

### Jurisdictional Scan

Administration conducted a jurisdictional scan to identify best practices and key learnings from other jurisdictions supporting zero emission building construction. The below table summarizes the results for each jurisdiction.

Jurisdiction	Summary
Canada	<ul style="list-style-type: none"> <li>• The federal government’s Emission Reduction Plan Buildings Strategy includes an intention to require EnerGuide labelling of homes at the time of sale in support of the goal of all new buildings being net zero energy ready by 2030<sup>1</sup>.</li> </ul>
British Columbia	<ul style="list-style-type: none"> <li>• British Columbia has had an energy step code since 2017 which allows local governments to incentivize or require higher steps than the base code and has set a provincial goal that all new buildings be net zero ready by 2032<sup>2</sup>. Steps 1-3 can be achieved using construction techniques and products readily understood and available, Steps 4-5 are more ambitious and will require more training and incentives to achieve. Costing studies have shown a premium of 3-10 per cent required to achieve Step 4<sup>3</sup>.</li> <li>• Case studies have been published for several homes achieving the higher steps<sup>4</sup>. There has been criticism that differing standards across the province has led to some confusion and</li> </ul>

<sup>1</sup> Government of Canada, “2030 Emissions Reduction Plan - Sector-by-sector Overview”, May 8 2023.

<https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/emissions-reduction-2030/sector-overview.html>

<sup>2</sup> Government of British Columbia “How the BC Energy Step Code works”  
<https://energystepcode.ca/how-it-works/>

<sup>3</sup> Reshape Strategies and Morrison Hershfield. “BC Energy Step Code Costing Studies Analysis”  
<https://energystepcode.ca/app/uploads/sites/257/2019/11/BC-Energy-Step-Code-Costing-Studies-Analysis-Rev1.pdf>

<sup>4</sup> Government of British Columbia. “Case Studies”  
<https://energystepcode.ca/case-studies/>

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	<p>subsequent overall cost increases.<sup>5</sup></p> <ul style="list-style-type: none"> <li>• Several jurisdictions in British Columbia allow lower steps for buildings built with a low carbon energy system, such as a district energy connection. For example Surrey and North Vancouver both require Step 3 for Part 3 residential buildings, but allow Step 2 for buildings with a low carbon energy system<sup>6</sup>.</li> </ul>
Yukon	<ul style="list-style-type: none"> <li>• Yukon subsidizes energy assessments for both new and existing buildings, and has a rebate program for new homes that are more energy efficient than required by code<sup>7</sup>. Under the ZeroPath rebate program, homes which use between 50 per cent and 59 per cent less energy than the code maximum can receive a \$5,000 rebate and those that use more than 60 per cent less energy can receive a \$10,000 rebate. There is an additional \$1,500 rebate offered for the installation of an air-source heat pump into a new home.</li> <li>• Yukon has published “Energy Efficient Housing Guidelines for Whitehorse, YT: Cost Optimized House”, which covers the design and construction of an archetype energy and cost optimized single family dwelling<sup>8</sup>. The cost-optimized pathway home is more airtight and fully electrified (with optional wood stove), and saves an estimated 46 gigajoules and \$1,264 in operating costs (savings on energy bills less payments on principal and mortgage) each year.</li> </ul>
Calgary	<ul style="list-style-type: none"> <li>• The City of Calgary has a Green Buildings Priority</li> </ul>

<sup>5</sup> CHBA British Columbia, “CHBA BC Position on the BC Energy Step Code”. October 2021. <https://chbabbc.org/wp-content/uploads/2021/11/CHBA-BC-Position-on-Energy-Step-Code-Revised-1.pdf>

<sup>6</sup> Government of British Columbia, “Implementation updates” December 2022. [https://energystepcode.ca/implementation\\_updates/](https://energystepcode.ca/implementation_updates/)

<sup>7</sup> Government of Yukon. “Apply for a ZeroPath rebate for new homes”. <https://yukon.ca/en/new-home-rebate>

<sup>8</sup> Government of Yukon. “Energy Efficient Housing Guidelines for Whitehorse: Cost Optimized House”, July 8, 2019. <https://yukon.ca/en/energy-efficient-housing-guidelines-whitehorse-cost-optimized-house>

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	<p>Stream voluntary program designed to encourage energy efficient buildings.<sup>9</sup></p> <ul style="list-style-type: none"> <li>● The program includes dedicated support through all development review and approval stages, accelerated permit reviews, preliminary building code compliance review at the development permit stage, and project promotion on a City of Calgary webpage.</li> <li>● Pathways for entry into the program include:             <ul style="list-style-type: none"> <li>○ 25 per cent less energy and 50 per cent less emissions than a code compliant Part 3 building</li> <li>○ 30 per cent less energy and 60 per cent less emissions than a code compliant Part 6 building</li> <li>○ Third party certifications such as CHBA Net Zero and Net Zero Ready, Passive House, and CaGBC Zero Carbon</li> <li>○ Other low emission projects at the City's discretion</li> </ul> </li> </ul>
Canmore	<ul style="list-style-type: none"> <li>● The Town of Canmore released Green Building Regulations in 2020 which require either EnerGuide labelling or pursuing a third party certification such as Built Green or LEED for all new residential construction<sup>10</sup>. Homes are required to achieve 10 per cent higher performance than the EnerGuide reference.</li> <li>● Compliance is enforced through a Green Building Performance Security (“the Security”) in the amount of 0.4 per cent of the construction value. Failure to submit the reporting requirements leads to a penalty of the entire security, while between 10 and 40 per cent of the Security can be lost for failing to achieve the targets.</li> <li>● Incentives in the amount of 10-30 per cent of the Security are provided for exceeding the minimum performance target. Commercial and</li> </ul>

<sup>9</sup> City of Calgary, “Green Buildings Priority Stream Program”, <https://www.calgary.ca/environment/climate/green-buildings-priority-stream-program.html>

<sup>10</sup> Town of Canmore “PUBLIC GUIDE TO GREEN BUILDING REGULATIONS: Residential Applications”, <https://www.canmore.ca/public/download/files/232740>

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	<p>large residential buildings have the option to meet the current NECB (which has higher requirements than the current Alberta building code) and receive variances of up to 20 per cent in areas such as building height and yard setbacks<sup>11</sup>. There is also the option to exceed the NECB requirements and receive a reduction in the development security in addition to the variances.</p>
Montreal	<ul style="list-style-type: none"> <li>• Montreal plans to use bylaw powers to mandate zero emissions construction in 2025.<sup>12</sup></li> </ul>
Toronto	<ul style="list-style-type: none"> <li>• The Toronto Green Standard (“the Standard”) sets sustainable design and performance requirements for new developments since 2010<sup>13</sup>. The Standard includes tiers of energy performance, with the lowest being mandatory and financial incentives being available for higher tiers. As of 2021, 150 out of 2,500 development projects received incentives to meet a higher tier. Version 4 of the Standard was adopted in 2022 which moves the minimum requirement to the current Tier 2. The current Tier 3 is planned to become mandatory in 2025 and requires whole-building air leakage testing as well as limiting greenhouse gas intensity.</li> <li>• The final update is planned to be adopted in 2028, which will make net-zero ready designs the mandatory minimum. The 2028 update will require almost entirely electrified heating systems. The Standard includes requirements for low-rise residential, mid to high-rise residential and non-residential, and city-owned facilities. Energy modelling guidelines are also</li> </ul>

<sup>11</sup> Town of Canmore “PUBLIC GUIDE TO GREEN BUILDING REGULATIONS: Commercial, Industrial, Institutional and Large scale Residential Applications”  
<https://www.canmore.ca/public/download/files/232741>

<sup>12</sup> Blais, Stéphanie. Montreal Gazette. “All new construction in Montreal to be zero emission as of 2025, Plante says”. May 3, 2022.  
<https://montrealgazette.com/news/local-news/all-new-constructions-in-montreal-to-be-zero-emission-as-of-2025-plante-says>

<sup>13</sup> City of Toronto. “Toronto Green Standard”.  
<https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/toronto-green-standard/>

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	<p>provided.</p> <ul style="list-style-type: none"> <li>• Toronto’s Zero Emissions Buildings Framework estimates that the stepped targets will reduce emissions by 30.6 megatonnes by 2050.</li> <li>• Other cities in Ontario have also developed their own green development standards: Ottawa, Brampton, Ajax, Whitby, Halton Hills, Markham and Richmond Hill<sup>14</sup>.</li> </ul>
Pickering	<ul style="list-style-type: none"> <li>• The City of Pickering has adopted Integrated Sustainable Design Standards (ISDS) for all new development, excluding lands that already have an approved plan of subdivision or site plan<sup>15</sup>. The ISDS uses checklists with two levels of achievement: Tier 1 which is mandatory, and Tier 2 which is an optional higher level of achievement. Both tiers include energy performance and emissions targets and require submission of an energy modelling report. Letters of Credit may be used to ensure completion of the approved development works.</li> </ul>
Vancouver	<ul style="list-style-type: none"> <li>• The City of Vancouver has its own building code, enabled through its Charter City status<sup>16</sup>. The Vancouver Building By-law currently includes requirements for improved envelope performance, electric heating and heat recovery ventilators. Compliance is verified through a pre-permit checklist, a home energy model, a blower door test, and an EnerGuide evaluation. There is also a greenhouse gas emissions cap for homes over 325 square metres.</li> <li>• Vancouver’s Green Buildings Policy for Rezoning sets more stringent energy limits than the building code and includes embodied</li> </ul>

<sup>14</sup> The Atmospheric Fund. “Municipal development standards for new buildings”.

<https://taf.ca/green-development-standards/>

<sup>15</sup> City of Pickering. “Building Green - User Guide, Pickering Integrated Sustainable Design Standards”. August 2022.

[https://www.pickering.ca/en/living/resources/Attachment-1---ISDS-User-Guide\\_revisedversion-LD-Formatting\\_ACC.pdf](https://www.pickering.ca/en/living/resources/Attachment-1---ISDS-User-Guide_revisedversion-LD-Formatting_ACC.pdf)

<sup>16</sup> City of Vancouver. “Vancouver Building By-law (CBO)”

<https://vancouver.ca/your-government/vancouver-building-by-law.aspx>

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	carbon limits <sup>17</sup> . It is planned to require zero emission buildings by 2030.
Victoria	<ul style="list-style-type: none"><li>• Victoria has adopted Step 3 of the BC Energy Step Code for small and mid-rise residential buildings and Step 2 for large residential and commercial buildings<sup>18</sup>. They will require the “zero carbon performance” step starting in 2024.</li></ul>
Whitehorse	<ul style="list-style-type: none"><li>• Whitehorse’s Building and Plumbing Bylaw includes energy efficiency requirements above the building code such as minimum thermal insulation values, airtightness, mandatory heat recovery ventilators and mandatory EnerGuide labelling for all new homes<sup>19</sup>. EnerGuide assessments are subsidized by the Territorial government.</li></ul>

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<sup>17</sup> City of Vancouver. “Policy Green Buildings Policy for Rezoning” July 2023.  
<https://guidelines.vancouver.ca/policy-green-buildings-for-rezonings.pdf>

<sup>18</sup> City of Victoria. “Low Carbon New Buildings”.  
<https://www.victoria.ca/community-culture/climate-action/climate-friendly-homes/low-carbon-new-buildings>

<sup>19</sup> City of Whitehorse. “Green Standards”.  
<https://www.whitehorse.ca/business-in-whitehorse/zoning/new-builds-renovations/green-standards/>