

**TO:** MAYOR & COUNCILLORS  
**FROM:** GENERAL MANAGER PLANNING AND DEVELOPMENT  
**SUBJECT:** **PROPOSED BUILDING BYLAW AMENDMENTS, ZERO CARBON STEP CODE, PART 3 BUILDINGS**  
**PURPOSE:** To recommend amendments to the Building Bylaw for implementing Zero Carbon Step Code for Part 3 buildings.

## **RECOMMENDATION**

**THAT** the City Solicitor be authorized to bring forward amendments to the Building Bylaw to require new buildings regulated by Part 3 of the BC Building Code to be designed and constructed to meet Emission Level 4 of the Zero Carbon Step Code, effective July 1, 2024, as outlined in Section 3.1 and Attachment 1 of the report entitled “Proposed Building Bylaw Amendments, Zero Carbon Step Code, Part 3 Buildings” dated June 10, 2024; and

**THAT** staff be authorized to introduce and update, as necessary, a new Energy Step Code and Zero Carbon Step Code (Part 3 Buildings) Information Guide to replace the existing Part 3 Green Building Policy, existing Low Carbon Energy System (LCES) Policy, and existing Part 3 Energy & Zero Carbon Step Code (Part 3 Buildings) Information Guide as outlined in Section 3.5 of the report entitled “Proposed Building Bylaw Amendments, Zero Carbon Step Code, Part 3 Buildings” dated June 10, 2024.

## **EXECUTIVE SUMMARY**

This report proposes amendments to the Burnaby Building Bylaw for implementation of Zero Carbon Step Code for Part 3 buildings and the preparation of an updated information guide for developers. As previously supported by Council, this is part of ongoing policy work to contain Energy Step Code and Zero Carbon Step Code requirements in the Building Bylaw, rather than as policies triggered by a rezoning application. This approach also responds to new housing directions from the Province for Small-Scale Multi-Unit Housing (SSMUH), as outlined in the report.

## **1.0 POLICY SECTION**

Requiring new buildings to meet standards for lower carbon emissions aligns with the following Council-adopted plans, strategies and policies:

- Zero Emissions Building Retrofit Strategy (2023),
- Burnaby District Energy Policy (2023),
- Corporate Strategic Plan (2022),
- Climate Action Framework (2020),

- Part 3 Green Building Policy (2019),
- Low Carbon Energy System Policy (2019)
- Environmental Sustainability Strategy (2016),
- Community Energy and Emissions Plan (2016),
- Social Sustainability Strategy (2011), and
- Economic Development Strategy (2007).

The Zero Carbon Step Code (ZCSC) was enacted by the Province of BC (Ministry of Housing, Building and Safety Standards Branch), through amendment of the Building Act General Regulation (Ministerial Order No. M40) and the BC Building Code (Ministerial Order No. BA2023 8). For Part 3 Buildings, Energy Step Code (ESC) and ZCSC are implemented by Sections 10.2 (Energy Efficiency) and 10.3 (Greenhouse Gas Emissions) of the BC Building Code. The ZCSC is a regulation that sets a maximum annual amount of greenhouse gas (GHG) emissions that new buildings are allowed to emit, and local government has the option to voluntarily adopt higher levels of the ZCSC.

**2.0 BACKGROUND**

**2.1 Previous Council Direction and Bylaw Amendments**

On December 11, 2023, Council authorized staff to amend the Part 3 Green Building Policy and Low Carbon Energy System (LCES), both of which are implemented through the rezoning process, to align with ESC Step 2 and ZCSC Code EL-4 (Zero Carbon Performance). These amendments were applied beginning January 1, 2024, for new rezoning applications for Part 3 buildings and instream rezoning applications that did not reach Second Reading by December 31, 2023.

On December 11, 2023, Council also authorized staff to amend the Building Bylaw to adopt ZCSC to regulate GHG emissions from new Part 9 residential buildings for the first time. Final Adoption of the amendments to the Building Bylaw was on February 27, 2024. Part 9 residential building permits received on or after January 1, 2024 must meet ZCSC EL-3 (Strong Carbon Performance) and building permits received on or after January 1, 2025 must meet ZCSC EL-4 (Zero Carbon Performance).

The Building Bylaw amendments also established the minimum ESC requirement for Part 9 residential buildings as Step 3 and the minimum ESC requirement for Part 3 buildings as Step 2.

**2.2 Concurrent related and ongoing policy work**

The recommendations of this report follow from ongoing policy work started this year to transition ZCSC requirements for Part 3 buildings from the rezoning process to the Building Bylaw. The Report to Council on December 11, 2023 noted that this would be a second phase of policy work scheduled for 2024.

Advancing this work also responds to new housing directions from the Province for Small-Scale Multi-Unit Housing (SSMUH). SSMUH will likely be Part 9 buildings, but

may also include some Part 3 buildings, for which a rezoning application will not be required. This would have had the potential to create a gap in the development approval process. The transition from policies triggered by rezoning application to Building Bylaw requirements for ESC and ZCSC requirements for Part 3 buildings aims to fill this gap and support the smooth processing and approval of future SSMUH applications in Burnaby.

**3.0 GENERAL INFORMATION**

**3.1 Amendment to Building Bylaw**

Staff recommend that the Building Bylaw be amended such that a new building regulated by Part 3 of the Building Code shall be designed and constructed to meet the following GHG emission requirement specified in Division B, Part 10 of the Building Code:

Beginning July 1, 2024:

- ZCSC, Emission Level 4 (EL-4, Zero Carbon Performance)

See Attachment 1 – Proposed Building Bylaw Amendment - for recommended provisions to be added to Section 9B of the Building Bylaw. The amendment bylaw appears elsewhere on the Council agenda for consideration of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> readings. The July 1, 2024, effective date is selected to align with the Provincial timeline and updates to the City’s Zoning Bylaw to support implementation of SSMUH.

Like ESC, ZCSC performance requirements will eventually become mandatory in the BC Building Code. Alignment of compliance pathways provided by the Part 3 Green Building and LCES rezoning policies, in place from 2019 to 2023, and future adoption of ZCSC performance requirements in the BC Building Code, are anticipated at this time.

**3.2 Alignment with Burnaby District Energy Utility**

Based on technical analysis completed to date, connection to the future Burnaby District Energy Utility (DEU) would be considered a viable compliance path that applicants can utilize to meet ZCSC requirements in Burnaby. City staff working on DEU and ZCSC implementation will continue to collaborate to ensure that there is alignment. Details of Burnaby’s requirements for DEU connection are outlined in the Burnaby District Energy Policy and will be cross-referenced in the new Energy Step Code and Zero Carbon Step Code (Part 3 Buildings) Information Guide.

**3.3 Issues for Consideration**

Electrification of space heating and domestic hot water systems is also an expected compliance pathway for ZCSC, EL-4 (Zero Carbon Performance), for buildings not served in the future by the Burnaby DEU. New developments that will not be served by the City’s future DEU will be required to demonstrate load requirements and are responsible for distribution system upgrades if there is not adequate power to meet the additional load on their site. This could result in additional costs to the project. BC Hydro is currently reviewing its extension policies and ways to reduce timelines for system upgrades.

**3.4 Exemptions and In-Stream Applications**

Exemptions to the ZCSC, EL-4 (Zero Carbon Performance) requirement for Part 3 buildings are proposed as follows:

- Building permit applications for Part 3 buildings that were the subject of a rezoning application that received Second Reading by December 31, 2023. These buildings will be required to meet a compliance pathway provided by the Part 3 Green Building and LCES policies applied through the rezoning process. This exemption is proposed to expire on December 31, 2026, when the ZCSC requirement could become mandatory under the BC Building Code. Building permit applications for these developments submitted after that date will be required to meet ZCSC, EL-4 (Zero Carbon Performance) requirements.
- Building permit applications for buildings connecting to the existing Burnaby Mountain District Energy Utility.

**3.5 New Energy Step Code and Zero Carbon Step Code Information Guide**

To support staff and applicants regarding expectations and process for meeting ESC and ZCSC requirements, staff are recommending the creation of a new Energy Step Code and Zero Carbon Step Code (Part 3 Buildings) Information Guide. This Information Guide would replace several documents that are currently in use but that are no longer necessary with the shift to the Building Bylaw for ESC and ZCSC requirements, including:

- the existing Part 3 Green Building Policy
- the existing Low Carbon Energy System (LCES) Policy
- the existing Part 3 Energy & Zero Carbon Step Code (Part 3 Buildings) Information Guide.

The new Information Guide is intended to provide clear information regarding ESC and ZCSC requirements in Burnaby, potential means of compliance, and administrative requirements through the development process. The guide may be updated from time to time should new information or requirements come forward.

**3.6 Future work**

Staff have identified several pieces of future work to continue to support the development of low carbon, high-performance buildings in Burnaby. This future work includes:

- Enhancing internal administrative processes to support green buildings in Burnaby, including reviewing the Green Building Covenant, exploring the creation of a Green Building Bylaw to replace portions of the Green Building Policy and establish clear requirements and guidance for ESC, ZCSC, and other sustainable design approaches in Burnaby;
- Updating guidance and processes for Green Building Reports to align with ESC and ZCSC adoption;

- Developing a building energy reporting and benchmarking strategy to formalize the process of better understanding energy use in new and existing buildings in Burnaby;
- Developing options for acceleration of the ESC for Part 3 and Part 9 buildings, informed by industry engagement, analysis, and best practice; and
- Engage with interested parties to advance understanding and best practices for aligning existing low carbon district energy systems with ZCSC.

**4.0 COMMUNICATION AND COMMUNITY ENGAGEMENT**

Engagement with interested parties related to ZCSC, including EL-4 for Part 3 buildings, was previously undertaken in the Fall of 2023 and is summarized in the December 11, 2023, report to Council on Zero Carbon Step Code Implementation.

Following acceptance of this report, the new Energy Step Code and Zero Carbon Step Code (Part 3 Buildings) Information Guide will be uploaded to the City’s Green Building webpage and circulated to the development community via e-mails, newsletters, and industry representative organizations to ensure that the new requirements and development application process is distributed and understood.

It is recommended that a copy of this report be forwarded to the Environment Committee for information.

**5.0 FINANCIAL CONSIDERATIONS**

Not applicable.

Respectfully submitted,

Lee-Ann Garnett, Acting General Manager Planning and Development

**ATTACHMENTS**

Attachment 1 – Proposed Building Bylaw Amendment

**REPORT CONTRIBUTORS**

This report was prepared by Mark Sloat, Senior Environmental Planner, and reviewed by David Clutton, Planner 2; May Leung, City Solicitor; Sara Gray, Staff Solicitor; and Johannes Schumann, Director Community Planning.