

Corporate Policy

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Section:	Planning and Development	13
Sub-Section:	Policy Planning	6870
Title:	BC Energy Step Code Rezoning Applications	2019-03

Related Policies

Number	Title

Approvals

Approval Date: July 9, 2019	Resolution #: <u>RC19/329</u>
Amended: January 28, 2020	Resolution #: <u>RC20/082</u>
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Definitions

Energy Step Code means the Province of British Columbia’s performance-based standard for energy efficiency in new construction requiring energy modelling and on-site testing to demonstrate minimum performance against metrics for building envelope, equipment and systems, and airtightness requirements, and including Step 1, Step 2, Step 3, Step 4, and Step 5, as defined in Sections 9.36.6 and 10.2.3 of the Building Code, all as amended or re-enacted from time to time.

Low Carbon Energy System means a professionally operated and maintained, highly efficient mechanical system that supplies a building’s space heating, cooling, and domestic hot water heating demand primarily from renewable energy sources, and meets defined GHG limits.

Greenhouse Gas Intensity means a measure of a building’s greenhouse gas (GHG) performance using the definition, calculation, and fuel type emissions factors established in the energy modelling guidelines referenced by the Energy Step Code, that is a calculated value determined through energy modelling and reported in kilograms of carbon dioxide-equivalent per square metre per year ($\text{kgCO}_2\text{e}/\text{m}^2\text{a}$).

Part 9 Buildings means a building defined in the British Columbia Building Code that includes single, two-family, attached and apartment buildings up to three storeys and 600 square metres in footprint or less.

Part 3 Buildings means a building defined in the British Columbia Building Code that includes residential or business and personal services or mercantile occupancy “commercial” buildings larger than three storeys or 600 square metres in footprint, and include apartments, offices, shopping centres, hotels, and some mixed-use buildings.

Policy

Background

The Energy Step Code (ESC) is an alternative compliance path in the British Columbia Building Code (BCBC) that outlines increasing steps of energy efficiency standards rooted in a performance-based approach. This approach establishes a set of metrics that must be demonstrated through energy modelling and airtightness testing to prove compliance. Various metrics define the Steps of the ESC, progressing from enhanced base code compliance at Step 1 to zero-energy ready at the highest step. Different building types have different numbers of steps. The steps are categorized into Lower and Upper Steps according to building types.

Three key aspects of the ESC that distinguish it from traditional BC Building Code energy requirements are as follows:

1. *Performance-based*, offering builders design flexibility, as opposed to a lengthy suite of prescriptive technical requirements for individual building components;
2. *Envelope-focused*, recognizing the need to help ensure that the building envelope (e.g. walls, foundation, ventilation), which is unlikely to change or be upgraded over the building’s life, is designed and constructed efficiently from the beginning; and

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3. *Explicit about airtightness*, the lowest cost way to improve building performance, but an area where buildings in BC lag behind the rest of the country.

Approach and Intent

Local governments have the opportunity to encourage or incentivize more energy efficient buildings under the ESC framework in advance of Provincial regulation. The City's Building Bylaw outlines steps for future construction. In addition to the Building Bylaw requirements, this Corporate Policy provides procedures to incentivise and encourage higher energy efficiency and low carbon building performance through the rezoning process, beyond ESC requirements outlined in the Building Bylaw. Rezoning application paths are outlined below according to building classification:

Building Type	Energy Step Code Paths for Rezoning Applications		
	2020	2021	2025
Pathways for Buildings Classified as Part 9			
Single family dwelling, duplex, semi-detached residential building, and dwelling units.	Step 3	Step 4	Step 5
Row housing building and multiple-unit residential buildings	Step 3	Step 4	Step 5
Pathways for Buildings Classified as Part 3			
Group C Multi residential building	Step 3 Or Step 2 with LCES	Step 4 Or Step 3 with LCES	Step 4 Or Step 3 with LCES
Group D Business and personal services occupancy	Step 2	Step 3	Step 3
Group E Mercantile occupancy	Step 2	Step 3	Step 3
Group C Hotel	Step 2	Step 3	Step 3

Low Carbon Energy Systems

While the Energy Step Code establishes a framework for reducing energy use in new buildings, it does not explicitly address GHGs from buildings. For this reason, based on industry research, rezoning applications submitted for buildings classified as Part 3 are provided with two pathways. Applicants will be encouraged to follow this Policy by meeting this policies goals with either a higher energy efficiency Step than prescribed in the Building Bylaw, or meet a lower energy efficiency Step with implementation of a low carbon energy system that satisfies a greenhouse gas intensity (GHGI) limit of 6kg/m²/year and a coefficient of performance greater than 2. As buildings make up a significant portion of community greenhouse gas emissions, the City strongly encourages applicants to meet the low carbon energy system pathway for applicable building types. Reducing building related GHGs directly impacts the City's progress towards achieving greenhouse gas reduction targets committed to in the Official Community Plan.

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Planning and Development staff may establish forms, processes, and similar administrative requirements in relation to an LCES Pathway such as:

- a) evidence that a utility will purchase the LCES;
- b) evidence that the ownership of the LCES has transferred to a utility;
- c) evidence of long-term energy service;
- d) evidence that the applicant has experience with other similar successful energy systems;
- e) evidence of long-term supply of low-carbon energy;
- f) maintenance, warranty, and optimization contract(s);
- g) long-term, owner-funded maintenance contract(s); and
- h) funding structure for long-term maintenance of strata-owned energy systems.

Procedures

The following procedures will be followed for Part 9 and Part 3 building archetypes with defined metrics according to the Energy Step Code framework:

1. During the preliminary review of a rezoning application, staff will direct the applicant to review the Corporate Policy and ensure that the applicant is aware of potential rezoning application paths pertaining to the project building classification;
2. The applicant will be strongly encouraged to conduct energy modelling and progress through the rezoning application process with the intent of achieving procedures outlined above;
3. Along with the detailed rezoning application submission, the applicant may be requested to voluntarily offer to provide a written statement, for example through a development agreement or Section 219 covenant in favour of the City that their proposed design is able to meet the chosen application path stated above and projects that comply with this Corporate Policy will be accompanied with a staff report to Council as part of its consideration of such application detailing the applicant's commitment to this Corporate Policy;
4. If the application is approved by Council in reliance on the commitments that may voluntarily be made as referred to in this Policy, applicants must submit Letters of Assurance as part of Building Permit application, and prior to occupancy, assuring that the project substantially complies with the City's Energy Step Code and LCES requirements, as applicable.

Associated Regulations and Policy Documents

This Policy is to be applied in conjunction with:

- City of Port Moody Zoning Bylaw, No. 2937;
- Energy Step Code bulletins issued by the Planning and Development Department; and
- other relevant bylaws or policies as necessary or that may be adopted by Council.

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Monitoring/Authority

The review of rezoning applications under this policy is delegated to the General Manager of Planning and Development. Council maintains full discretion on the consideration of rezoning applications.

This Corporate Policy shall come into effect on September 1, 2019.