City of Langford

Staff Report to Council

DATE: Monday, April 20, 2026
DEPARTMENT: Planning
SUBJECT: Step Code Information and Proposed Implementation Timeline

EXECUTIVE SUMMARY:

The purpose of this report is to seek Council direction with respect to the adoption of higher levels of BC Energy Step Code and Zero Carbon Step Code requirements in Langford.

This report and the accompanying presentation that will be presented at this Council meeting outline the research and analysis that has occurred to date, key considerations, and recommendations for implementation. Council may wish to consider directing staff to prepare a bylaw to implement higher levels of Zero Carbon Step Code, while maintaining the current Provincial timeline for Energy Step Code.

BACKGROUND:

At the Regular Council meeting of July 17, 2023, Council directed staff to conduct a gaps analysis to explore resources and policy changes needed to meet the City's GHG reduction goals.

Following this direction, staff completed a gaps analysis that led to an in-depth review of Step Code requirements in the region, local industry capacity and trends, and considerations for implementing policy changes to reduce GHG emissions from new construction.

This report and the accompanying presentation that will be presented at this Council meeting provide an overview of the research, key considerations and recommendations for further implementation of Step Code requirements in Langford.

COMMENTARY:

The Province of BC has committed to zero carbon new construction by 2030 and net-zero energy ready construction by 2032. To transition towards these goals, the BC Building Code has two regulations applicable to new buildings, commonly referred to as "Step Codes":

- **Energy Step Code (ESC)**: focuses on energy efficiency (using less energy to perform the same task).

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- **Zero Carbon Step Code (ZCSC):** focuses on decarbonization (reducing greenhouse gas emissions, also called carbon emissions).

The two Step Codes are independent but complementary. The ESC sets the stage to reduce the overall energy consumption, while the ZCSC reduces the greenhouse gas emissions associated with the energy consumption. Together, they create high-performance, low-emission buildings that are energy efficient, cost-effective, and environmentally responsible.

The Step Codes set incremental targets to meet energy efficiency requirements and greenhouse gas emission limits specified in the BC Building Code. Initially introduced as voluntary regulations, the Step Codes are currently mandated by the Province across British Columbia (current requirements are presented below). Local governments may adopt incremental targets (described as "Steps" in the ESC and "Emission Levels" in the ZCSC) that exceed the provincial minimums, enabling them to advance their own community greenhouse gas reduction goals.

Energy Step Code (ESC)

ESC, introduced in 2017, is a provincial building regulation that establishes energy efficiency requirements for new buildings through incremental targets called "Steps", with the energy efficiency improving as the steps go higher. Since May 2023, the minimum ESC requirement in the BC Building Code is Step 3 for Part 9 buildings and Step 2 for Part 3 buildings. As illustrated in Figure 1 below, each "Step" corresponds to a specific energy efficiency improvement percentage above 2018 BC Building Code requirements.

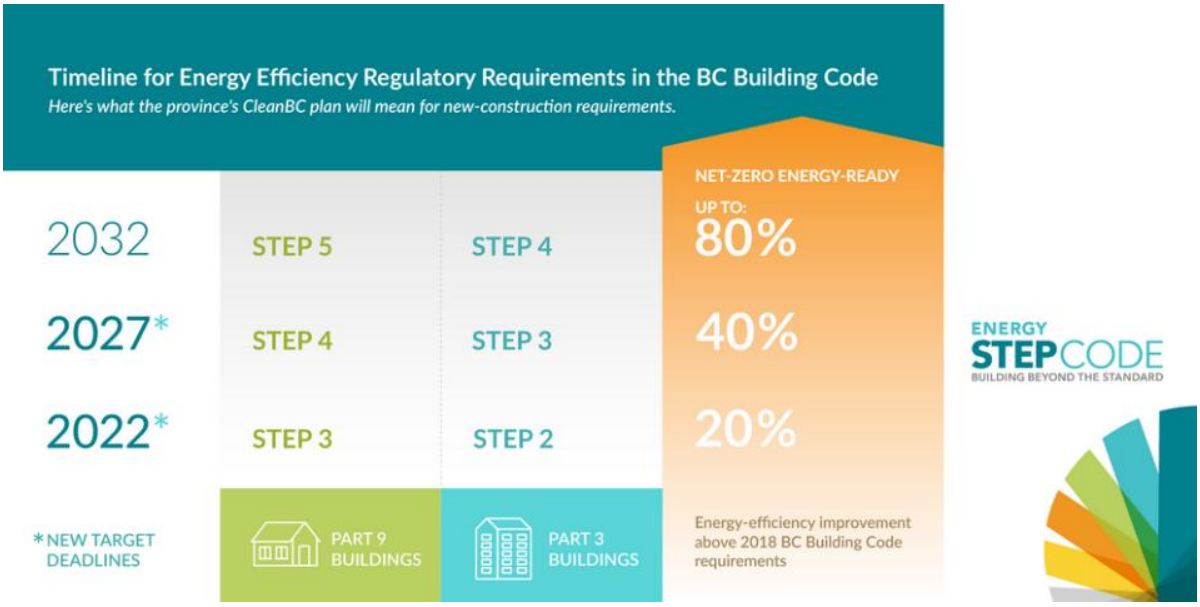

Figure 1. Energy Step Code

Zero Carbon Step Code (ZCSC)

ZCSC, introduced in May 2023, is a provincial building regulation that limits green house gas emissions, also called "carbon emissions", from buildings by using low carbon sources of energy for space heating and domestic hot water systems, and some auxiliary equipment as defined in the BC Building Code. Similar to ESC, ZCSC also has incremental targets, called "Emission Levels", with more reduction in carbon emissions as the Emission Levels go higher. Since March 2025, the minimum ZCSC requirement in the BC Building Code is EL-1 for both Part 9 and Part 3 buildings.

A brief description of the four Emission Levels is presented below:

- **Emission Level 1 (EL-1): Measure only**, meaning the buildings must report carbon emissions, but are not required to reduce emissions

- **Emission Level 2 (EL-2): Moderate Carbon Performance**
    - In most cases, requires electrification of either space heating or domestic hot water systems.

- **Emission Level 3 (EL-3): Strong Carbon Performance**
    - In most cases, requires electrification of both space heating and domestic hot water systems.

- **Emission Level 4 (EL-4): Zero Carbon Performance**
    - In most cases, requires full electrification of a building

For all four Emission Levels, Part 9 buildings can choose between two compliance paths:

- **Prescriptive path**, that requires buildings to use specific energy sources for space heating, domestic hot water systems and applicable equipment and appliances (as defined in the BC Building Code), OR
- **Performance path**, that gives flexibility to choose energy sources provided they meet the emission limits specified in the BC Building Code.

Part 3 buildings are allowed to demonstrate compliance only through one path – performance path. This means they have the flexibility to choose energy sources provided they meet the emission limits specified in the BC Building Code.

Current Step Code Requirements

The current Step Code requirements across the province (including Langford) are:

- Energy Step Code
    - Step 3 for Part 9 buildings (such as single-family homes, duplexes, and townhomes)
    - Step 2 for Part 3 buildings (such as larger commercial and multi-family buildings)
- Zero Carbon Step Code: EL-1 for all new buildings (both Part 9 and Part 3 buildings)

More details about what these incremental steps mean (e.g. types of space heating, water heating, and cooking equipment, and their energy sources), their implications to both builders and occupants of the building (e.g. upfront and operating costs), current requirements in the region, provincial implementation timelines, and compliance pathways are included in the accompanying presentation that will be presented at this Council meeting.

Analysis of trends in Langford's new construction

To understand trends in the types of space and water heating equipment generally used in Langford's new construction, their energy sources and associated greenhouse gas (GHG) emissions, staff analyzed the ESC compliance documentation the City has received for new construction projects in Langford.

More details about the analysis of trends and findings, and impacts (both financial and emissions reduction impacts) of adopting higher levels of Step Codes are included in the accompanying presentation that will be presented at this Council meeting.

Industry Engagement

City staff engaged with several developers and industry professionals to better understand:

- Industry experience and local capacity to adopt higher levels of Step Code requirements.
- How the City can help support the transition should new requirements come into effect.
- At what stage in the development process would it be challenging to implement new requirements in Step Codes.

Key findings from the industry engagement are included in the accompanying presentation that will be presented at this Council meeting.

Staff recommendations for implementation of Step Codes

Based on findings from the analysis of trends in Langford's new construction, industry engagement, and additional considerations outlined in this report and accompanying presentation that will be presented at this Council meeting, staff recommend the City adopt higher requirements for ZCSC for both Part 9

and Part 3 buildings as outlined in Table 1 below. No changes to ESC requirements are currently proposed.

For Part 9 buildings, staff recommend a phased implementation approach to give advance notice to the community with an immediate roll-out of EL-2 and 6 months notice for EL-4 implementation. The immediate roll-out of EL-2 is not expected to cause delays or redesign as Langford's homes already exceed the current minimum requirement of EL-1.

For Part 3 buildings that are more complex and difficult to redesign, staff recommend a longer implementation timeline to EL-4 and an unphased approach to minimize subsequent changes in requirements through phases. To provide certainty for developers with projects already underway, and to avoid delays and added costs from significant redesign, Council may wish to enable an additional "in-stream" protection framework to advance ZCSC implementation while still protecting projects that are well underway. Under this approach, projects that are sufficiently advanced in the approvals process may proceed under their approved designs. This includes projects that have a development permit issued prior to the step code bylaw adoption and is still valid at the time of building permit application, and projects that submit a development permit application within six months of step code bylaw adoption. "In-steam" projects have 1 year to advance to building permit application under the current ZCSC requirements, after which new requirements take effect. This approach is similar to the Province's transition framework for the seismic and adaptable housing requirements in the 2024 BC Building Code, though with a shorter transition period given the lower design impacts of ZCSC requirements.

A summary of proposed Step Code implementation timeline is provided below.

Table 1. Proposed Step Code Requirements (ESC & ZCSC) Implementation Timeline

Building Type	**Current Step Code Requirements**	**Proposed Step Code Requirements**		
		1 Month From Step Code Adoption #	**6 Months From Step Code Adoption #**	**1 Year From Step Code Adoption #**
Part 9	ESC: Step 3 ZCSC: EL-1	ESC: Step 3 ZCSC: EL-2	ESC: Step 3 ZCSC: EL-4	
Part 3 (all except in-stream projects)	ESC: Step 2 ZCSC: EL-1		ESC: Step 2 ZCSC: EL-4	
Part 3 (in-stream projects)	ESC: Step 2 ZCSC: EL-1			ESC: Step 2 ZCSC: EL-4

Applicable to Building Permits applied for on or after the implementation timeline indicated in this table.

As noted, staff recommend following the Provincial timeline for ESC implementation (through BC Building Code updates), which are:

- Part 9 buildings: Step 4 in 2027, Step 5 in 2032
- Part 3 buildings: Step 3 in 2027, Step 4 in 2032

FINANCIAL IMPLICATIONS:

There are no known financial implications associated with this report.

LEGAL IMPLICATIONS:

There are no known legal implications associated with this report.

STRATEGIC PLAN ALIGNMENT:

2a – Develop a Climate Action Master Plan Including Targets for Emissions Reduction.

OPTIONS:

Option 1
THAT Council direct staff to prepare a Bylaw to amend Building Bylaw No.1160, 2008 to implement the following Zero Carbon Step Code requirements and timelines:

Part 9 Buildings

1. One month after bylaw adoption: Building Permit applications must meet or exceed Emissions Level 2 (EL-2)

2. Six months after bylaw adoption: Building Permit applications must meet Emissions Level 4 (EL-4)

Part 3 Buildings

1. Six months after bylaw adoption: Building Permit applications must meet Emissions Level 4 (EL-4)

2. Projects that meet both of the following criteria will be considered “in-stream” and therefore exempt from the new bylaw requirements:

    a. A development permit has been issued and is still valid at the time of building permit application, or a development permit application is submitted within six months of step code bylaw adoption; and

b. A building permit application is submitted within twelve months of step code bylaw adoption.

OR Option 2
THAT Council take no action at this time with respect to adopting higher levels of Zero Carbon Step Code.

OR Option 3
THAT Council direct staff as follows:
1._____;
2._____;
3._____.

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