTS			
9. Increase the load management options allowed by BC and Canadian Electrical Codes to minimize the size of building electrical service capacity.	<ul style="list-style-type: none"> • Canadian Standards Association • Province of BC • Local governments • Technical Safety BC 	2026/Ongoing	
10. Adopt a streamlined municipal heat pump permitting approach that reduces the time associated with receiving a permit while ensuring safety and quality verifications are being met.	<ul style="list-style-type: none"> • Local Governments • Technical Safety BC • HVAC associations 	2027/Ongoing	
11. Increase the ability of contractors to receive the training and certifications needed to complete multiple tasks associated with the installation of small residential heat pumps (<5kW prime mover).	<ul style="list-style-type: none"> • Province of BC • HVAC associations • Trade unions • Training schools 	2027/Ongoing	
12. Continue to improve the coordination between utilities, local governments, and developers to ensure electrical connections are made well in advance of scheduled building occupancy.	<ul style="list-style-type: none"> • Electricity utilities • Local governments • Developers 	Ongoing	
STRATEGY #4: SUPPORT WORKFORCE READINESS AND IMPROVE THE QUALITY OF INSTALLATIONS			
13. Establish and implement dual-fuel performance standards for different equipment types that prioritize heat pump use and can be referenced by professional guidelines, funding programs, and equipment regulations.	<ul style="list-style-type: none"> • Canadian Standards Association • Professional & HVAC associations • Rebate program managers 	2027/Ongoing	
14. Establish minimum training and qualifications for installing small residential heat pumps (<5kW prime mover).	<ul style="list-style-type: none"> • Province of BC • HVAC associations • Training schools 	2027/Ongoing	
15. Enable local governments to require performance commissioning (Cx) for new construction projects and new equipment installations, and performance retro-commissioning (RCx) for poor performing existing buildings as per energy and emissions reporting.	<ul style="list-style-type: none"> • Province of BC • Local governments • Professional & HVAC associations 	2027/Ongoing	

SUPPORT






This phase focuses on accelerating market activity for building electrification in the short- to medium-term by reducing barriers for building owners and industry actors to move projects forward. Actions such as incentives, financing, targeted promotions, and broad industry training, are intended to enable project uptake and steer toward future regulations.

ACTIONS TO SUPPORT MARKET GROWTH	PRIMARY ACTOR(S)	SUGGESTED TIMELINE	RELEVANT SECTORS
STRATEGY #5: DEDICATE RESOURCES TO ENSURE EQUITABLE ACCESS TO BUILDING ELECTRIFICATION OPPORTUNITIES AND BENEFITS			
16. Establish a process for rental market actors to co-develop guidelines that allow for a fair and transparent allocation of building electrification project costs, and any transference of utility bill expenditures between tenants and landlords.	<ul style="list-style-type: none"> • Province of BC • Building owner associations • Tenant organizations 	2026	
17. Continue to offer incentives for lower-income households and buildings, including social housing, consolidating them where possible to minimize the time and cost associated with applications. Ensure northern and interior communities are well represented.	<ul style="list-style-type: none"> • Federal government • Province of BC • Local governments • Utilities 	Ongoing	

ACTIONS TO SUPPORT MARKET GROWTH	PRIMARY ACTOR(S)	SUGGESTED TIMELINE	RELEVANT SECTORS
STRATEGY #6: CONTINUE TO COMMIT RESOURCES AND UNLOCK FINANCING TO SUPPORT BUILDING ELECTRIFICATION MARKET GROWTH			
18. Provide incentives that focus on supporting market readiness for upcoming equipment regulations, consolidating them where possible to minimize the time and cost associated with applications.	<ul style="list-style-type: none"> • Federal government • Province of BC • Local governments • Utilities 	2026/Ongoing	
19. Provide municipal incentives for all-electric new construction projects that increase their value (e.g., density bonuses) and/or allow for standardized designs to be used for multiple buildings.	<ul style="list-style-type: none"> • Local governments • Developers 	2026/Ongoing	
20. Enable local governments to offer property-secured improvement financing, learning from property assessed clean energy (PACE) financing (prioritize for C&I and apartment-style building sectors).	<ul style="list-style-type: none"> • Province of BC • Local governments • Building owner associations • Financial institutions 	2027/Ongoing	
21. Explore the use of on-bill utility financing for residential electrification retrofit projects and allowing larger commercial and apartment-style retrofit projects to amortize the cost of upgraded distribution transformers.	<ul style="list-style-type: none"> • Province of BC • Utilities 	2027/Ongoing	
22. Set up an innovative financial mechanism (e.g., government loan guarantee) to provide support for strata corporations pursuing electrification projects.	<ul style="list-style-type: none"> • Federal government • Province of BC • Strata associations 	2027/Ongoing	
23. Continue to support training in building electrification for building owners, managers, and operators, developers, builders, design professionals, and contractors. Emphasize opportunities to enhance the skillset of gas-oriented trades to implement low-carbon technologies.	<ul style="list-style-type: none"> • Federal government • Province of BC • Local governments • Utilities • Training providers • Industry associations 	Ongoing	
24. Continue to provide funding for retrofit concierge services, ensuring easy access to equity-deserving households, lower-capacity owners, and communities in BC's north and interior.	<ul style="list-style-type: none"> • Federal government • Province of BC • Local governments • Utilities • Concierge service providers • Building owner associations 	Ongoing	
25. Continue to provide funding for demonstration and pilot projects that target promising new technologies and harder-to-electrify use cases. Encourage projects that showcase Canadian-based technologies.	<ul style="list-style-type: none"> • Federal government • Province of BC • Local governments • Utilities 	Ongoing	

REGULATE

This phase establishes minimum performance requirements aligned with high-efficiency and low GHG equipment and buildings. The actions firmly establish the pace and scale of BC’s building electrification market transformation over the next 20 years. For some actions, a phased regulatory approach is suggested due to building size and geographical region. Clearly defined timelines, communicated well in advance, sends a strong signal to market actors of the skills and knowledge they need to obtain for compliance. Advance clarity also helps governments, utilities, and industry associations to align resources and coordinate implementation efforts.

ACTIONS TO REGULATE MARKET CHANGE	PRIMARY ACTOR(S)	SUGGESTED TIMELINE	RELEVANT SECTORS
STRATEGY #7: ESTABLISH STANDARDS AND REGULATIONS FOR LONG-TERM MARKET TRANSFORMATION			
26. Implement the Highest Efficiency Equipment Standard for packaged roof top units and ground-oriented residential space and water heating starting in 2030 for Climate Zones 4 and 5. Increase provincial enforcement capabilities to ensure compliance across multiple climate zones.	<ul style="list-style-type: none"> Province of BC HVAC manufacturers and supply chain Building owner associations 	2030/Ongoing	
27. Set a minimum emissions performance standard by 2030 for large commercial and institutional buildings (100,000 ft2 or greater), and mid-sized buildings by 2032. Over time, reduce minimum GHG performance thresholds using a predictable schedule.	<ul style="list-style-type: none"> Province of BC Building owner associations 	2030/Ongoing	
28. Set a requirement in the BC Energy Efficiency Standards Regulation for any permanently installed air conditioners to include a reversing valve to enable it to heat or cool an indoor space.	<ul style="list-style-type: none"> Province of BC HVAC manufacturers and supply chain 	2027/Ongoing	
29. Require all new buildings in Climate Zones 4 and 5 to meet or exceed Emissions Level 3 of the Zero Carbon Step Code starting in 2027. Conduct a cost-benefit analysis to assess the cost and GHG implications of moving to Emissions Level 4 in Climate Zones 4 and 5 by 2030, and Emissions Level 3 or 4 in the rest of the province by 2030. The analysis should include consideration of local electricity grid capacity, as well as Energy Step Code adoption. Pause further province-wide increases to Energy Step Code requirements until after a cost-benefit analysis is completed. Continue to allow and support local governments to voluntarily implement the ESC and ZCSC on an accelerated timeline to help prepare the market.	<ul style="list-style-type: none"> Province of BC Local Governments Development community 	2027/Ongoing	
30. Prioritize the use of high-efficiency heat pumps in any policies, programs, and training intended to advance mechanical cooling retrofits in residential buildings.	<ul style="list-style-type: none"> Province of BC Local governments Building owner associations Tenant organizations 	Ongoing	

Summarized Subsector Roadmaps

A summary of the actions for each of the four building subsectors are shown below, including recommendations for roll out between 2026 and 2032.

Commercial and Institutional Building Roadmap

The cornerstone of the C&I building electrification roadmap is mandatory energy and emissions reporting for mid- and large-sized buildings, which received widespread support from engagement participants. This action enables several high-priority measures for this sector, including more targeted concierge support and government and utility incentive offers, as well as collecting the data needed for setting and tracking a building performance standard (recommended as early as 2030 for large buildings). For large to mid-sized buildings, a building performance standard provides the longer-term clarity and flexibility this sector needs to succeed. The Highest Efficiency Equipment Standard for select packaged equipment is also needed for smaller buildings not captured under the building performance standard.

	2026	2027	2028	2029	2030	2031	2032
Lead	<ol style="list-style-type: none"> Reestablish the Province of BC's long-term commitment to building electrification Continue to invest in electricity grid readiness and demand management strategies Commit funding to support building electrification over the next five years (e.g. LGCAP, Buildings Revitalization Levy) Continue to grow and support the coalition of organizations and individuals who advance and advocate for decarbonizing BC's building sector Deliver clear and timely communications 						
	<ol style="list-style-type: none"> Establish guidelines and require utilities to share whole building energy data with building owners Update the BC and Canadian Electric Codes to allow more load management options 						
Prepare	<ol style="list-style-type: none"> Adopt streamlined municipal heat pump permitting Establish and reference dual-fuel performance design standards for different equipment types Enable local governments to adopt performance commissioning and retro-commissioning requirements 						
	<ol style="list-style-type: none"> Require energy and emissions reporting (starting in 2028 with larger buildings and gradually expanded) 						
Support	<ol style="list-style-type: none"> Provide incentives that focus on supporting market readiness for upcoming equipment regulations Continue to support building electrification related training Continue to provide funding for retrofit concierge services Continue to provide funding for demonstrations and pilot projects 						
	<ol style="list-style-type: none"> Enable local governments to offer property-secured improvement financing Explore utilities allowing amortization of customer payments for upgraded distribution transformers 						
Regulate	<ol style="list-style-type: none"> Pass HEES legislation for packaged systems (start with roof top units in CZ4 and CZ5) 				<ol style="list-style-type: none"> HEES in effect for CZ4 and CZ5 for roof top units and gradually expanded 		
	<ol style="list-style-type: none"> Pass Building Performance Standard Legislation 				<ol style="list-style-type: none"> Legislation in effect for Building Performance Standard 		
	<ol style="list-style-type: none"> Pass "A/C to heat pump" legislation 		<ol style="list-style-type: none"> "A/C to heat pump" legislation in effect 				

Key: Bolded Text = Priority actions

Apartment-Style Residential Building Roadmap

Like the C&I building sector, improved access to building energy and emissions data, supported by mandatory reporting, is foundational for electrifying apartment-style buildings. These actions will help owners make more informed capital investments, and can be used for more targeted concierge services, utility programs, and equity-oriented incentives. Electrical Code updates that provide alternatives to costly electrical service capacity upgrades are considered critical for managing project costs. Growing demand for in-suite cooling is expected to drive adoption; wherever possible, high efficiency heat pumps should be used. For rental buildings, agreement is needed about how to maintain affordability while also providing fair compensation for building electrification upgrades. For strata properties, an innovative financial mechanism (e.g., government loan guarantees) is recommended for supporting electrification upgrades.

	2026	2027	2028	2029	2030	2031	2032
Lead	<ol style="list-style-type: none"> Reestablish the Province of BC's long-term commitment to building electrification Continue to invest in electricity grid readiness and demand management strategies Commit funding to support building electrification over the next five years (e.g. LGCAP, Buildings Revitalization Levy) Continue to grow and support the coalition of organizations and individuals who advance and advocate for decarbonizing BC's building sector Deliver clear and timely communications 						
	<ol style="list-style-type: none"> Establish guidelines and require utilities to share whole building energy data with building owners Update the BC and Canadian Electric Codes to allow more load management options 						
Prepare	<ol style="list-style-type: none"> Adopt streamlined municipal heat pump permitting Establish and reference dual-fuel performance design standards for different equipment types Establish minimum training and qualifications for installing small residential heat pumps (<5KW Prime Mover) Enable local governments to adopt performance commissioning and retro-commissioning requirements 						
	<ol style="list-style-type: none"> Require energy and emissions reporting (starting in 2028 with larger buildings and gradually expanded) 						
Support	<ol style="list-style-type: none"> Continue incentives for lower-income households and buildings, including social housing Provide incentives that focus on supporting market readiness for upcoming equipment regulations Continue to support building electrification related training Continue to provide funding for retrofit concierge services Continue to provide funding for demonstrations and pilot projects 						
	<ol style="list-style-type: none"> Develop guidelines for the fair and transparent allocation of costs of building electrification projects between tenants and landlords Enable local governments to offer property-secured improvement financing Explore utilities allowing amortization of customer payments for upgraded distribution transformers Set up an innovative financial mechanism (e.g. loan guarantee) for strata building electrification projects 						
Regulate	<ol style="list-style-type: none"> Pass HEES legislation for packaged systems (start with roof top units in CZ4 and CZ5) 				<ol style="list-style-type: none"> HEES in effect for CZ4 and CZ5 for roof top units and gradually expanded 		
	<ol style="list-style-type: none"> Pass A/C to heat pump legislation 		<ol style="list-style-type: none"> A/C to heat pump "reversing valve" legislation in effect 				
	<ol style="list-style-type: none"> Prioritize heat pumps for cooling requirements 						

Key: Bolded Text = Priority actions

Ground-Oriented Residential Building Roadmap

From a technological perspective, existing ground-oriented residential buildings are considerably more straightforward to electrify than C&I and apartment-style buildings. However, there are well over 600,000 existing homes that will need to make this transition. Establishing an effective date in the early 2030s for the Highest Efficiency Equipment Standard for space heating and domestic hot water will create momentum to reduce installation costs and ensure there is a strong, and highly qualified workforce in place. Incentives will continue to play a role but target lower-income households and colder and more remote parts of the province. Home energy labelling will also help to build awareness and accelerate the rate of voluntary home energy and emissions upgrades.

	2026	2027	2028	2029	2030	2031	2032
Lead	<ul style="list-style-type: none"> 1. Reestablish the Province of BC’s long-term commitment to building electrification 2. Continue to invest in electricity grid readiness and demand management strategies 3. Commit funding to support building electrification over the next five years (e.g. LGCAP, Buildings Revitalization Levy) 4. Continue to grow and support the coalition of organizations and individuals who advance and advocate for decarbonizing BC’s building sector 5. Deliver clear and timely communications 						
Prepare	<ul style="list-style-type: none"> 9. Update the BC and Canadian Electric Codes to allow more load management options 						
	<ul style="list-style-type: none"> 10. Adopt streamlined municipal heat pump permitting 11. Increase the ability for small residential heat pump contractors to complete multiple installation tasks 13. Establish and reference dual-fuel performance design standards for different equipment types 14. Establish minimum training and qualifications for installing small residential heat pumps (<5KW Prime Mover) 						
Support	<ul style="list-style-type: none"> 8. Introduce home energy and emissions disclosure at time of sale 						
	<ul style="list-style-type: none"> 17. Continue incentives for lower-income households and buildings, including social housing 18. Provide incentives that focus on supporting market readiness for upcoming equipment regulations 23. Continue to support building electrification related training 24. Continue to provide funding for retrofit concierge services 25. Continue to provide funding for demonstrations and pilot projects 						
Regulate	<ul style="list-style-type: none"> 16. Develop guidelines for the fair and transparent allocation of costs of building electrification projects between tenants and landlords 20. Enable local governments to offer property-secured improvement financing 21. Explore on bill financing with utilities 22. Set up an innovative financial mechanism (e.g. loan guarantee) for strata building electrification projects 						
	<ul style="list-style-type: none"> 26. Pass HEES legislation for packaged space and water heating equipment for CZ4 and CZ5 				<ul style="list-style-type: none"> 26. HEES in effect for CZ4 and CZ5 		
	<ul style="list-style-type: none"> 28. Pass A/C to heat pump legislation 		<ul style="list-style-type: none"> 28. A/C to heat pump “reversing valve” legislation in effect 				
<ul style="list-style-type: none"> 30. Prioritize heat pumps for cooling requirements 							

Key: Bolded Text = Priority actions

New Construction Roadmap

New construction will be the first building sector in BC to be mostly electrified as incorporating electric systems at the design stage is more cost effective and straight forward than retrofitting existing buildings. Despite these advantages, the ability of the new construction sector to make this shift should not be taken for granted. Successful implementation of the Zero Carbon Step Code will require sustained engagement and training, comparable to efforts supporting the Energy Step Code. Emissions–Level 3, which allows for dual–fuel heating systems for all building types, should be adopted for Climate Zones 4 and 5 by 2027 – reflecting existing uptake across many BC communities. Additional training and education support should be provided for building and development communities in colder climates well in advance of implementation. Before the Province of BC adopts Emissions–Level 4 as a code minimum, a detailed cost–benefit analysis should be undertaken and used to inform the effective date. The analysis should include consideration of local electricity grid capacity, as well as alignment with Energy Step Code adoption.

	2026	2027	2028	2029	2030	2031	2032
Lead	<ol style="list-style-type: none"> 1. Reestablish the Province of BC’s long–term commitment to building electrification 2. Continue to invest in electricity grid readiness and demand management strategies 3. Commit funding to support building electrification over the next five years (e.g. LGCAP, Buildings Revitalization Levy) 4. Continue to grow and support the coalition of organizations and individuals who advance and advocate for decarbonizing BC’s building sector 5. Deliver clear and timely communications 						
Prepare	<ol style="list-style-type: none"> 9. Update the BC and Canadian Electric Codes to allow more load management options 12. Continue to improve processes to align electrical connections with scheduled building occupancy 						
	<ol style="list-style-type: none"> 13. Establish and reference dual–fuel performance design standards for different equipment types 14. Establish minimum training and qualifications for installing small residential heat pumps (<5KW primer mover) 15. Enable local governments to adopt performance commissioning requirements 						
	<ol style="list-style-type: none"> 8. Introduce home energy and emissions disclosure at time of sale 						
Support	<ol style="list-style-type: none"> 19. Provide municipal incentives for all–electric new construction projects (e.g. density bonuses and permit standardized designs) 23. Continue to support building electrification related training 						
Regulate	26. Pass HEES legislation for CZ4 and CZ5				26. HEES in effect for CZ4 and CZ5 and gradually expanded		
	28. Pass A/C to heat pump legislation		28. A/C to heat pump “reversing valve” legislation in effect				
	29. Pass ZCSC EL–3 for CZ–4 & CZ5 and conduct study for EL–4				29. Adopt provincial ZCSC EL–4 (pending study)		

Key: Bolded Text = Priority actions

5. Roadmap Implementation



The Need for Provincial Leadership

The 2026 Roadmap sets out a comprehensive pathway to achieve widespread and high-efficiency electrification in BC within the next 20 years. This transition would significantly reduce energy use for heating, virtually eliminate associated GHG emissions and improve building comfort year-round. Ratepayers would benefit from electricity price stability and load management programs and technologies. BC's economy would additionally benefit from the thousands of new jobs needed to build this market transformation.

The largest source of uncertainty for the near-term success of the Roadmap is the level of support from the Province of BC. At the time of writing, future commitments to climate policy and building decarbonization remain unclear. As noted in [Chapter 2](#), historical leadership from the Province of BC established strong building electrification momentum. That trajectory is in jeopardy, with the removal of the carbon tax in 2025 and continued uncertainty about the future of building-related policies and programs included in the CleanBC Roadmap to 2030.

Given these factors, a key near-term priority is coordinated advocacy to reinforce provincial leadership to continue to support and lead on building electrification.

The Power of Working Together

While provincial leadership is critical, progress on building electrification does not depend solely on provincial government action. Indeed, there is still much that can and needs to be done by other key actors:

- Local governments have shown their ability and willingness to lead in areas such as the Zero Carbon Step Code, PACE financing, mandatory energy and emissions reporting, industry training, incentives, and pilot projects.
- Many industry associations have stepped up by acting as hosts for concierge services, providing their membership with relevant education and training, piloting programs, and working constructively with governments to establish building decarbonization policies that work for their members, while still meeting broader public objectives.
- Public interest organizations are also critical to continually advancing our knowledge and understanding of what is needed and possible, and stepping in to provide programs, lead pilot projects, and strengthen our collective networks.
- At the project level, thousands of building owners, managers, developers, and builders are already leading the way, and the list keeps growing with each passing day.

Finally, there are the building professionals and tradespeople, equipment suppliers and manufacturers, and building officials and inspectors who ensure the work gets done and gets done well. The more than 250 organizations who make up the BC B2E Coalition are a testament to the diversity and commitment of the actors who are needed to make the building-electrification market transformation happen. Some examples of the kinds of roles needed include:

- Regulation and/or enforcement (e.g., governments, professional self-regulatory bodies)
- Funding (e.g., governments, utilities, foundations)
- Advocacy (e.g., property-owner associations, professional and trade associations, public interest groups)
- Public research (e.g., governments, public interest groups, utilities)
- Program administration (e.g., governments, utilities, property-owner associations, public interest groups)
- Tool development (e.g., property-owner associations, utilities, government)
- Training and education (e.g., trade and professional associations, colleges and training facilities)
- Communications (e.g., governments, utilities, property-owner associations, public interest groups)
- Building and installations (e.g., building owners and tenants, contractors, design professionals, supply chain)
- Financing (e.g., financial institutions, energy as a service providers, governments, utilities)

Appendix D provides further details of the specific organizations in BC likely to participate with the Roadmap implementation. **Appendix E** lists the enabling organization, delivery agent, and primary advocates likely required to do this. The intention is to help organizations see who needs to be involved to successfully move an action forward – linking actors to actions.

Tracking Progress

Any successful attempt at sector-wide transformation requires consistent performance tracking. Table 3 outlines a proposed set of indicators to monitor electrification over time.

For ground-oriented homes, annual shipping data can serve as a good indicator of future heat pump sales for packaged systems. The annual shipping dataset first reported in the Province of BC’s 2024 Power Our Future: BC’s Clean Energy Strategy⁶⁴ and republished above in [Chapter 3](#) provides a useful starting point, though gaps remain as it does not include boilers and electric resistance baseboards. It is also owned by an industry-based organization, which means access is currently limited. To be successful as an indicator, the responsible organization for the dataset would need to agree to share it annually.

For medium- to large-sized buildings in the C&I and apartment-style building sectors, the data collected through mandatory energy and emissions reporting would provide a robust foundation for tracking emissions intensity. While smaller buildings in these subsectors will not be represented by this indicator, many will be represented in the shipping data indicator noted above.

For new construction, adoption of higher steps of the Zero Carbon Step Code by local government provides a clear and accessible short-term indicator of progress. These data are readily available through the Community Energy Association’s Local Government Dashboard.⁶⁵

Table 3 - List of proposed indicators and short-term targets for tracking building electrification progress in BC

BUILDING SECTOR	INDICATOR	DATA SOURCE
Commercial and Institutional	Emissions Intensity (tCO _{2e} /m ²)	Medium to Large buildings: Mandatory Energy and Emissions Reporting
Apartment-style	Emissions Intensity (tCO _{2e} /m ²)	Smaller Buildings: annual shipping data
Ground Oriented Residential	Percentage of heat pumps shipped	Annual shipping data
New Construction	Number of local governments that have adopted EL-3 or EL-4 of the Zero Carbon Step Code	CEA’s Climate Action Dashboard

Conclusion

Overall, the Roadmap indicates that BC is already on a strong trajectory toward widespread building electrification and provides a clear path forward over the next five years to meet the goal of a largely electrified building sector. This journey will take place over decades, giving the network of actors time to prepare the market, electricity grid, and workforce. However, the long (15+ year) replacement cycles of building heating systems limit the frequency of intervention opportunities, meaning timely action is critical. The sooner the move to building electrification occurs, the sooner individuals and businesses within BC will benefit from improved indoor comfort and resilience, rate stability, job creation, and reduced GHG emissions.

The Roadmap provides a defined pathway to electrify most of BC’s building sector within the next 20 years. Its success, however, will depend on what happens after the Roadmap is published. Hosted by the Zero Emissions Innovation Centre, the B2E Coalition will continue to play a critical role in organizing key actors and tracking progress on Roadmap implementation. Achieving the Roadmap’s objective will require the continued collaboration between a much larger number of organizations and individuals.

Appendix A – Comparing the BC Building Electrification Roadmap to the CleanBC Independent Review

The table below compares the key building decarbonization related recommendations included in the CleanBC review with those in the Roadmap and shows largely consistent alignment between the two.

RECOMMENDATION		COMMENTARY
CLEANBC REVIEW	ROADMAP	
1.a Ensure British Columbia’s, residents, businesses, and industries continue to have ready access to a sufficient supply of clean and reliable electricity.	2. Continue to invest in electricity grid readiness and demand management strategies.	Strong alignment.
1.d Recognize electrification’s broad economic and societal benefits by investing directly in the sustained buildout of the electricity system.	2. Continue to invest in electricity grid readiness and demand management strategies.	Strong alignment.
1.e (i) Establish recurring three-year targets for steadily increasing the share of electricity in BC’s overall energy use, and report annually on progress. Also consider setting targets and tracking by sector or subsector. Direct BC Hydro to incorporate these targets in its service plan.	1. Reestablish the Province of BC’s long-term commitment to building electrification and build market-wide confidence that BC Hydro will be capable of delivering electricity when and where it is needed.	Good alignment. The Roadmap recommends more frequent reporting for building electrification progress. Chapter 5 of the Roadmap gives more information about how they could be done.
2.a (i) Continue offering the Better Homes and Better Buildings incentives to support consumer adoption of clean heating/cooling technology and efficiency upgrades, which will drive continued market transformation. These can be funded by recycling 100% of a modest increase to the Clean Energy Levy (about the cost of a coffee per month) on utility gas bills.	3. Commit secured funding to support building electrification over the next five years, including maintaining the Local Government Climate Action Program (LGCAP) and designating and expanding the Innovative Clean Energy Levy for building electrification revitalization projects. 18. Provide incentives that focus on supporting market readiness for upcoming equipment regulations, consolidating them where possible to minimize the time and cost associated with applications.	Good alignment. The CleanBC Review limits the use of a designated funding source to incentives. Given the breadth of other ongoing supporting work needed to decarbonize the building sector over the next five years, the Roadmap also recommends some of these funds be assigned to supporting pilot projects and ongoing training.
2.a (ii) Consider a Property Assessed Clean Energy (PACE) program for commercial buildings and explore other opportunities to enable affordable financing of residential clean energy and efficiency upgrades.	20. Enable local governments to offer property-secured improvement financing, learning from property assessed clean energy (PACE) financing (prioritize for C&I and apartment-style building sectors). 21. Explore the use of on-bill utility financing for residential electrification retrofit projects and allowing larger commercial and apartment-style retrofit projects to amortize the cost of upgraded distribution transformers. 22. Set up an innovative financial mechanism (e.g., government loan guarantee) to provide support for strata corporations pursuing electrification projects.	Strong alignment with C-PACE for the commercial and institutional building sector and for market rental. The Roadmap offers more specific recommendations regarding other financing mechanisms for the residential sector. It is important to recognize the differences between market rental, strata, and privately owned housing and the different financing tools that are likely needed for each of these.

RECOMMENDATION		COMMENTARY
CLEANBC REVIEW	ROADMAP	
2.b (ii) Amend the Zero Carbon Step Code to achieve Strong Performance (EL3) in 2027 and Zero Carbon Performance (EL4) in 2030 for climate zones 4 and 5, and Strong Performance (EL3) in climate zones 6–8 in 2030.	29. Require all new buildings in Climate Zones 4 and 5 to meet or exceed Emissions Level 3 of the Zero Carbon Step Code starting in 2027. Conduct a cost-benefit analysis to assess the cost and GHG implications of moving to Emissions Level 4 in Climate Zones 4 and 5 by 2030, and Emissions Level 3 or 4 in the rest of the province by 2030. The analysis should include consideration of local electricity grid capacity, as well as Energy Step Code adoption. Pause further province-wide increases to Energy Step Code requirements until after a cost-benefit analysis is completed. Continue to allow and support local governments to voluntarily implement the ESC and ZCSC on an accelerated timeline to help prepare the market.	Good alignment. The Roadmap recommends setting 2030 levels based on the outcomes of a provincially led cost-benefit analysis.
2.b (iv) For both Codes, continue to allow local governments to move faster, while encouraging regional coordination.	29. Require all new buildings in Climate Zones 4 and 5 to meet or exceed Emissions Level 3 of the Zero Carbon Step Code starting in 2027. Conduct a cost-benefit analysis to assess the cost and GHG implications of moving to Emissions Level 4 in Climate Zones 4 and 5 by 2030, and Emissions Level 3 or 4 in the rest of the province by 2030. The analysis should include consideration of local electricity grid capacity, as well as Energy Step Code adoption. Pause further province-wide increases to Energy Step Code requirements until after a cost-benefit analysis is completed. Continue to allow and support local governments to voluntarily implement the ESC and ZCSC on an accelerated timeline to help prepare the market.	Strong alignment.
2.c (i) Phase-in a provincial requirement that permanently installed new air conditioning systems in Part 9 buildings must be able to provide both low-carbon heating and cooling through amendments to the B.C Building Code and the Energy Efficiency Standards Regulation.	28. Set a requirement in the BC Energy Efficiency Standards Regulation that requires any permanently installed air conditioners to include a reversing valve to enable it to heat or cool an indoor space.	Good alignment. The Roadmap does not limit the requirement to Part 9 buildings.
2.c (ii) Develop and implement the Highest Efficiency Equipment Standard (HEES) to require all new space and water heating equipment sold and installed in BC to be at least 100% efficient by the early 2030's, while providing flexibility for climate zones 6–8 and harder-to-electrify market segments.	26. Implement the Highest Efficiency Equipment Standard for packaged roof top units and ground-oriented residential space and water heating starting in 2030 for Climate Zones 4 and 5. Increase provincial enforcement capabilities to ensure compliance across multiple climate zones. 27. Set a minimum emissions performance standard by 2030 for large commercial and institutional buildings (100,000 ft ² or greater), and mid-sized buildings by 2032. Over time, reduce minimum GHG performance thresholds using a predictable schedule.	Good alignment. The Roadmap gives more specific recommendations for the type of equipment that could be regulated starting in 2030. The Roadmap also recommends mandatory building reporting for mid- to large sized commercial and institutional, and apartment style buildings. It also recommends a building performance standard as the primary mechanism for driving down GHG emissions for mid- to large-sized commercial and institutional buildings.
3.a Ensure we have the domestic workforce trained and ready to meet CleanBC policy-driven market growth.	11. Increase the ability of contractors to receive the training and certifications needed to complete multiple tasks associated with the installation of small residential heat pumps (<5kW prime mover). 14. Establish minimum training and qualifications for installing small residential heat pumps (<5kW prime mover). 23. Continue to support training in building electrification for building owners, managers, and operators, developers, builders, design professionals, and contractors. Emphasize opportunities to enhance skillset of gas-oriented trades to implement low-carbon technologies.	Good alignment. The Roadmap recognizes that training requirements for small residential heat pumps need to be more clearly defined and required.
5.b Ensure a growing supply of renewable and low carbon gas recognizing its role in decarbonizing the utility gas system, which will continue to play an important role in the province's energy system.		Good alignment. The Roadmap does not comment directly on this but does recognize the renewable gas will continue to play a role in a fully decarbonized BC building sector.

RECOMMENDATION		COMMENTARY
CLEANBC REVIEW	ROADMAP	
6.b Continue to support local governments as key partners and contributors to CleanBC's success.	<p>3. Commit secured funding to support building electrification over the next five years, including maintaining the Local Government Climate Action Program (LGCAP) and designating and expanding the Innovative Clean Energy Levy for building electrification revitalization projects.</p> <p>7. Introduce mandatory provincial energy and emissions reporting for large buildings 100,000 ft² or greater) by 2028 and scale up over a three-year period to include all mid-sized buildings. In the interim, support municipal reporting programs to help prepare the market.</p> <p>15. Enable local governments to require performance commissioning (Cx) for new construction projects and new equipment installations, and performance retro-commissioning (RCx) for poor performing existing buildings as per energy and emissions reporting.</p>	<p>Strong alignment.</p> <p>The Roadmap recognizes the Local Government Climate Action Program as a critical source of committed funding to allow local governments to advance climate mitigation and resilience measures.</p> <p>The Roadmap has a number of recommendations aimed at providing local governments with specific authorities to advance building electrification.</p>




Appendix B: FortisBC Gas and BC Hydro Residential Rate Changes





YEAR	FORTISBC GAS RATE CHANGE	SOURCE
2021	+8%	https://www.newswire.ca/news-releases/natural-gas-rates-change-january-1-for-fortisbc-customers-834525399.html
2022	+9%	https://www.newswire.ca/news-releases/gas-rates-change-january-1-for-fortisbc-customers-839750509.html
2023	-4%	https://www.newswire.ca/news-releases/most-fortisbc-customers-will-see-a-decrease-to-their-gas-bills-in-the-new-year-871205977.html
2024	-1.1%	https://www.newswire.ca/news-releases/fortisbc-gas-customers-to-see-a-decrease-to-their-bill-on-january-1-863051265.html
2025	+17.5%	https://www.fortisbc.com/about-us/news-events/media-centre-details/2024/12/06/gas-rates-will-change-on-january-1-for-fortisbc-customers
2026	+11.1%	https://www.fortisbc.com/accounts/billing-rates/natural-gas-rates/residential-rates

YEAR	BC HYDRO RATE CHANGE	SOURCE
2021	+1.16%	https://www.bchydro.com/news/press_centre/news_releases/2021/bc-hydro-rates.html
2022	-1.4%	https://www.bchydro.com/news/press_centre/news_releases/2021/bc-hydro-rates.html
2023	+2.0%	https://www.bchydro.com/news/press_centre/news_releases/2023/rates-increasing-for-residential-customers.html
2024	+2.7%	https://www.bchydro.com/news/press_centre/news_releases/2023/rates-increasing-for-residential-customers.html
2025	+3.75%	https://www.bchydro.com/news/press_centre/news_releases/2023/rates-increasing-for-residential-customers.html
2026	+3.75%	https://www.bchydro.com/news/press_centre/news_releases/2023/rates-increasing-for-residential-customers.html





Appendix C: Detailed Roadmap Actions

LEAD





RECOMMENDATION FOR STRONG AND PERSISTENT LEADERSHIP	DESCRIPTION				
<p>1. Reestablish the Province of BC's long-term commitment to building electrification and build market-wide confidence that BC Hydro will be capable of delivering electricity when and where it is needed.</p>	<p>An accelerated transition over the next two decades to a future where the majority of buildings in BC are heated with clean and efficient electric technologies is only possible with strong and consistent leadership from the Province of BC.</p> <p>In recent years, there have been numerous accounts of public misinformation and fearmongering about the ability of BC's electricity grid to meet future demand, including increased demand from building electrification. As discussed in Chapter 2, BC's electricity grid is well positioned to meet the rise in demand that will take place over the next two decades. Despite this, the Province of BC's and BC Hydro's responses against these criticisms have frequently been slow to emerge and opaque. In the shorter term, this unchecked misinformation causes mistrust with BC Hydro's capabilities, confusion in the marketplace, and slows down progress on building electrification policies and programs.</p> <p>Strong and persistent provincial leadership is needed to ensure the public, industry and decision-makers that BC is well positioned when it comes to building electrification.</p>				
<p>2. Continue to invest in electricity grid readiness and demand management strategies.</p>	<p>An affordable and reliable source of clean electricity is the backbone of all building electrification efforts in BC. Fortunately, the province already has one of the lowest-cost, most reliable and cleanest electricity grids in North America. BC Hydro's \$36 billion, 10-Year Capital Plan is an excellent example of what that utility is doing to ensure its system is ready as new demand comes online.⁶⁶</p> <p>Utilities should also continue to invest in and build into their long-term resource plans, strategies to reduce peak demand from buildings: distributed energy resources and load-management.</p>				
<p>3. Commit secured funding to support building electrification over the next five years, including maintaining the Local Government Climate Action Program (LGCAP) and designating and expanding the Innovative Clean Energy Levy for building electrification revitalization projects.</p>	<p>Many of the actions included in this roadmap will need a reliable source of funding to make them happen both at the scale and rate needed to continue to transform BC's building sector over the next 5 to 10 years. Actions requiring regular funding include workforce upskilling, targeted incentives (including those for lower-income households and Northern BC), trials and pilot projects to advance innovative new clean technologies, and local government capacity to pursue climate related objectives.</p> <p>Unlike utility DSM programs, BC building owners and residents looking to shift to efficient electric heating and cooling do not have a reliable source of funding to support this shift. While one option is to continue with CleanBC funding through general tax revenues, a more reliable option would be for fossil fuel customers to contribute to and benefit from their own fuel-switching fund – similar to how utility DSM programs work. This could be done by repurposing the existing Innovative Clean Energy (ICE) Fund Levy to a Buildings Revitalization Levy.</p> <p>The ICE Fund levy on natural gas, propane, and fuel-oil sales is currently 0.4% and raised about \$10M in 2024. If the levy was increased to 4% (or about 20 cents per day for a typical residential natural gas customer), it would generate around \$100M per year. The funds raised through a Buildings Revitalization Levy could be directed to support equity-based incentives, workforce upskilling, and innovative pilot projects. By comparison, the provincial carbon tax added about 23% to an average residential gas bill just prior to it being removed in 2025.⁶⁷</p>				
<p>4. Continue to grow and connect the diverse coalition of organizations and individuals who advance and advocate for electrifying BC's building sector.</p>	<p>The successful electrification of BC's building sector over the next 20 years will require many thousands of individuals and organizations working toward this shared goal. Invaluable to this process are the small number of organizations that help to coordinate these efforts, share information about challenges and solutions, and advocate for the kinds of recommendations included in the Roadmap.</p>				

RECOMMENDATION FOR STRONG AND PERSISTENT LEADERSHIP	DESCRIPTION				
5. Deliver clear and timely communications about the benefits and opportunities of building electrification, as well as the challenges and options for overcoming them.	<p>Building electrification, unlike the transition to electric vehicles, is a topic that is still not widely discussed outside of technical policy and building decarbonization circles. Broader public and industry awareness will be needed to see all phases of the market transformation successfully advance over the coming years.</p> <p>The push for building electrification in BC that occurred between 2021 and 2023 is a good example of the kind and level of communications needed. Also needed are trusted spokespeople who can clearly articulate to different audiences both the why and how of a building electrification market transformation over a 20-year time span. Leading organizations also need to continue to provide well-supported and timely information that can be easily understood and used by other market actors.</p>				





PREPARE

RECOMMENDATION TO PREPARE THE MARKET	DESCRIPTION				
6. Establish provincial guidelines for sharing whole building energy data with building owners and require utilities to adhere to them.	An important prerequisite for building performance reporting, is easy and reliable access to building-level utility energy consumption data. Currently there are challenges in receiving aggregated data, especially from gas utilities. At the time of writing, the federal government is working with industry partners to develop a set of guidelines to help provinces and utilities implement better utility sharing protocols and requirements. These are expected to be published in spring 2026.				
7. Introduce mandatory provincial energy and emissions reporting for large buildings (100,000 ft ² or greater) by 2028 and scale up over a three-year period to include all mid-sized buildings. In the interim, support municipal reporting programs to help prepare the market.	<p>Mandatory energy and emissions reporting is the cornerstone for both the commercial and institutional buildings roadmap and the apartment-style buildings roadmap. This kind of reporting is already required by the City of Vancouver, City of Victoria, and District of Saanich and is widely required by cities and states across the U.S.</p> <p>Starting in 2027, the Province of Quebec will require all commercial buildings with a floor area of at least 5,000 m² and multi-unit residential buildings with 50 or more dwellings to submit annual emissions reporting.⁶⁸ In 2028, this is expanded to commercial buildings with a floor area of at least 2,000 m² and multi-unit residential buildings with 25 or more dwellings.</p> <p>The data collected through reporting is foundational for providing better informed supports and training, and more targeted incentives. For C&I buildings, reporting is also needed to support the Roadmap's recommended building performance standard. Although local governments in BC have the authority to require energy and emissions reporting in the absence of a provincial requirement, a province-wide approach is preferred to ensure greater efficiencies, consistency, and maximum benefits.</p>				
8. Require all ground-oriented homes to provide a home energy label when advertised for sale or lease.	The mandatory disclosure of home energy labels will not transform the market on their own, but they do play a role in increasing the level of awareness and priority given to energy and emissions improvements. It gives valuable information to prospective buyers or renters and can also motivate some sellers or landlords, especially those with lower scores, to invest in home performance improvements. For example, a Belgian study found that the average household energy consumption dropped 6% after the introduction of mandatory home Energy Performance Certificates in that country. ⁶⁹ Other research shows that a sales premium is attributed to homes with higher efficiency ratings. ⁷⁰ Given these market benefits and the opportunity of labels to increase general awareness about home energy and emissions use, they are a natural fit for building electrification.				
9. Increase the load management options allowed by BC and Canadian Electrical Codes to minimize the size of building electrical service capacity.	Electrification projects that are able to work within a building's existing electrical service capacity or, in the case of new construction projects, minimizing the electrical service capacity needed will generally be more economical to complete. Examples of changes that can provide more options for mitigating the need for larger electrical service capacity include allowances in the Canadian and BC Electrical Codes that permit the use of technologies such as load sharing devices between nonelectric vehicle loads and energy management systems used for capping a building's peak load demand, as well as the modernization of base load calculations. The Consortium for Power Efficiency provides an excellent example of the kinds of changes needed and how partners from across Canada are working together to advance these kinds of changes within the Canadian Electrical Code. ⁷¹				





RECOMMENDATION TO PREPARE THE MARKET	DESCRIPTION				
10. Adopt a streamlined municipal heat pump permitting approach that reduces the time associated with receiving a permit while ensuring safety and quality verifications are being met	Municipalities across BC differ in terms of what permits they require a contractor to pull before a heat pump is installed in a building. Depending on where a heat pump is being installed, municipal permitting can add very little time and money to a project or delay a project for weeks and add thousands of dollars. From an electrification perspective, it is important to balance the need for safety and high-quality installations with the need to make heat pump installation projects straightforward and affordable. A more standardized approach that achieves this balance is one way to help keep costs down for all installations.				
11. Increase the ability of contractors to receive the training and certifications needed to complete multiple tasks associated with the installation of small residential heat pumps (<5kW prime mover).	The more individuals that are needed on site to install a small residential heat pump, the longer it will generally take to install the system and the higher the cost. Allowing more heat pump contractors to hold and perform multiple skills while on site will mean more heat pumps can be installed quicker and for less cost. For example, one HVAC company that works in Ontario and BC noted that in Ontario a heat pump can generally be installed in a single day, whereas in BC it is typically two days. They attributed the difference to the fact that it is more straightforward in Ontario for a residential heat pump installer to be certified to undertake additional skilled tasks. A similar approach in BC could help contractors save time and residents save money.				
12. Continue to improve the coordination between utilities, local governments and developers to ensure electrical connections are made well in advance of scheduled building occupancy.	<p>For new construction projects, time is money. To help ensure new developments have electricity well before building occupancy, it is important for developers, local governments, and electricity utilities to coordinate carefully with one another on the timing and size of new development projects well in advance. Utilities and local governments then need to make sure they are resourced appropriately to meet these timelines, and developers communicate in a timely matter any changes to these plans.</p> <p>In rare instances where local electricity distribution systems cannot accommodate a low-carbon building's anticipated connection size in the required project timeline, this information needs to be identified and communicated by utilities very early in the development phase. The local government should then consider a special exemption to allow the project to decarbonize within the bounds of the site-specific electricity capacity restrictions.</p>				
13. Establish and implement dual-fuel performance standards for different equipment types that prioritize heat pump use and can be referenced by professional guidelines, funding programs, and equipment regulations.	As discussed in Chapter 2, there is undoubtedly an important role for dual-fuel heating systems in BC's low-carbon building future, especially in colder climates and in larger buildings that are more challenging to fully electrify. However, it is important for these systems to be designed, installed and operated in a manner that optimizes their use of the high-efficiency electric heating equipment – and that ideally limits the use of the gas component to peak demand events (such as the coldest days of the year). An optimized dual-fuel performance design standard for different equipment categories would help ensure all industry actors are working toward the same performance outcomes. The standard can then be used for incentive offers, training, commissioning, and relevant regulations.				
14. Establish minimum training and qualifications for installing small residential heat pumps (<5kW prime mover).	<p>In 2025, the BC Ministry of Post-Secondary Education and Future Skills removed small residential heat pumps with a prime mover of less than 5 kilowatts from the list of equipment that fall under the Skills Trade BC Regulation. This means nearly all heat pumps typically used for residential applications (e.g., single-family homes, townhomes, and in-suite) are not covered under the regulation. In practice, this means just about anyone can install a small residential heat pump in BC if they work alongside certified trades for other parts of the installation as needed (e.g., electrician, gasfitter, sheet-metal worker). Unfortunately, this still leaves considerable room for small residential heat pumps to be designed and installed by contractors with little to no relevant training.</p> <p>In the short-term, small residential heat pumps that receive an incentive through a utility or the Province of BC are required to be installed by a contractor who has completed a minimum level of training and is certified by the Home Performance Contractor Network (HPCN). This provides some level of assurance but is fully dependent on these incentive programs continuing.</p> <p>To help ensure homeowners are better protected, a more permanent solution is needed. To address this gap, the Province of BC, industry groups, Authorities Having Jurisdictions, and training schools need to agree to the minimum training requirements that should be in place and the best option to ensure compliance with it.</p>				

RECOMMENDATION TO PREPARE THE MARKET	DESCRIPTION				
<p>15. Enable local governments to require performance commissioning (Cx) for new construction projects and new equipment installations, and performance retro-commissioning (RCx) for poor performing existing buildings as per energy and emissions reporting.</p>	<p>Performance commissioning (Cx) is done to ensure that new equipment installed in new or existing buildings is operating at optimal efficiency (as per CSA Z5000). Performance retro-commissioning (RCx), meanwhile, fixes and optimizes the efficiency of an existing mechanical system (as per CSA Z5001).</p> <p>Both Cx and RCx can save energy and emissions and reduce utility bills. Cx also provides quick feedback to the designers and contractors involved in an installation. A 2009 study found new construction projects using Cx realized 13% median energy savings and had a simple payback of 4.2 years.⁷² An updated 2020 study found RCx projects (what they call Existing Building Commissioning or EBCx) resulted in 5-14% median energy savings and a simple payback of 1.7 years.⁷³</p> <p>Local governments in BC, with the exception of the City of Vancouver for new construction, do not currently have the authority to require Cx or RCx. In the United States, several local governments twin their energy and emissions reporting requirements with mandatory retro-commissioning requirements for buildings that fall below a certain threshold. A similar “soft touch” regulatory approach could be taken by BC municipalities if enabled by the Province of BC.</p>				





SUPPORT





RECOMMENDATIONS TO SUPPORT MARKET GROWTH	DESCRIPTION				
<p>16. Establish a process for rental market actors to co-develop guidelines that allow for a fair and transparent allocation of building electrification project costs, and any transference of utility bill expenditures between tenants and landlords.</p>	<p>Three of the thorniest issues related to building electrification for residential rental buildings are: 1) How will it impact affordability, 2) How landlords can recoup their expenditures, and 3) How are tenants compensated if the installation of an in-suite heat pump means they now pay directly for their own in-suite heating instead of having the cost of heating integrated into their rent?</p> <p>Although tenants welcome the opportunity for cooling, there is concern that these projects will drive up rents and force renovations. Landlords on the other hand need to know they can recover the cost of retrofits in a reasonable time through various mechanisms (e.g., rent increase, incentive, investment tax credit etc.).</p>				
<p>17. Continue to offer incentives for lower-income households and buildings, including social housing, that minimize the time and cost associated with applications. Ensure northern and interior communities are well represented.</p>	<p>CleanBC and utility incentive offers targeting income-qualified households and apartment buildings are important steps toward ensuring all British Columbians will have an opportunity to benefit from building electrification. These incentives have the added benefit of increasing industry experience with the eligible technology and preparing the market for future market changing regulations. Incentive providers should take a customer’s perspective and make efforts whenever possible to coordinate offers and design them to be as straightforward as possible for the intended market segment to understand and apply to.</p>				
<p>18. Provide incentives that focus on supporting market readiness for upcoming equipment regulations, consolidating them where possible to minimize the time and cost associated with applications.</p>	<p>Incentives are a useful policy tool for accelerating the demand for building electrification retrofits by reducing the capital cost of the projects that can take advantage of them. They can also help to create market awareness, build industry capacity and knowledge more quickly by increasing the volume of projects, and prepare the market for future regulations.</p> <p>Although incentives on their own will not transform the market, all levels of government and other funding agencies are encouraged to continue to offer incentives as a strategy to help expand the market for building electrification. Incentive providers should take a customer’s perspective and make efforts whenever possible to coordinate offers and design them to be as straightforward as possible for the intended market segment to understand and apply to.</p>				
<p>19. Provide municipal incentives for all-electric new construction projects that increase their value (e.g., density bonuses) and/or allow for standardized designs to be used for multiple buildings.</p>	<p>Local governments are encouraged to look for low-cost opportunities to boost the value to developers of all electric buildings. Tools they can use for this include density bonusing and allowing the design for an all-electric building in one part of a community to be replicated elsewhere in the community. These measures can help to increase developer experience with and support for all electric buildings.</p>				





RECOMMENDATIONS TO SUPPORT MARKET GROWTH	DESCRIPTION				
<p>20. Enable local governments to offer property-secured improvement financing, learning from property assessed clean energy (PACE) financing (prioritize for C&I and apartment-style building sectors).</p>	<p>Larger and more complex building electrification retrofits will likely require some form of financing to help project proponents distribute cost over time. For many projects, existing market financing options can serve this function. However, there are numerous conditions that can make it difficult or very costly to get standard financing (e.g., ownership type, debt to equity ratio). For commercial and market-rental apartment buildings, property-secured improvement financing offers the clearest alternative financing path. This approach uses a voluntary encumbrance on the property to guarantee the debt and may also be used as a mechanism of repayment through the municipal tax roll. Before it can be used, though, the Province of BC will need to enable its use by local governments.</p> <p>A similar financing model should also be considered for ground-oriented homes if utility on-bill financing (#21) is not pursued.</p>				
<p>21. Explore the use of on-bill utility financing for residential electrification retrofit projects and allowing larger commercial and apartment-style retrofit projects to amortize the cost of upgraded distribution transformers.</p>	<p>Utility-based financing options should be considered for both large and smaller buildings. For ground-oriented homes, the Federal Government's Greener Homes Loan program provided interest free loans between \$5,000 and \$40,000 to more than 115,000 homeowners from 2022 to 2025.⁷⁴ Its broad uptake demonstrates the willingness of some homeowners to use alternative financing to fund their energy and emission reductions retrofits. The cessation of the Greener Homes Loan program in late 2025 means there is a gap in the market for homeowners seeking alternative financing options. Making alternative financing available to more homeowners could be especially helpful for those households who do not qualify for existing or future incentives offers. Given this, the Province of BC and BC Hydro are encouraged to explore on-bill financing that is tied to a home's electricity meter as an option for building electrification projects.</p> <p>For larger commercial and apartment-style projects that need to upgrade their electrical service size, the service upgrade can quickly run into hundreds of thousands of dollars, especially if it includes a new distribution transformer. This level of upfront cost can easily prevent a project from going forward. Rather than require customers to pay the full amount of the upgrade all at once, an amortized repayment schedule from utilities could help projects move forward more quickly.</p>				
<p>22. Set up an innovative financial mechanism (e.g., government loan guarantee) for strata corporations pursuing electrification projects.</p>	<p>An innovative financial mechanism, such as government loan guarantees, is needed for strata buildings because their shared ownership model severely limits their ability to get whole building financing. What financing is available to strata corporations includes very high interest rates.</p> <p>During BC's "leaky condo" crisis, government loan guarantees were used to help strata corporations overcome this hurdle. A similar approach for building electrification will help strata buildings add high-efficiency electric heating and cooling.</p>				
<p>23. Continue to support training in building electrification for building owners, managers, and operators, developers, builders, design professionals, and contractors. Emphasize opportunities to enhance skillset of gas-oriented trades to implement low-carbon technologies.</p>	<p>BC has a strong tradition of industry education and training, and this needs to be continued. For many professionals and trades people who work primarily with fossil fuel systems, building electrification will require them to work with technologies and systems that are more sophisticated than they may be used to.</p> <p>Existing trade programs, such as gasfitters, plumbing, and electricians should all have heat pumps added to their curriculum to ensure they are prepared to competently work on building electrification projects. Ongoing professional development needs to also be made readily accessible in all parts of the province. In the shorter term, peak load management technologies and strategies should be prioritized to help avoid unnecessary electrical service upgrades.</p> <p>In the new construction sector, additional resources should be devoted to supporting more builders, developers, and the people they work with to make the transition to high-efficiency, electric systems. A level of education and training similar to what was deployed after the introduction of the Energy Step Code is likely warranted.</p>				

RECOMMENDATIONS TO SUPPORT MARKET GROWTH	DESCRIPTION				
<p>24. Continue to provide funding for retrofit concierge services, ensuring easy access to equity-deserving households, lower-capacity owners, and communities in BC’s north and interior.</p>	<p>Concierge programs help to overcome building owner knowledge barriers by providing low-cost, low-risk and unbiased professional advice to owners and managers during different phases of an electrification retrofit project. Not every electrification project will require this kind of third-party support, but for those that do, it can often be the difference between a project that goes ahead and one that stagnates.</p> <p>In BC, different concierge services exist for all existing building sectors, including the Decarb Accelerator for commercial buildings, the Rental Apartment Retrofit Accelerator Program, the Strata Energy Advisor, the BC Non-Profit Housing Association and the Aboriginal Housing Management Association for social housing, and the Home Energy Navigator, Retrofit Assist, and Home Energy Savings Program for ground-oriented homes. However, the coverage of many of these programs are generally geographically limited, and their funding sources are shorter-term in nature. Current funding for the commercial, market-rental, and strata concierge services expires after March 2027.</p>				
<p>25. Continue to provide funding for demonstration and pilot projects that target promising new technologies and harder-to-electrify use cases. Encourage projects that showcase Canadian-based technologies.</p>	<p>Although many technologies already exist to help buildings of all types and sizes electrify, there will always be a need to install and test new technologies that may prove more beneficial from a performance, use, and / or cost perspective. Despite their potential benefit, there is always a risk to a building owner who agrees to have a less familiar technology used in their building. Pilot projects can help to mitigate some of this risk by providing higher levels of funding and support to owners who agree to participate in a pilot.</p> <p>Demonstration projects, meanwhile, help to showcase a more mature but not yet widely used technology. The learnings from these projects can then be documented, shared with the broader sector, and the teams that worked on the projects act as trusted, local experts. In this way, technologies that prove successful can be more quickly taken up by the mainstream.</p> <p>In the shorter term, two areas of building electrification that would benefit from pilot projects are high-temperature heating systems in larger buildings and addressing electrical capacity constraints.</p>				

REGULATE


RECOMMENDATIONS TO REGULATE MARKET CHANGE	DESCRIPTION				
<p>26. Implement the Highest Efficiency Equipment Standard for packaged roof top units and ground-oriented residential space heating starting in 2030 for Climate Zones 4 and 5. Increase provincial enforcement capabilities to ensure compliance across multiple climate zones.</p>	<p>The Highest Efficiency Equipment Standard (HEES) was first proposed in the CleanBC Roadmap to 2030. It would require all space and water heating equipment installed in buildings to have a co-efficient of performance (COP) greater than one. In practice, this means a heat pump will need to be part of the heating system.</p> <p>For ease of compliance and enforcement, it is recommended that HEES apply only to “packaged equipment” (i.e., equipment that is assembled off site by a manufacturer and sold as a single, ready to use system).</p> <p>For larger C&I buildings and new construction, the HEES is a secondary regulation but still recommended. In the case of existing C&I buildings, the HEES ensures smaller commercial buildings not covered by the recommended emissions building performance standard (#27) are also reducing their emissions over time. It will also help to ensure that buildings covered by a building performance standard are installing equipment today that they will likely need to achieve more stringent performance standards in the future. For new construction, the HEES helps ensure compliance after the building is constructed and occupied.</p>				





RECOMMENDATIONS TO REGULATE MARKET CHANGE	DESCRIPTION				
<p>27. Set a minimum emissions performance standard by 2030 for large commercial and institutional buildings (100,000 ft² or greater), and mid-sized buildings by 2032. Over time, reduce minimum GHG performance thresholds using a predictable schedule.</p>	<p>A building emissions performance standard (BPS) requires a building to not exceed a preset maximum emissions intensity level as determined by the building’s annual energy and emissions reporting. The standard would apply to mid- and large-sized buildings. Initially it would be set at a relatively high level (e.g., just below the threshold of the 10-20% of highest emitters as determined by an analysis of energy and emissions reporting data).</p> <p>Ideally, incentives and concierge support services can work quickly with the most intensive emitters to ensure most of these buildings are in compliance before the standard comes into effect. The standard would then be increased gradually over time at predictable intervals and levels, giving building owners and managers the time and information they need to build these requirements into their long-term capital plans.</p> <p>This kind of approach is used in numerous leading jurisdictions including the City of Vancouver, Washington State, and New York City.</p>				
<p>28. Set a requirement in the BC Energy Efficiency Standards Regulation that requires any permanently installed air conditioners to include a reversing valve to enable it to heat or cool an indoor space.</p>	<p>Air conditioning units that are permanently installed in homes and buildings are essentially the same piece of equipment as a heat pump, except that the heat pump can both cool and heat a room. The main difference between the two types of equipment is that heat pumps are built with what is called a “reversing valve” that allows heat to either be pulled out of a room and moved outside (cooling mode) or reversed to allow heat to be pulled from outside and into a room (heating mode). Heat pumps are usually more efficient, so this is an opportunity to help residents save on energy and utilities bills, while taking an important step toward building decarbonization.</p> <p>This requirement would not prevent a resident from using a portable cooling only air conditioning unit in their suite. The City of Vancouver has already passed a similar equipment requirement for existing single-family and duplex homes.</p>				
<p>29. Require all new buildings in Climate Zones 4 and 5 to meet or exceed Emissions Level 3 of the Zero Carbon Step Code starting in 2027. Conduct a cost-benefit analysis to assess the cost and GHG implications of moving to Emissions Level 4 in Climate Zones 4 and 5 by 2030, and Emissions Level 3 or 4 in the rest of the province by 2030. The analysis should include consideration of local electricity grid capacity, as well as Energy Step Code adoption. Pause further province-wide increases to Energy Step Code requirements until after a cost-benefit analysis is completed. Continue to allow and support local governments to voluntarily implement the ESC and ZCSC on an accelerated timeline to help prepare the market.</p>	<p>The Zero Carbon Step Code was introduced in BC in 2023 and includes four, increasingly more stringent, emissions levels. For “Part 9” (i.e., smaller) buildings that use the modelled compliance pathway it is still relatively straightforward to include a dual-fuel heating system, even for Emission Level 4 (EL-4). So long as the model shows that the heat pump component of a dual-fuel system can cover all or nearly all of a home’s peak heating load, the modelled emissions from the gas furnace component will not be high enough to breach the threshold. Given this, EL-3 and even EL-4 are relatively straightforward to achieve for Part 9 buildings in most parts of BC.</p> <p>“Part 3” (i.e., larger) buildings are a different matter because the modelling guidelines used count the emissions from all auxiliary heating sources. In practice, this means an EL-4 Part 3 building will need to be fully electrified or use some other recognized low-carbon fuel source to stay under the required threshold.</p> <p>At time of print, the Province of BC is planning to undertake an updated “metrics” study for the Zero Carbon Step Code in 2026. This should provide valuable information to determine the best timing to move to EL-4.</p>				

RECOMMENDATIONS TO REGULATE MARKET CHANGE	DESCRIPTION				
<p>30. Prioritize the use of high-efficiency heat pumps in any policies, programs, and training intended to advance mechanical cooling retrofits in residential buildings.</p>	<p>Most existing multi-family buildings in BC do not have mechanical cooling, with the exception of the southern interior. Historically this was not a major issue because most parts of the province had relatively mild summers. As was tragically demonstrated during the province’s 2021 “heat dome” event, this status quo is quickly changing because of climate change. According to the BC Coroners Service, the heat dome was the cause of 619 premature deaths; 98% of these deaths occurred indoors.⁷⁵ Unfortunately, future climate modeling by the Pacific Climate Impacts Consortium (PCIC) forecasts that average temperatures will continue to rise across all regions of BC.⁷⁶ The need for mechanical cooling during future extreme heat events is therefore critical for many people.</p> <p>For buildings with centralized gas heating, many of the challenges and opportunities associated with retrofitting mechanical cooling solutions are the same ones that exist for electrifying space heating. Using a heat pump when adding cooling is therefore a perfect opportunity to both improve the safety and comfort of residents and significantly reduce a building’s GHG emissions.</p> <p>At time of print, there are several efforts underway in BC to give the right to residents of multi-family buildings to use mechanical cooling (air conditioning unit or heat pump) if they want. Whenever possible, these efforts should seek to encourage the use of heat pumps for any permanently installed equipment.</p>				

Appendix D – Key Organizations and Their Roles in Implementation

ORGANIZATION					REGULATION / ENFORCEMENT	FUNDING	ADVOCACY	PUBLIC RESEARCH	PROGRAM ADMIN	DEVELOP TOOLS	TRAINING / EDUCATION	COMMUNICATIONS
GOVERNMENT ENTITIES, INDUSTRY REGULATORS AND PUBLIC INSTITUTIONS												
Natural Resources Canada	✓	✓	✓	✓	✓	✓			✓		✓	✓
CanmetEnergy		✓	✓	✓		✓		✓		✓	✓	✓
BC Ministry of Energy & Climate Solutions	✓	✓	✓	✓	✓	✓			✓	✓		✓
BC Ministry of Housing		✓	✓	✓	✓	✓		✓		✓	✓	✓
BC Ministry of Advanced Education and Future Skills		✓	✓	✓	✓	✓						✓
BC Ministry of Citizens' Services	✓										✓	✓
BC Housing		✓	✓	✓		✓	✓	✓	✓		✓	✓
Local Governments	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
AIBC				✓	✓						✓	✓
EGBC	✓	✓	✓	✓	✓						✓	✓
TSBC	✓	✓	✓	✓	✓						✓	✓
Colleges & Universities	✓	✓	✓	✓				✓			✓	✓
UTILITIES												
BC Hydro	✓	✓	✓	✓		✓			✓		✓	✓
FortisBC Gas	✓	✓	✓	✓		✓			✓		✓	✓
FortisBC Electric	✓	✓	✓	✓		✓			✓		✓	✓
Pacific Northern Gas	✓	✓	✓	✓		✓			✓		✓	✓
Municipal Electric Utilities	✓	✓	✓	✓		✓			✓		✓	✓

ORGANIZATION					REGULATION / ENFORCEMENT	FUNDING	ADVOCACY	PUBLIC RESEARCH	PROGRAM ADMIN	DEVELOP TOOLS	TRAINING / EDUCATION	COMMUNICATIONS
OWNER/DEVELOPER INDUSTRY ORGANIZATIONS												
AHMA		✓	✓				✓		✓		✓	✓
BCNPHA		✓	✓				✓		✓	✓	✓	✓
BOMA BC	✓						✓	✓	✓	✓	✓	✓
CHBA / CHBA BC / Local CHBA chapters		✓	✓	✓			✓		✓		✓	✓
CHOA BC		✓	✓				✓		✓		✓	✓
Co-operative Housing Federation of BC		✓	✓	✓			✓				✓	✓
LandlordBC		✓	✓				✓	✓	✓	✓	✓	✓
ULI BC				✓			✓				✓	✓
UDI				✓			✓				✓	✓
Victoria 2030 District		✓							✓		✓	✓
VISOA	✓	✓	✓				✓				✓	✓
TENANT ORGANIZATIONS												
Tenant Resource and Advisory Centre		✓	✓				✓				✓	✓
TAPS		✓	✓				✓				✓	✓
BC Poverty Reduction Coalition		✓	✓				✓				✓	✓
ACORN		✓	✓				✓				✓	✓
MEMBER-BASED PROFESSIONAL ORGANIZATIONS												
ASHRAE BC	✓	✓		✓				✓			✓	✓
BC Electrical Association	✓	✓	✓	✓			✓				✓	✓
BC Federation of Labour	✓	✓	✓	✓			✓				✓	✓
BC Real Estate Association			✓	✓			✓				✓	✓
BOABC	✓	✓	✓	✓	✓						✓	✓
CaGBC	✓	✓		✓			✓	✓	✓		✓	✓
CACEA			✓	✓			✓				✓	✓
CIPH	✓	✓	✓	✓			✓				✓	✓
HPSC		✓	✓	✓			✓				✓	✓
HRAI	✓	✓	✓	✓			✓	✓			✓	✓
MCABC	✓	✓	✓	✓			✓				✓	✓
Strata Property Agents of BC		✓	✓				✓				✓	✓
TECA		✓	✓	✓			✓				✓	✓

ORGANIZATION					REGULATION / ENFORCEMENT	FUNDING	ADVOCACY	PUBLIC RESEARCH	PROGRAM ADMIN	DEVELOP TOOLS	TRAINING / EDUCATION	COMMUNICATIONS
BUILDINGS RELATED PUBLIC INTEREST GROUPS												
Building Decarbonization Alliance	√	√	√	√			√	√			√	√
CAPE		√	√	√			√	√				√
Canadian Climate Institute	√	√	√	√			√	√				√
CEA	√	√	√	√			√	√	√	√	√	√
Clean Energy Canada	√	√	√	√			√	√				√
EcoTrust Canada		√	√				√	√	√			√
Efficiency Canada	√	√	√	√			√	√				√
Pembina Institute	√	√	√	√			√	√	√			√
ZEIC/B2E	√	√	√	√			√	√	√		√	√

Appendix E – Matching Roadmap Actions to Key Organizations and Roles

LEAD

ACTION - LEAD	ENABLING ORGANIZATIONS	DELIVERY AGENT	POTENTIAL ADVOCATES
1. Reestablish the Province of BC's long-term commitment to building electrification	<ul style="list-style-type: none"> Province of BC BC Hydro 	<ul style="list-style-type: none"> Province of BC BC Hydro 	<ul style="list-style-type: none"> Local governments Public interest groups
2. Continue to invest in electricity grid readiness and load management strategies	<ul style="list-style-type: none"> BC Hydro FortisBC Electric 	<ul style="list-style-type: none"> BC Hydro Fortis BC Electric 	<ul style="list-style-type: none"> Local governments Owner/developer industry organizations Public interest groups
3. Commit funding to support building electrification over the next five years	<ul style="list-style-type: none"> Federal government Province of BC Utilities 	<ul style="list-style-type: none"> Federal government Province of BC 	<ul style="list-style-type: none"> Local governments Owner/Developer industry organizations Tenant organizations Member based-professional organizations (training) Public interest groups
4. Continue to grow and support the diverse coalition of organizations and individuals who advance and advocate for decarbonizing BC's building sector	<ul style="list-style-type: none"> All levels of government Electricity utilities Public interest groups 	<ul style="list-style-type: none"> B2E Coalition Community Energy Association Building Decarbonization Alliance 	<ul style="list-style-type: none"> All levels of government Owner/Developer industry organizations Member based-professional organizations Public interest groups
5. Deliver clear and timely building electrification communications	<ul style="list-style-type: none"> All levels of government Electricity utilities Industry associations Public interest groups Colleges and universities 	<ul style="list-style-type: none"> All levels of government Electricity utilities Local governments Owner/Developer industry organizations Member based-professional organizations Public interest groups Colleges and universities 	<ul style="list-style-type: none"> All levels of government Local governments Industry associations Public interest groups Colleges and universities

PREPARE

ACTION - PREPARE	ENABLING ORGANIZATIONS	DELIVERY AGENT	POTENTIAL ADVOCATES
6. Establish guidelines and require utilities to share whole building energy data with building owners	<ul style="list-style-type: none"> Federal government Province of BC Utilities 	<ul style="list-style-type: none"> Utilities 	<ul style="list-style-type: none"> Local governments Owner/Developer industry organizations Public interest groups
7. Require energy and emissions reporting for commercial and institutional buildings	<ul style="list-style-type: none"> Province of BC Local governments Utilities 	<ul style="list-style-type: none"> Province of BC Local governments 	<ul style="list-style-type: none"> Owner/Developer industry organizations Local governments Public interest groups
8. Require all ground-oriented homes to provide a home energy label at time of sale	<ul style="list-style-type: none"> Province of BC 	<ul style="list-style-type: none"> Province of BC BC Real Estate Association 	<ul style="list-style-type: none"> Local governments Public interest groups
9. Update the BC and Canadian Electric Codes to allow more load management options	<ul style="list-style-type: none"> CSA Province of BC 	<ul style="list-style-type: none"> Local governments TSBC 	<ul style="list-style-type: none"> Electricity utilities Local governments Owner/Developer industry organizations Public interest groups

ACTION – PREPARE	ENABLING ORGANIZATIONS	DELIVERY AGENT	POTENTIAL ADVOCATES
10. Adopt streamlined municipal heat pump permitting	<ul style="list-style-type: none"> Local governments 	<ul style="list-style-type: none"> Local governments 	<ul style="list-style-type: none"> HPSC MCABC TECA
11. Increase the ability for small residential heat pump contractors to complete multiple installation tasks	<ul style="list-style-type: none"> BC Ministry of Advanced Education and Future Skills 	<ul style="list-style-type: none"> Colleges and training institutions 	<ul style="list-style-type: none"> Local governments Public interest groups HRAI
12. Continue to improve processes to align electrical connections with scheduled building occupancy	<ul style="list-style-type: none"> Electricity utilities 	<ul style="list-style-type: none"> Electricity utilities Local governments Developers 	<ul style="list-style-type: none"> Developers
13. Establish and reference dual-fuel performance design standards for different equipment types	<ul style="list-style-type: none"> BC Ministry of Energy and Climate Solutions BC Ministry of Housing 	<ul style="list-style-type: none"> Utilities (programs) EGBC MCABC HPSC TECA 	<ul style="list-style-type: none"> BC Housing Owner/Developer industry organizations Local governments Public interest groups
14. Establish minimum training and qualifications for installing small residential heat pumps	<ul style="list-style-type: none"> BC Ministry of Advanced Education and Skilled Trades 	<ul style="list-style-type: none"> HRAI HPSC TECA MCABC 	<ul style="list-style-type: none"> Local governments HRAI HPSC TECA Public interest groups
15. Enable local governments to adopt performance commissioning and retro-commissioning requirements	<ul style="list-style-type: none"> Province of BC 	<ul style="list-style-type: none"> Local governments 	<ul style="list-style-type: none"> Utilities Local governments Public interest groups

SUPPORT

ACTION – SUPPORT	ENABLING ORGANIZATIONS	DELIVERY AGENT	POTENTIAL ADVOCATES
16. Develop guidelines for the fair and transparent allocation of costs of building electrification projects between tenants and landlords	<ul style="list-style-type: none"> BC Ministry of Housing 	<ul style="list-style-type: none"> BC Ministry of Housing Landlord BC Tenant organizations 	<ul style="list-style-type: none"> Tenant organizations Local governments Public interest groups
17. Continue incentives for lower-income households and buildings, including social housing	<ul style="list-style-type: none"> All levels of government Electricity utilities 	<ul style="list-style-type: none"> All levels of government Electricity utilities 	<ul style="list-style-type: none"> Social housing providers Tenant organizations Building owner associations Public interest groups
18. Provide incentives that focus on supporting market readiness for upcoming equipment regulations	<ul style="list-style-type: none"> Federal government Province of BC Local governments Utilities 	<ul style="list-style-type: none"> Federal government Province of BC Local governments Utilities 	<ul style="list-style-type: none"> Local governments Owner/Developer industry organizations Tenant organizations Member based-professional organizations Public interest groups
19. Provide municipal incentives for all-electric new construction projects	<ul style="list-style-type: none"> Local governments 	<ul style="list-style-type: none"> Local governments 	<ul style="list-style-type: none"> Development community Public interest groups
20. Enable local governments to offer property-secured improvement financing	<ul style="list-style-type: none"> Province of BC 	<ul style="list-style-type: none"> Local governments Private lending firms 	<ul style="list-style-type: none"> Owner/Developer industry organizations Local governments Public interest groups
21. Explore on-bill utility financing for residential projects and amortizing the cost of upgraded distribution transformers for larger projects	<ul style="list-style-type: none"> Province of BC Utilities 	<ul style="list-style-type: none"> Utilities 	<ul style="list-style-type: none"> Owner/Developer industry organizations Local governments Public interest groups
22. Set up an innovative financial mechanism (e.g., loan guarantee for strata building electrification projects)	<ul style="list-style-type: none"> Federal government Province of BC 	<ul style="list-style-type: none"> Financial institutions 	<ul style="list-style-type: none"> Owner/Developer industry organizations Local governments Public interest groups

ACTION – SUPPORT	ENABLING ORGANIZATIONS	DELIVERY AGENT	POTENTIAL ADVOCATES
23. Continue to support building electrification related training	<ul style="list-style-type: none"> Federal government Province of BC Local governments Utilities 	<ul style="list-style-type: none"> Colleges & other training bodies 	<ul style="list-style-type: none"> Member-based professional organizations
24. Continue to provide funding for retrofit concierge services	<ul style="list-style-type: none"> Federal government Province of BC Municipal utilities 	<ul style="list-style-type: none"> Existing concierge providers 	<ul style="list-style-type: none"> Local governments Owner/developer industry organizations Public interest groups
25. Continue to provide funding for demonstration and pilot projects	<ul style="list-style-type: none"> Federal government Province of BC Utilities Municipal utilities Local governments 	<ul style="list-style-type: none"> Utilities Owner/Developer industry organizations Public interest groups: CEA, EcoTrust, Pembina, ZEIC/B2E 	<ul style="list-style-type: none"> Local governments Member-based professional organizations Public interest groups

REGULATE

ACTION – REGULATE	ENABLING ORGANIZATIONS	DELIVERY AGENT	POTENTIAL ADVOCATES
26. Enact Highest Efficiency Equipment Standard	<ul style="list-style-type: none"> Province of BC 	<ul style="list-style-type: none"> Province of BC Local governments Equipment supply chain 	<ul style="list-style-type: none"> Local governments Public interest groups
27. Set a Building Performance Standard	<ul style="list-style-type: none"> Province of BC 	<ul style="list-style-type: none"> Province of BC Local governments 	<ul style="list-style-type: none"> Local governments BOMA BC Public interest groups
28. Require reversing valve for air conditioning units	<ul style="list-style-type: none"> Province of BC 	<ul style="list-style-type: none"> Province of BC Equipment supply chain 	<ul style="list-style-type: none"> Local governments Public interest groups
29. Proceed with Zero Carbon Step Code	<ul style="list-style-type: none"> Province of BC Local governments 	<ul style="list-style-type: none"> Local governments 	<ul style="list-style-type: none"> Local governments Public interest groups Builder/Developer industry leaders
30. Prioritize heat pumps for cooling	<ul style="list-style-type: none"> Federal government Province of BC Local governments Municipal utilities 	<ul style="list-style-type: none"> Province of BC Local governments 	<ul style="list-style-type: none"> Local governments Public interest groups

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