

DATE OF MEETING JULY 9, 2018

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**SUBJECT BC ENERGY STEP CODE IMPLEMENTATION STRATEGY**

## OVERVIEW

### **Purpose of Report**

To introduce the BC Energy Step Code Implementation Strategy for the City of Nanaimo.

### **Recommendation**

That Council endorse the implementation strategy for the BC Energy Step Code as outlined within the report title “BC Energy Step Code Implementation Strategy” dated 2018-JUL-09”.

## BACKGROUND

The BC Energy Step Code came into effect 2017-APR-11. This technical regulation is a voluntary compliance path within the BC Building Code (Subsections 9.36.6. and 10.2.3. of Division B). It establishes a set of progressive performance steps for new construction projects to take toward the target of net-zero-energy-ready building by 2032 from the current energy efficiency requirements in the BC Building Code.

Building owners may voluntarily build to the requirements in the BC Energy Step Code. As of 2017-DEC-15, local governments can choose to require or encourage builders to meet one or more steps of the BC Energy Step Code as an alternative to the BC Building Code’s prescriptive requirements. Local governments choosing to establish the BC Energy Step Code in their communities may select from a broad spectrum of policy tools that raise awareness, provide incentives, institute bylaw requirements, remove barriers to energy efficient building, or in some other manner demonstrate leadership in the community. Each community can select the tools most suitable to the community. The following chart outlines step code equivalency for existing single residential dwelling energy standards:

<b>Step</b>	<b>Equivalent Existing Energy Standard</b>
Step One	Section 9.36.6 of the current <i>Building Act</i>
Step Two	EnerGuide 80
Step Three	Energy Star
Step Four	R-2000
Step Five	Net Zero or Passive House

The BC Energy Step Code only applies to new construction of the following building types:

- Residential buildings (Part 9) – province-wide.
- Multi-unit residential and commercial buildings (Part 3) – (e.g. Lower Mainland, southern Vancouver Island and southern Okanagan).

The BC Energy Step Code Council (ESCC), comprised of builders, developers, governments, utilities, and professional associations and chaired by the provincial Building and Safety Standards Branch, developed the step code and is overseeing its implementation. Several publically-available education and research resources have been available to support local governments, including a best practices guide.

The City of Nanaimo is actively participating in an Island-wide building energy efficiency strategy to promote the benefits of building energy efficient homes and creating a stakeholder engagement process around the BC Energy Step Code. In January 2017, the City of Nanaimo and Regional District of Nanaimo (RDN) hosted the initial meeting of what has become an Island-wide energy management working group. Meeting attendees included representatives from BC Hydro, the RDN, the District of Lantzville, the Town of Qualicum Beach, the Municipality of North Cowichan, the Town of Ladysmith, the City of Nanaimo, and a sustainability consultant who volunteered her time. The purpose of the multi-jurisdictional meeting was to brainstorm ways to build awareness on the step code prior to its adoption and build the energy assessment capacity within the region. Over time, the working group has expanded to include staff representing the Capital Regional District, the City of Campbell River, the Cowichan Valley Regional District, and the Comox Valley Regional District.

Over the last year, the RDN has been coordinating a series of educational workshops and providing materials to promote energy efficient buildings as part of the step code (Attachment A). As a member municipality, the City of Nanaimo has supported these efforts and has worked with the RDN in co-sponsoring a number of events and presentations, including the Canadian Home Builders' Association AGM in January 2018 and the Passive House Training Workshop: Building Enclosures for High Performance Buildings on 2018-FEB-23. In addition, the City of Nanaimo, along with the RDN and BC Hydro, continues to support the Real Estate Energy Efficiency Program (REEP), which provides training to the Real Estate community on energy audits and labeling on existing homes.

### **Step Code Implementation Strategy**

As the largest municipality on Vancouver Island north of the Malahat, the City of Nanaimo has the responsibility and opportunity to take a leadership role in the implementation of the step code. The Step Code Implementation Working Group, however, advises local governments should refer to the lower steps and create incentives or voluntary requirements to achieve higher steps. In order to build regional capacity and prepare the industry for eventual step code implementation, the City will continue to focus on facilitation and education with a phased approach leading towards adopting lower steps and incenting higher steps.

The proposed implementation strategy is as follows:

#### 2018

- Inform Council and seek direction to pursue step code implementation strategy.
- Continue working with regional partners to coordinate a regional approach to step code implementation and support industry/public engagement.
- Continue supporting the REEP program and consider expanding the program to include homebuilders for 2019.
- Provide support for regional step code workshops and seminars with the RDN.
- Implement a home energy rebate program. The program will promote energy efficiency within new and existing buildings and support the implementation of the BC Energy Step

Code. The program is to provide homeowners with a \$150 rebate for an initial home energy assessment conducted by a certified energy advisor. Homeowners who achieve Step Two or higher will be offered an additional rebate.

- Amend Schedule D (Amenity Requirements for Additional Density) of the Zoning Bylaw to reward additional amenity points to projects that meet or exceed Step Three.
- Draft a Building Bylaw that requires Step One compliance to become effective one year from adoption.

### 2019

- Support continuing education to support step code implementation.
- Create rezoning policy within the OCP that requires all rezoning applications for multiple-family, mixed-use, or commercial buildings to enter into a restrictive covenant that requires Step Two compliance at the time of building and development permit.
- Implement Step One code compliance. All new construction (Part 9 and 3) will require a home energy assessment conducted by a certified energy advisor (Step One).
- Subject to funding approval, restrict energy rebate incentive to existing homes.
- Continue to work with the realtor community and support the REEP Program.

### 2020

- Subject to funding approval, support continuing education to support step code implementation.
- Subject to funding approval, restrict energy rebate incentive to existing homes.
- Continue to work with the realtor community and support the REEP Program.
- Monitor rezoning policy and report to Council one year after implementation date.

## OPTIONS

1. That Council endorse the implementation strategy for the BC Energy Step Code as outlined within the report title "BC Energy Step Code Implementation Strategy" dated 2018-JUL-09".
  - **Budget Implication:** Council has committed to \$50,000 for 2018 for the Energy Step Code Education and Rebate Program. Additional funding of up to \$41,000 may be requested for future years of the program based on an evaluation of the success of the 2018 program.
  - **Policy Implication:** A 2007 study notes buildings consume 53% of all energy used in the city and emit 28% of greenhouse gas emissions. The Step Code Implementation Strategy will help the City meet its community greenhouse gas reduction targets.
  - **Engagement Implication:** Engagement with the building community has begun with some expectation for a City program to help with step code implementation as the building industry works toward meeting the 2032 Net Zero Energy target for new buildings.
  - **Strategic Priorities Implication:** The program will contribute toward the City meeting the strategic priority of Environmental Responsibility that is defined within the 2016-2019 Strategic Plan Update to include "creating greater efficiencies in how we consume energy and adapting the way in which we live, work, recreate and travel within the new reality of climate change."

2. That Council not endorse the implementation strategy for the BC Energy Step Code.
- **Budget Implication:** Council will save \$50,000 by canceling the Energy Step Code Education and Rebate Program.
  - **Policy Implication:** The City will find it more difficult to meet its community greenhouse gas reduction targets of 39% below 2007 levels by 2050, as identified in the Community Sustainability Action Plan.
  - **Engagement Implication:** With engagement and education programs already underway regionally, not proceeding will slow down the transition toward Net Zero Energy buildings and will make it harder to reach this required target. The BC Energy Step Code Council will not be providing training support to local government and builders beyond 2020.
  - **Strategic Priorities Implication:** Not proceeding with the program will miss an opportunity to help meet the City's strategic priority of Environmental Responsibility, which is in the 2016-2019 Strategic Plan Update.

### **SUMMARY POINTS**

- The BC Energy Step Code came into effect April 2017. It establishes a set of progressive performance steps for new construction projects to take toward the target of net-zero-energy-ready building by 2032 from the current energy efficiency requirements in the BC Building Code.
- As the largest municipality on Vancouver Island north of the Malahat, the City of Nanaimo has the responsibility and opportunity to take a leadership role in the implementation of the step code.
- In order to build regional capacity and prepare the industry for eventual step code implementation, the City will continue to focus on facilitation and education with a phased approach leading towards adopting lower steps and incenting higher steps.

### **ATTACHMENT**

ATTACHMENT A: BC Energy Step Code Stakeholders Event Schedule in the Regional District of Nanaimo

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