



Energy Step Code Implementation

August 27, 2018

Implementation Strategy Engagement

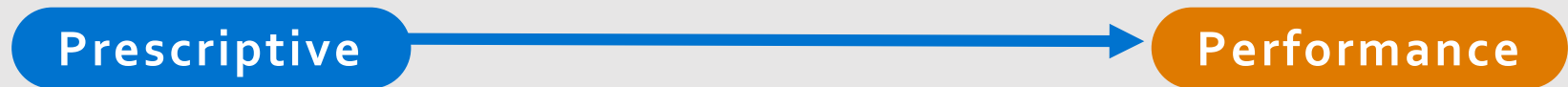
1. Inform pertinent **stakeholders**;
2. Gather feedback on the **proposed policy timeline**;

Pt 9 Residential Building Type	Apr 1, 2019	Oct 1, 2020	2022
SFD/2/3/4-plex	Step 1	Step 3	-
Carriage house	Step 1	Step 2	Step 3
Townhouse/Low-Rise Apartment	Step 1	Step 3	-

3. Gather feedback on the **tools and resources needed**.

BC Energy Step Code Recap

The ESC is a **transition policy** that provides an **incremental** and **consistent** approach to achieving more energy efficient buildings that go beyond the requirements of the **current BC Building Code**.

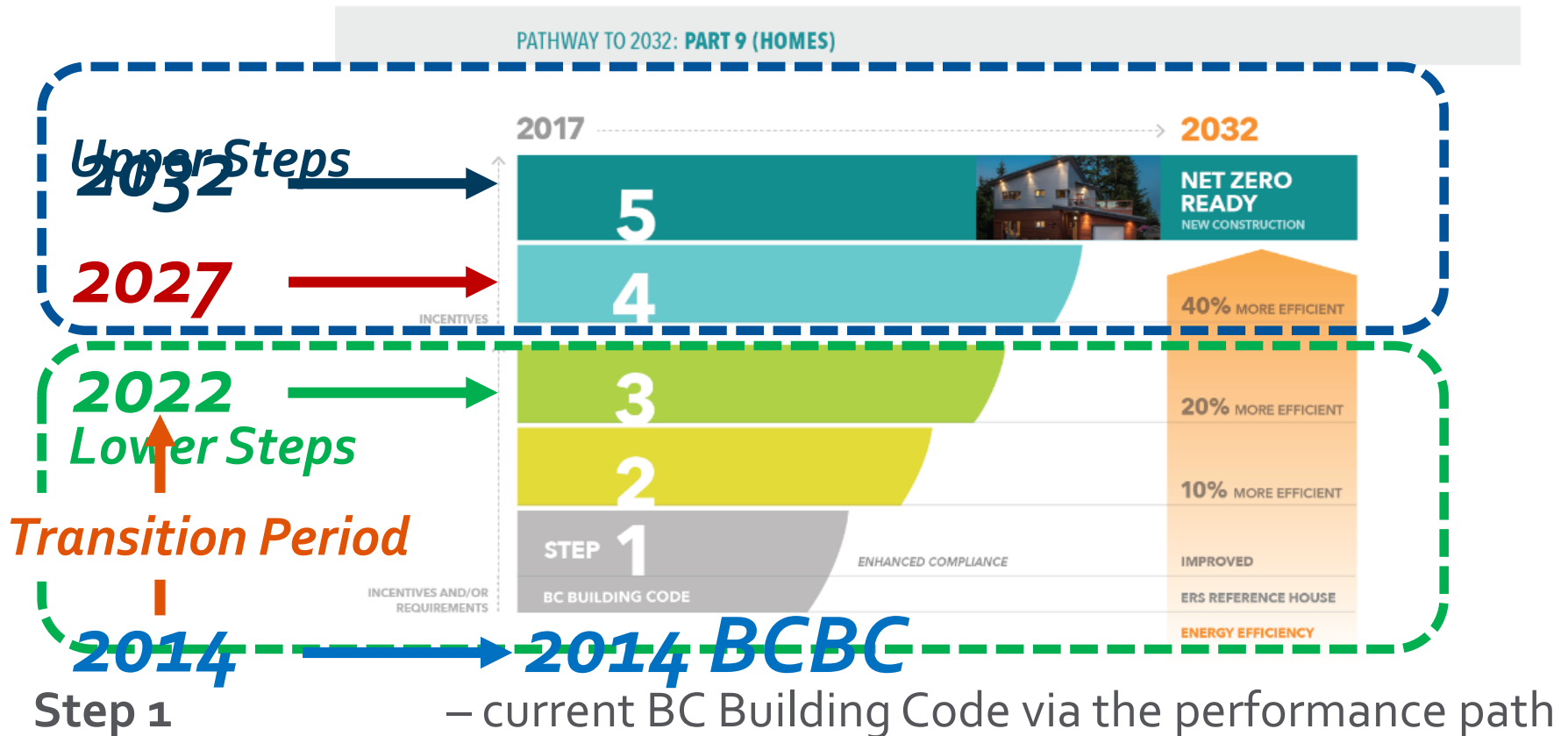


Energy Modeling



On-Site Testing

Focus to 2020: Part 9 Residential Buildings, Lower Steps



Step 1

– current BC Building Code via the performance path

Lower Steps (2/3) – use conventional materials and techniques

Upper Steps (4/5) – may require innovative materials and practices

Engagement Approach

- ▶ **Over 30 touchpoints** with affected parties from September 2017 to August 2018:
 - ▶ Meetings, informational offerings (print, email, web), several industry surveys, targeted training
 - ▶ In collaboration with local municipalities from Vernon to Penticton, and in conjunction with local chapters of UDI and CHBA.

Regional Industry Survey

- ▶ Open from Apr 12 to May 23, 2018;
- ▶ 53 responses;
- ▶ **86%** indicated that the proposed timeline is achievable;
 - ▶ Many viewed **training/education** a **key** to a smooth transition;
 - ▶ **Incentives** seen as an important tool to support the transition;
 - ▶ Having **sufficient Energy Advisor capacity** noted as crucial for the timelines to work;
 - ▶ Some concern for **affordability**, especially for the **higher 'Steps'**.

Step Code Industry Workshop

The **Energy Step Code Workshop** was an opportunity for industry professionals to learn about building to the BC Energy Step Code, with a special emphasis on improving **thermal performance, airtightness and moisture management**, and provided information on forthcoming **regulatory changes**, available **incentives**, and the process of **working with an Energy Advisor**.



May 31, 2018
Kelowna, BC
106 Participants

Presenters:

Peter Robinson: Community Energy Association

Marika Luczi: Canadian Home Builders Association - Central Okanagan

Ashley Lubyk: City of Kelowna

Hayley Newmarch: FortisBC

Hamid Heidarali: Hamid Design Build

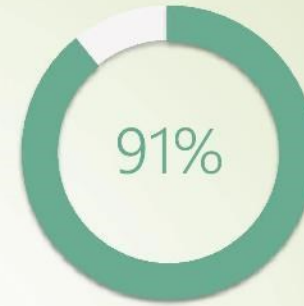
Gilles Lesage: Total Home Solutions



of survey respondents rated the workshop as:

"Very" or "Extremely" Helpful

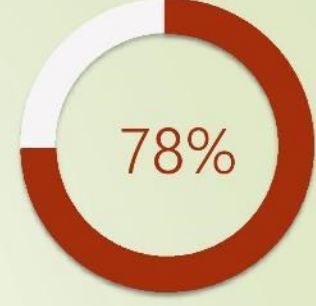
in improving their understanding of improved thermal performance, air tightness and moisture management in buildings.



of survey respondents rated the workshop as:

"Very" or "Extremely" Helpful

in improving their understanding of achieving Energy Step Code compliance.



of survey respondents rated the workshop as:

"Very" or "Extremely" Helpful

in improving their understanding of what it is like to work with an energy advisor.



Addressing Step Code Concerns

Concern	Response
Insufficient Energy Advisor Capacity	<ul style="list-style-type: none">Increased capacity is contingent on governments enacting robust regulations to backstop investment in training or additional staff
Impacts affordability	<ul style="list-style-type: none">Costing studies demonstrate a modest (less than 1% cost premium for the Lower Steps)Optimization through performance pathway can reduce costsOperational costs are reduced
Will slow down building permit processing times	<ul style="list-style-type: none">The energy modelling is a relatively quick and simple process done during the design phase and will be completed before a building permit is applied for
Lack of industry skills	<ul style="list-style-type: none">The design and construction techniques necessary for Step 1 are unchanged from the requirements from base BCBCCHBA, BC Housing, NRCan, among others, have already begun offering training related to the Step Code

Recommendations – A Combined Approach

Regulation

- ▶ Enact the implementation timeline
 - ▶ Modest revision to reflect adjustments made by the Province

Pt 9 Residential Building Type	Apr 1, 2019	Oct 1, 2020	2022
SFD/2/3/4-plex	Step 1	Step 3	-
Carriage house	Step 1	Step 2	Step 3
Townhouse/Low-Rise Apartment	Step 1	Step 3	-

Original Proposal

Pt 9 Residential Building Type	Apr 1, 2019	Oct 1, 2020
SFD/2/3/4-plex, Carriage house and Townhouse / Low-rise apartments	Step 1	Step 3

Recommendation

Recommendations – Incentives

Incentives

- ▶ Amend the Zoning Bylaw to relax **side yard, rear yard, front yard, and/or flanking street** set backs by up to **0.25m**
 - ▶ Removes barrier associated with thicker walls
- ▶ Offer building permit rebates to incentivize 'Upper Steps'
 - ▶ \$500 for Step 4
 - ▶ \$1000 for Step 5

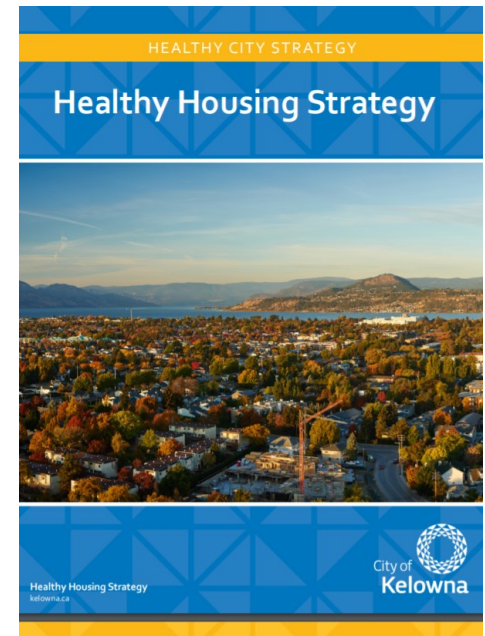
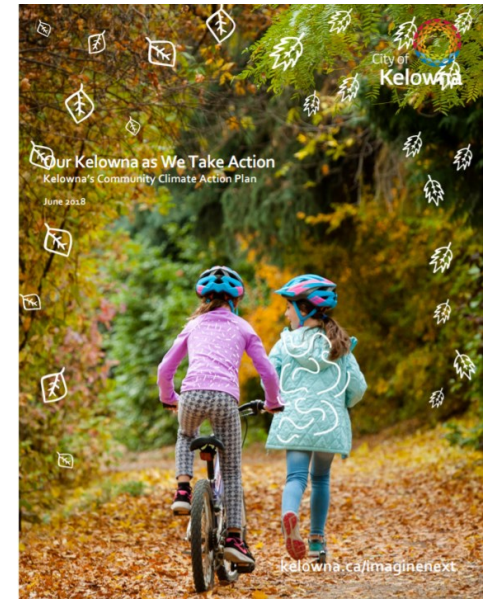
Delivering on our Plans

► Kelowna's Community Climate Action Plan

- City-wide requirement for Step Code by April 2019 (Action #B5)
- Relax setback requirements in Zoning bylaw (Action #B6)
- Create a building permit rebate program to incentivize Upper Steps (Action #B7)

► Kelowna's Healthy Housing Strategy

- Implement Step Code to increase energy efficiency and reduce household carrying costs.



Next Steps

- ▶ Facilitate additional training and education
- ▶ Consult on implementing ESC for Part 3 buildings once available (expected Dec 2018)
- ▶ Continue working with Regional partners
- ▶ Develop Community Retrofit Strategy

Impact through Leadership



Voluntary
Uptake



Incentive
Uptake



Combined
Approach –
Regulation &
Incentives



Questions?

For more information, visit kelowna.ca.