



THE CORPORATION OF THE CITY OF COURTENAY

## STAFF REPORT

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**To: Council**  
**From: Director of Development Services**  
**Subject: Zero Carbon Step Code**

**File No.:**  
**Date:** February 14, 2024

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### PURPOSE:

This report is to provide options to Council on the implementation of the Zero Carbon Step Code.

### BACKGROUND:

At the regular meeting of Council on 25<sup>th</sup> October 2023, Council adopted the following resolution

*“THEREFORE BE IT RESOLVED THAT pursuant to policies BL6 and BL7 of Courtenay’s OCP, staff prepare a report outlining options for implementing the Zero Carbon Step Code in order to meet the City’s 2030 emissions reduction target.”*

On 1<sup>st</sup> May 2023 the province introduced the Zero Carbon Step Code (ZCSC) to the BC Building Code to regulate greenhouse gas (GHG) emissions in new construction. The ZCSC follows the same tiered approach as the BC Energy Step Code that was introduced in 2017

The ZCSC has four carbon performance steps of increasing stringency and has been introduced on a voluntary basis.

1. Measure Only (EL-1)  
Measures the buildings emissions and is intended to build knowledge and understanding without reductions
2. Moderate Carbon Performance (EL-2)  
In most cases require decarbonizing of either space heating or domestic hot water system
3. Strong Carbon Performance (EL-3)  
In most cases will require decarbonizing of both space heating and domestic hot water system
4. Zero Carbon Performance (EL-4)  
In most cases will require full electrification with full decarbonizing of the building and the operation of the building is as close to zero GHG emissions

The CleanBC Roadmap to 2030 commits to requiring increasingly stringent GHG emission requirements for new buildings in 2024 and 2027 with the full decarbonizing by 2030. After 2023, all new space and water heating equipment sold and installed in BC will be at least 100% efficient. (See Attachment 1)

A few local governments have already adopted the ZCSC to restrict emissions to varying degrees of implementation. Although higher performance emissions have been established they have not accelerated the Energy Step Code (ESC). The new City of Courtenay building bylaw has accelerated the ESC and the proposed introduction of the ZCSC is accelerating the ZCSC ahead of the BC Building Code while meeting the CleanBC road map.

City of Courtenay Building Bylaw No. 3114 which, came into effect on 1<sup>st</sup> January 2024, requires the energy efficiency of all new buildings to be one step higher than the BC Energy Step Code and aligns with policies in the Official Community Plan (OCP). Higher efficiency buildings will have an impact on GHG emissions due to reduced energy requirements.

Further, on the March 8<sup>th</sup> 2024 the next addition of the BC Building will come into effect which will introduce further requirements for accessibility, enable mass timber construction, rough-ins for radon safety, adopting cooling requirements to provide one living space that does not exceed 26 degrees Celsius, and a few other items.

Staff had met with the Development Industry in July 2023 and the Industry was not familiar with the ZCSC. Given the unfamiliarity staff were proposing to carry out an engagement process.

In response to the motion noted above, staff would like to provide the following implementation options for the ZCSC.

- Develop a communication and engagement strategy on the ZCSC to develop an implementation plan and propose bylaw amendments. This would require an amendment to strategic priorities and staff work plan. An implementation plan would be brought back to Council for consideration based on the communication and engagement plan. Budget for this would have to be identified in the 2024 financial plan and staff work plan be adjusted.
- Align with the CleanBC road map which also aligns with the City's implementation of the Energy Step Code being one step higher than the building code requirements, this would be introduce EL-2 of the Zero Carbon Step Code in 2024, then EL-3 in 2027 and EL-4 in 2030. This approach would align with the Step Code policy in the OCP but staff would recommend a communication and engagement strategy.
- Align with the CleanBC road map and adopt the Zero Carbon Step Code with the prescribed timelines to reach level 4 by January 1, 2030. Staff to provide information and engage with development industry. This would require an amendment to Building Bylaw No. 3114 to adopt the Zero Carbon Step Code.
- Follow the prescriptive requirements of the BC Building Code. At this time, it is voluntary to follow the ZCSC and therefore has no requirements, or effect on reducing GHG emissions. (See Attachment 2)
- Council provide an alternative direction on the implementation of the ZCSC.

**DISCUSSION:**

Staff have reviewed other Local Governments processes and timelines on the implementation of the ZCSC and the acceleration of the Energy Step Code. The City of Nanaimo participated in a public engagement process organized by the Regional District of Nanaimo to obtain stakeholder input on the development of a strategy for Net Zero Buildings that included the implementation of the ZCSC. The process to consult and prepare reports for Council consideration was approximately six months.

The City of Victoria and the District of Saanich worked collaboratively together and were the first jurisdictions to enact the ZCSC. An engagement process was embarked upon from February 2022 to August 2022 (approximately six months).

Utilizing Nanaimo, City of Victoria and District of Saanich as examples to the implementation of the Zero Carbon Step Code and Energy Step Code, each government has taken a phased approach with the implementation of both the ZCSC and the ESC, which is summarized below.

District of Saanich City of Victoria	Implementation Timeline		
Zero Carbon Step Code	Part 9	EL-1 May 2023	EL-4 November 2023
	Part 3 (MURB)	EL-1 May 2023	EL-4 July 2024
	Part 3 (All)		EL-4 November 2024
Energy Step Code	Part 9	BCBC Step 3	Not accelerated
	Part 3	BCBC Step 2	Not accelerated

City of Nanaimo	Implementation Timeline		
Zero Carbon Step Code	Part 9	EL-1 October 2023	EL-4 July 2024
	Part 3	EL-1 October 2023	EL-4 July 2024
Energy Step Code	Part 9	BCBC Step 3	Not accelerated
	Part 3	BCBC Step 2	Step 3 Jan 2026

To undertake a full development community and public engagement process on the implementation of the ZCSC would take approximately six months based upon Nanaimo process. This task is not an action in the 2024 work plan or budget. Adjustments would be required to staff’s work plan for 2024 and another task would need to be deferred to 2025

The province will be mandating minimum EL levels as noted above and these can be amended into Building Bylaw No. 3114. Council can consider following the approach to the Energy Step Code which was adopted in the OCP to be one level higher than what the province would mandate for that year. Staff do recommend that consultation is undertaken with this option to provide information to the development

industry and community as there is an impact to business operations and implementation to the industry. There would be impact on staff work plan and budget for 2024.

Alternatively, Council can adopt the Zero Carbon Step Code and amend Building Bylaw No.3114 to incorporate the Province's strategy through the CleanBc Roadmap with a defined time line to reach zero GHG emissions by 2030 starting in 2024. This follows the performance steps in the ZCSC and is a progressive pathway to compliances that would allow the construction industry to adapt to the change.

**POLICY ANALYSIS:**

The Community Charter provides municipalities the authority to regulate, prohibit and impose requirements by bylaw in respect to buildings and structures (Part 2: Division 1 Section 8).

The City of Courtenay Official Community Plan outlines objectives and policies (BL6 and BL7) to accelerate energy efficiency and to regulate carbon pollution for new buildings.

The CleanBC Roadmap launched in late 2018 sets out polies on climate change and the reduction of GHG emissions with a range of accelerated actions for zero carbon in new buildings by 2030.

**FINANCIAL IMPLICATIONS:**

As this task is not currently envisioned in the 2024 work plan or financial plan. Should Council give direction on the implementation of the Zero Carbon Step Code, staff time will need to be considered which may result in a review and realignment of 2024 with tasks moved to 2025. Associated budget for consultation and legal review will need to be considered depending on the direction being considered by Council.

**OPTIONS: 1 (Recommended)**

1. That Council adopt the Provincial Zero Carbon Step Code; and  
That Council direct staff to amend "Building Bylaw No.3114 " to include the Zero Carbon Performance Levels in accordance with the timelines established in the CleanBC Road Map for all applicable Part 3 and Part 9 buildings starting with EL2 in 2024 and EL3 in 2027 and EL 4 in 2030;  
and

Direct staff to engage with the development industry and community to inform on the Zero Carbon Step Code and its mandates.

2. THAT Council adopt the Provincial Zero Cabon Step Code; and  
THAT Council direct staff to consult with the development industry and community prior to amending *Building Bylaw No.3114* to:
  - a) require all applicable Part 3 and Part 9 buildings meet the Zero Carbon Performance Level (EL-2) of the Zero Carbon Step Code six months after adoption of the bylaw ammendment, or one step higher than the BC Building Code; and

- b) require all applicable Part 3 and Part 9 buildings meet the Zero Carbon Performance Level (EL-3) of the Zero Carbon Step Code on January 1, 2027, or one step higher than the BC Building Code; and
  - c) require all applicable Part 3 and Part 9 buildings meet the Zero Carbon Performance Level (EL-4) of the Zero Carbon Step Code on January 1, 2030; and
  - d) include funding in the 2024 financial plan for consultants to lead engagement for this task; and
  - e) direct staff to bring forward amendments to the 2024 and 2025 workplan.
3. That Council not proceed with implementation of the ZCSC at this time.

**ATTACHMENTS:**

Building and Safety Standards Branch Information Bulletin

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