

Report to Council



Date: August 27, 2018
File: 0920-02
To: City Manager
From: Ashley Lubyk, Community Energy Specialist
Subject: Energy Step Code Implementation

Recommendation:

THAT Council receives, for information, the Report from the Community Energy Specialist dated August 27, 2018 with respect to Energy Step Code Implementation;

AND THAT Council directs staff that all new Part 9 residential buildings must comply to the following BC Energy Step Code in order to satisfy the energy efficiency requirements of the British Columbia Building Code:

- i. Effective April 1st, 2019 - Step 1 Energy Step Code requirement
- ii. Effective October 1st, 2020 - Step 3 Energy Step Code requirement

AND THAT Zoning Bylaw Text Amendment Application No. TA18-0007 to amend City of Kelowna Zoning Bylaw No. 8000 as outlined in Appendix B in the Report from the Community Energy Specialist dated August 27, 2018 be considered by Council;

AND THAT the Zoning Text Amending Bylaw be forwarded to Public Hearing for reading consideration;

AND THAT final adoption of the Zoning Text Amending Bylaw be considered subsequent to the approval of the Ministry of Transportation and Infrastructure.

AND THAT Council direct staff to use up to a maximum of \$70,000 annually from the Permit Averaging Reserve Account to provide building permit rebates of \$500 for Step 4 and \$1,000 for Step 5 residential buildings between October 1, 2018 and October 1, 2020 to incent achieving higher steps of the Energy Step Code.

AND FURTHER THAT Council direct staff to consult with key stakeholders on Energy Step Code for Part 3 buildings.

Purpose:

To inform Council on the BC Energy Step Code engagement process and for Council to direct staff to implement the package of requirements and incentives presented in this report.

Background:

The *BC Energy Step Code* is a provincial standard designed to help both local government and industry incrementally move toward a future in which all new construction across the province is “net-zero energy ready” by 2032. The BC Energy Step Code aims to provide consistency across BC by creating a standard set of performance requirements, while offering local governments a simple and effective set of standards to support their energy conservation and greenhouse gas reduction goals.

Stakeholder engagement regarding the Energy Step Code began in September 2017. On March 26th, 2018 City Council directed staff to engage key stakeholders on the proposed Energy Step Code Implementation Strategy. In collaboration with local municipalities from Penticton to Vernon and through consultation with the Urban Development Institute Okanagan Chapter, Canadian Home Builder’s Association Central Okanagan, staff sought to inform and gather feedback from development industry representatives, home builders, architects and designers, engineers, suppliers, energy advisors/modelers and others on three key areas of the implementation strategy:

1. The motivation for and the direction of the Energy Step Code, and the associated requirements;
2. The proposed implementation timelines; and
3. Supports needed for a smooth transition.

Industry Engagement on the Proposed Approach

The engagement process included over 30 touchpoints with affected stakeholders from September, 2017 through August, 2018. This was through a series of meetings, informational offerings (print, email, web), several industry surveys, and targeted training opportunities. A full list of stakeholder touchpoints is available in the Energy Step Code report – see Appendix A.

Key Findings

The engagement process revealed a number of concerns and opportunities regarding Step Code implementation. Some of the key findings include:

- 86% of survey respondents indicated that the proposed timeline is achievable;
- Many viewed training/educational supports as a key to success for a smooth transition;
- Incentives for all levels of the Energy Step Code such as those offered by Fortis (ranging from \$500 to \$8,500 in 2018) are seen as an important tool in helping transition the market;
- Having sufficient Energy Advisor capacity was noted as necessary for meeting the proposed timelines and ensuring they are accredited and that quality assurance checks are in place;
- Some concern for impacts to affordability was noted, especially for the higher ‘Steps’.

These concerns were carefully considered and informed the implementation strategy and recommended timeline for adoption presented in this report. A detailed overview of the industry engagement and the findings is provided in the Energy Step Code Report.

Recommended Approach to the BC Energy Step Code Adoption

The Provincial Government has recently produced three Clean Growth Intentions Papers. In the *Clean, Efficient Buildings Intentions Paper*, the Province has now announced its intention regarding clear, transparent timelines for the implementation of the Energy Step Code. The Energy Step Code will move from being a voluntary standard to being the minimum standard for all of BC. Compared to the current BC Building Code, new homes would have to be:

- 20 per cent more energy efficient by 2022 (equivalent to Step 3 for Part 9 buildings)
- 40 per cent more energy efficient by 2027 (equivalent to Step 4 for Part 9 buildings)

Informed by the engagement process and best practices, staff recommend that Council support the package of recommendations to support a smooth transition into the Energy Step Code and allow Kelowna to be a leader in the Province.

Updated Implementation Timelines

On July 19, 2018 the Province released Proposed Standards Improvements which include changes to increase the energy budget and thus improve fairness for smaller homes such as carriage homes. With these changes, there is no longer a need to provide carriage homes a longer timeline to implement the Energy Step Code requirements (as suggested in the Council report dated March 26th, 2018).

Therefore, staff recommend that Council directs staff that all new Part 9 residential building must comply to the BC Energy Step Code following the updated timelines proposed in Table 2 below:

Table 2: Updated Energy Step Code Adoption Timelines

Pt 9 Building Type	April 1, 2019	October 1, 2020
Part 9 Residential Buildings: SFD/2/3/4-plex, Carriage house and Townhouse / Low-rise	Step 1	Step 3

The recommended timeline seeks a balance between local and Provincial GHG reduction goals, allows Kelowna to be a leader, and provides industry adequate time to build the capacity necessary to achieve the Step Code targets prior to being required Provincially.

Incentives

While the Lower Steps (Steps 1 to 3) of the Step Code depend on design and construction techniques commonly used to meet the current base BC Building Code, it is acknowledged that achieving the Upper Steps (4 & 5, including Passive House) may require innovative materials and building practices. One of the recommendations from the *Best Practices Guide for Local Governments*¹ is to provide incentives to help encourage builders to build to the Upper Steps, thus helping to accelerate the market shift toward a higher standard of building. Upper Step projects help build local capacity in areas relating to design, specialized trades, consulting, and the supply and installation of new/innovative products. Following this recommendation, several incentives are being proposed, including a setback relaxation (by way of a zoning bylaw amendment – see Appendix B) and building permit rebates.

¹BC Energy Step Code: A Best Practices Guide for Local Governments (August 28, 2017). A publication of the Energy Step Code Council and the Building and Safety Standards Branch.

i) **Set Back Relaxation**

Building to Step 5 (or to a Passive House standard) requires thicker walls to achieve the associated performance targets. This has a direct impact to the buildable floor area of a house, thereby creating a barrier to building to this uppermost 'Step'. Staff recommend a Zoning Bylaw amendment that would ensure incremental additions of insulation do not inadvertently impact the size of home built, particularly on urban lots. The details of this are provided in Appendix B.

ii) **Building Permit Rebates**

In addition to the New Home Incentive rebates being offered by FortisBC (details of this are provided in the Energy Step Code report), staff are recommending the following building permit rebates:

- a. \$500 for Step 4 compliant projects;
- b. \$1,000 for Step 5 compliant projects.

Staff will use up to a maximum of \$70,000 annually from the Permit Average Reserve Account. Building permit incentives would be in effect between October 1st, 2018 and October 1st, 2020. Staff will monitor uptake in the first twelve months and if uptake is lower than expected (in estimated 5% of permits), staff will revisit the incentive levels and return to Council with a recommendation. Similarly, if uptake is greater than what is budgeted, incentive levels will be revised and brought to Council for consideration.

Consultation for Part 3 Buildings

The Province recently released Proposed Standards Improvements which include introducing Energy Step Code metrics to Part 3 buildings in all regions of the province. Up until this proposed change, implementation of the Energy Step Code requirements for Part 3 buildings were only available in BC's southwest region. Communities elsewhere were not able to incentivize or require higher performance in Part 3 buildings. If adopted, the Proposed Standard Improvements will take effect in December 2018 and therefore it is recommended that staff begin industry consultation for Part 3 buildings.

Regional Coordination

City staff have been working with neighbouring Okanagan municipalities (City of Penticton, District of Summerland, District of Peachland, City of West Kelowna, District of Lake Country, and City of Vernon) to develop a regional approach to Step Code implementation in order to create consistency across the region. Though each municipality is at a slightly different stage in its engagement process, and each will develop its own implementation strategy and set its own timelines for enforcement, most have indicated they are considering a similar approach to Step Code adoption as is being recommended in the City of Kelowna.

Next Steps

Staff will continue to help facilitate educational opportunities to support a smooth transition to Energy Step Code adoption ahead of the April 1, 2019 implementation date. Furthermore, the City will begin consultation on Energy Step Code for Part 3 buildings for referencing in local policies and regulations.

Conclusions

The adoption timeline seeks a balance between local and Provincial GHG reduction goals, the protection of local housing affordability, and provides industry the necessary time to build capacity necessary to achieve the Step Code targets. Based on the referenced research and the feedback

gathered during the engagement process, staff are seeking Council's support of the package of recommendations presented in this report.

Internal Circulation:

Divisional Director, Community Planning and Strategic Investments
Development Services Director
Sustainability Coordinators
Energy Program Manager
Communications Advisor
Community Planning Supervisor
Legislative Coordinator

Legal/Statutory Authority:

To support energy conservation and greenhouse gas reduction objectives, Section 5 of the *Building Act* ("Unrestricted Matters") authorizes local governments in BC (except the City of Vancouver) to reference the *BC Energy Step Code* in their policies and bylaws, and may begin enforcing requirements as of December 15, 2017, subject to notification timelines.²

Existing Policy:

The City of Kelowna has established a number of climate action goals and programs that are delivering on Council's commitment to low-carbon energy, including:

- OCP Objective 5.16. "Improve the energy efficiency and environmental performance of new buildings."
- OCP Objective 6.2. "Improve energy efficiency and reduce community greenhouse gas emissions."
- OCP Objective 6.2.1 The City of Kelowna will, in partnership with: senior governments; local residents and businesses; NGOs; external agencies; and utility providers, work towards reducing community greenhouse gas emissions by 33% (from 2007 levels) by 2020. (Please note that the City recently updated this target as part of the Community Climate Action Plan update, which was endorsed by Council in June 2018).
- *Our Kelowna as We Take Action: Kelowna's Community Climate Action Plan (2018-2023):*
 - Action # B5 Update Kelowna's Building Bylaw to reference the Energy Step Code as a city-wide requirement for Part 9 buildings with an adoption timeline of Step 1 by April 2019, graduating to Step 3 by October 2020 (carriage houses would require Step 2 compliance at this time).
 - Action # B6 Relax the setback requirements in Kelowna's Zoning Bylaw to ensure thicker walls to accommodate more insulation (common to buildings constructed to Steps 4 and 5 of the Energy Step Code).
 - Action # B7 Create a building permit fee rebate program for part 9 buildings to incentivize projects achieving Steps 4 and 5 of the Energy Step Code.

² Local governments are required to give a minimum of 6 months between the time they notify the Building and Safety Standards Branch of their intent to consult and the referencing of Lower Steps in municipal policies or bylaws. The City of Kelowna submitted their Notice of Consultation on the BC Energy Step Code to the Building and Safety Standards Branch on January 22, 2018.

- *Healthy Housing Strategy*
 - Recommended action: Implement the Energy Step Code for New Housing: Develop an Energy Step Code Implementation Plan to increase energy efficiency and reduce utility costs in new builds to reduce household carrying costs.

External Agency/Public Comments:

Consultation response letters were received by BC Housing, FortisBC, Encircle and CHBA Central Okanagan. These letters and the response letter are included in Appendix C.

Financial/Budgetary Considerations:

Training and education will be offered through a combined funding model, with support from sponsors such as FortisBC, and with the balance of programming costs covered through a fee-for-service model in partnership with organizations such as the Community Energy Association.

Submitted by:

Ashley Lubyk, Community Energy Specialist

Approved for inclusion:



Danielle Noble-Brandt, Department Manager of Policy & Planning

Attachments:

Appendix A: Step Code Report

Appendix B: Zoning Bylaw Text Amendment Application No. TA18-0007

Appendix C: Consultation Response Letters

cc:

Divisional Director, Community Planning and Strategic Investments

Development Services Director

Sustainability Coordinators

Building & Permitting Manager

Energy Program Manager

Community Planning Supervisor

Legislative Coordinator