



BUILDER & DESIGNER BREAKFAST

Anvil Centre | November 17th, 2016

Supported by





NEW WESTMINSTER

YOU'RE INVITED

Fall 2016 Builder & Designer Breakfast Event

ANVIL CENTRE | THURSDAY, NOVEMBER 17TH, 2016 | 7:30AM TO 9:30AM

LIMITED SEATS AVAILABLE!

RSVP to: rcoleman@newwestcity.ca or 604.515.3818

AGENDA

1. **Energy Save New West – Program and Policy Update**
2. **ENERGY STAR® for New Homes**
3. **502 Richmond Street – Case Study**
4. **RateOurHome.ca**
5. **Wrap-up and adjourn**



STRATEGIC OBJECTIVES

- Design and construct buildings that perform better
- Engage developers, homebuilders, design professionals on energy efficiency and GHG reduction
- Enhance BC Building Code compliance through use of verification forms and City-supported programs like Energy Save New West
- Encourage home energy labelling (EnerGuide, Energy Star®, Certified Passive House)



PROGRAM UPDATE

Since our last Builder & Designer Breakfast ...

High Performance New Home Program

- City sponsored a full-day *Introduction to Passive House* course at the Anvil Centre on Friday July 17, 2016.
- Sold out event with 35 attendees.
- Workshop provided practical knowledge about how to design and construct a Certified Passive House building.




PASSIVE HOUSE WORKSHOP
Friday, June 17th, 2016
8:00 AM to 4:00 PM

The City of New Westminster is pleased to offer local builders and designers an opportunity to participate in a private one-day Passive House introductory course from the Canadian Passive House Institute West (CanPHI West).

The CanPHI workshop will cover the following topics:

- Passive house design fundamentals
- Super insulated envelopes
- Methods for achieving extreme air tightness
- Passive house quality windows
- Leading ventilation design principles
- Passive house economics and costs
- Local Passive House case studies



The price of this private course offering is \$52.50 which includes GST (a \$250.00 savings). All attendees will be provided a small breakfast, a full lunch and refreshments throughout the day. Builders and designers/architects will also be eligible for professional development credits through HPO and AIBC.





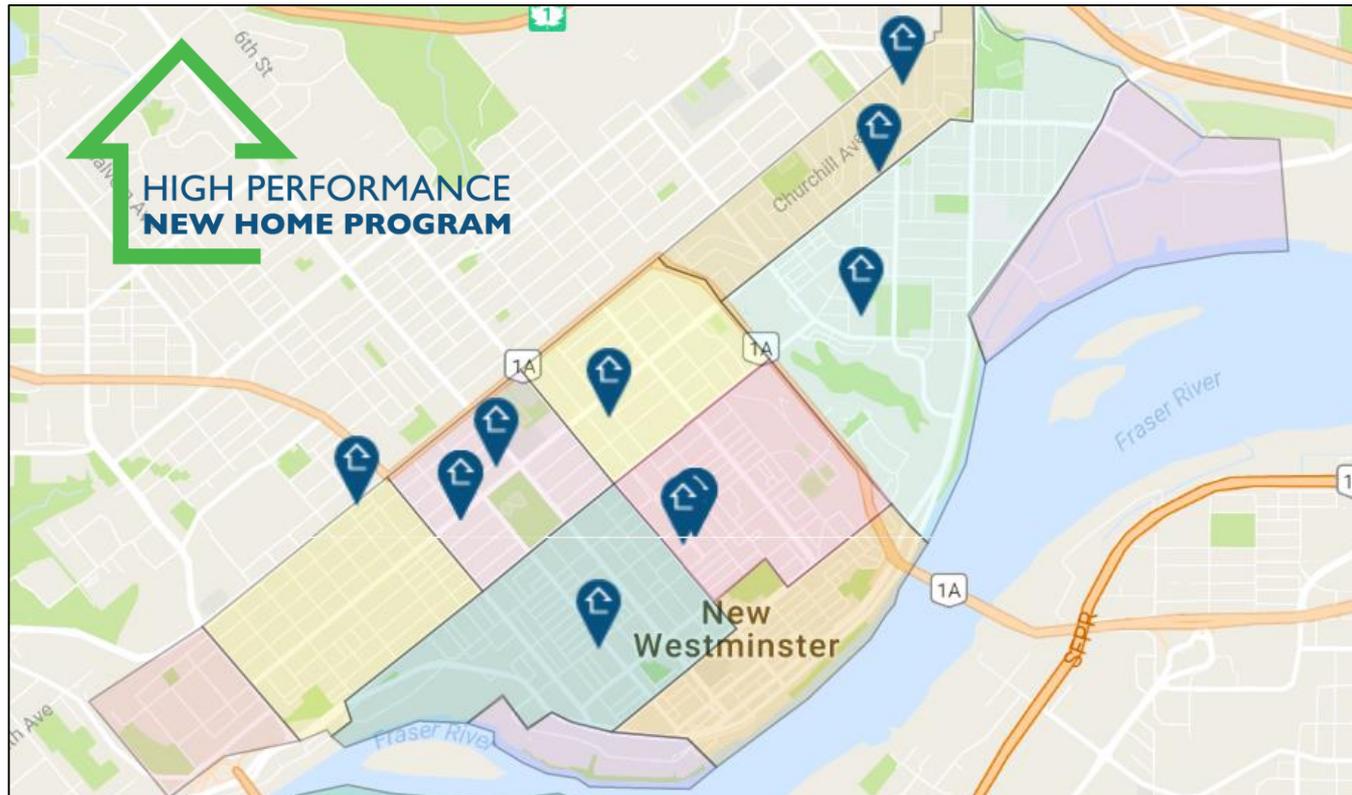
This course has limited seating on a first come, first served basis. To confirm your seat, you'll need to complete and return this registration form along with payment by Friday, May 20th.

FULL NAME:	<input type="text"/>
CONTACT NUMBER:	<input type="text"/>
ORGANIZATION:	<input type="text"/>
	Please indicate: <input type="checkbox"/> Builder <input type="checkbox"/> Designer / Architect
DIETARY REQUIREMENTS:	Please indicate: <input type="checkbox"/> Vegetarian <input type="checkbox"/> Gluten Free
	<input type="checkbox"/> Other (please specify):

NEW HOME PROGRAM

Actively supporting improved energy performance in a growing number of Part 9 construction projects in New Westminster.

www.energysavenewwest.ca



NEW HOME PROGRAM

Our New Home Program provides **FREE program services and solutions (equivalent to \$800+ per project)** to maximize energy performance, enhance occupant comfort and improve the quality of new residential projects.



- **EnerGuide Rating System** – Energy modeling, plan evaluation report with upgrade options and home energy labelling.
- **Blower-Door Testing** - Diagnostic testing at mid-stage construction to improve air tightness of home.
- **Energy Coaching** – Technical guidance on upgrade options and house-as-a-system support.

POLICY – ENERGY STEP CODE



ARCHITECTURAL
INSTITUTE OF
BRITISH COLUMBIA



NGOs

Utilities

Local Governments

Province

Developers & Builders

Professionals & Trades



First Priority – Quality Building Envelope



2nd priority ...

Install efficient, right-sized mechanicals

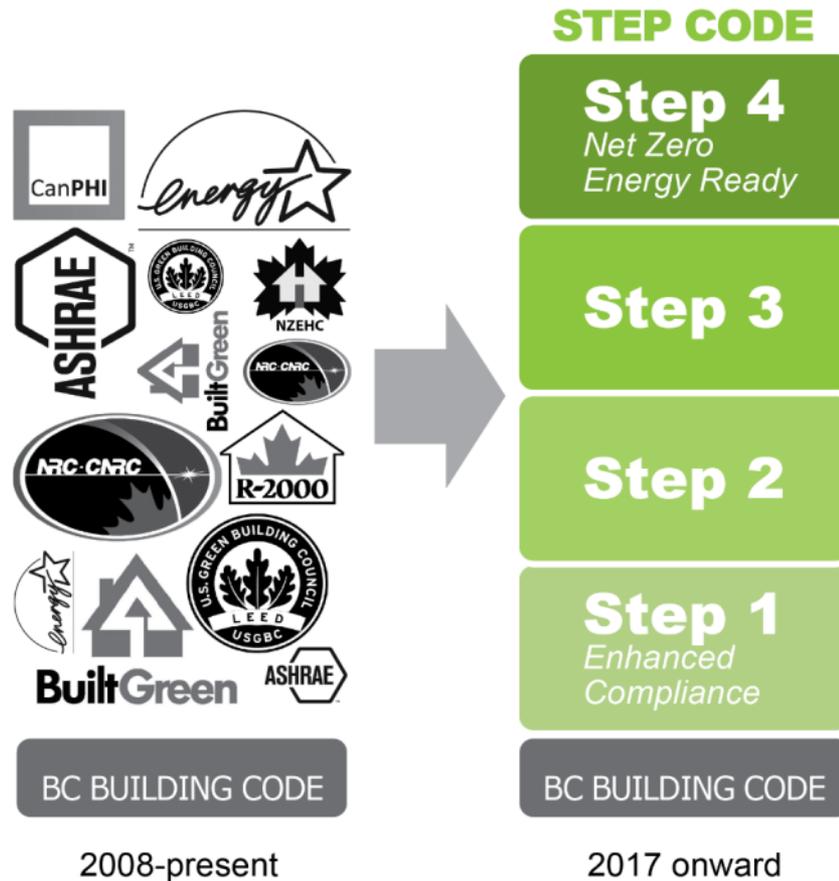


Many energy efficiency standards ...



2008-present

Simplifying the standards



Note: There are 4 steps for Part 3 buildings (big buildings), and 5 steps for Part 9 (small buildings)

Step 1 – Enhanced Compliance

STEP CODE

Step 4

Net Zero
Energy Ready

Step 3

Step 2

Step 1

Enhanced
Compliance

BC BUILDING CODE

2017 onward



Steps 2, 3, – better performance

STEP CODE

Step 4

*Net Zero
Energy Ready*

Step 3

Step 2

Step 1

*Enhanced
Compliance*

BC BUILDING CODE

2017 onward



Step 4 – Net Zero Energy Ready Buildings

STEP CODE

Step 4

*Net Zero
Energy Ready*

Step 3

Step 2

Step 1

*Enhanced
Compliance*

BC BUILDING CODE

2017 onward



THE 288 SKEENA RENTAL MURB IN VANCOUVER. COURTESY CORNERSTONE ARCHITECTURE.



Step 4 – Net Zero Energy Ready Buildings

STEP CODE

Step 4
*Net Zero
Energy Ready*

Step 3

Step 2

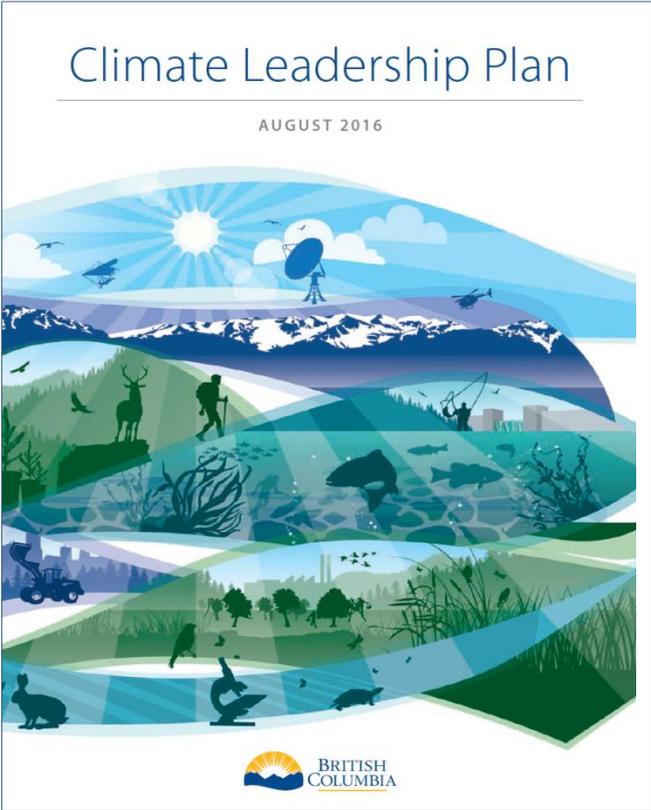
Step 1
*Enhanced
Compliance*

BC BUILDING CODE

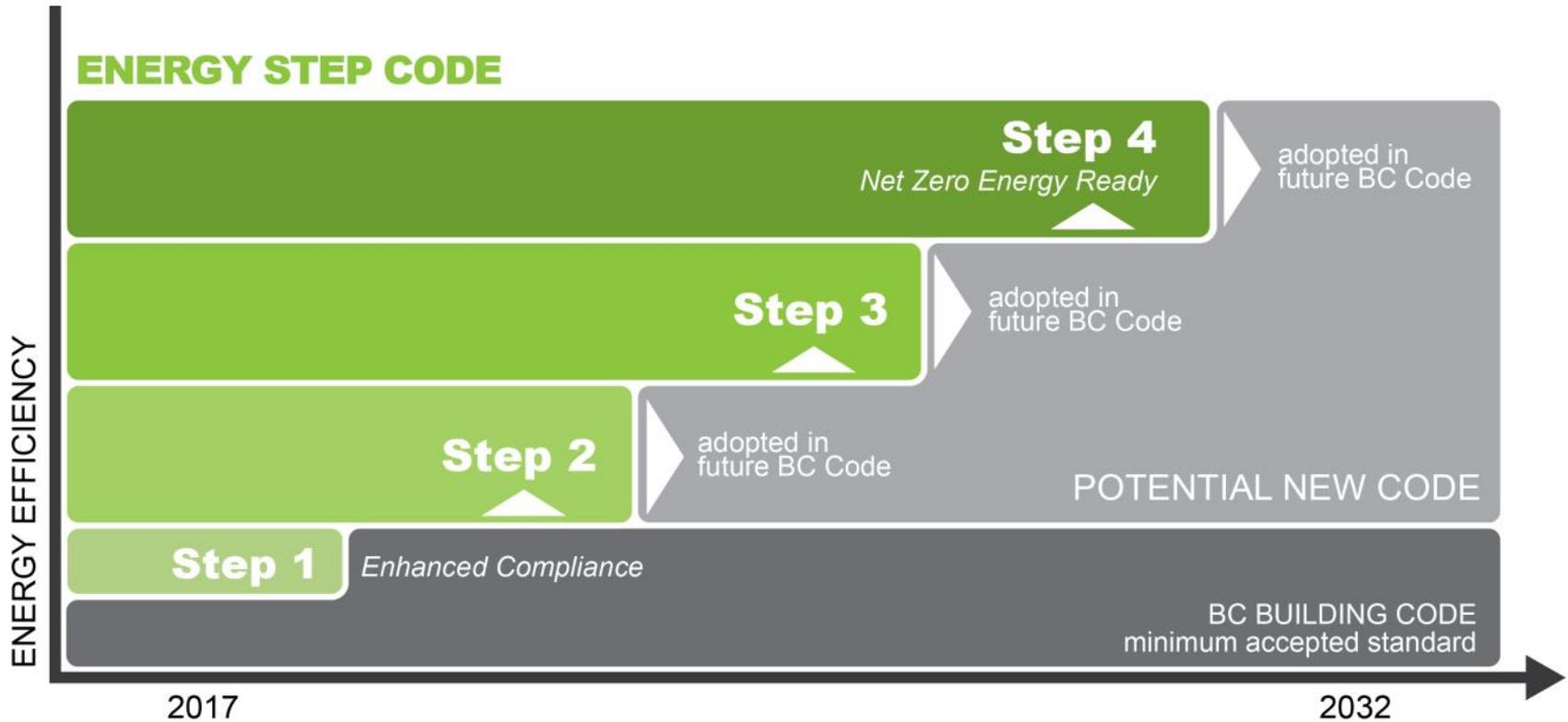
2017 onward



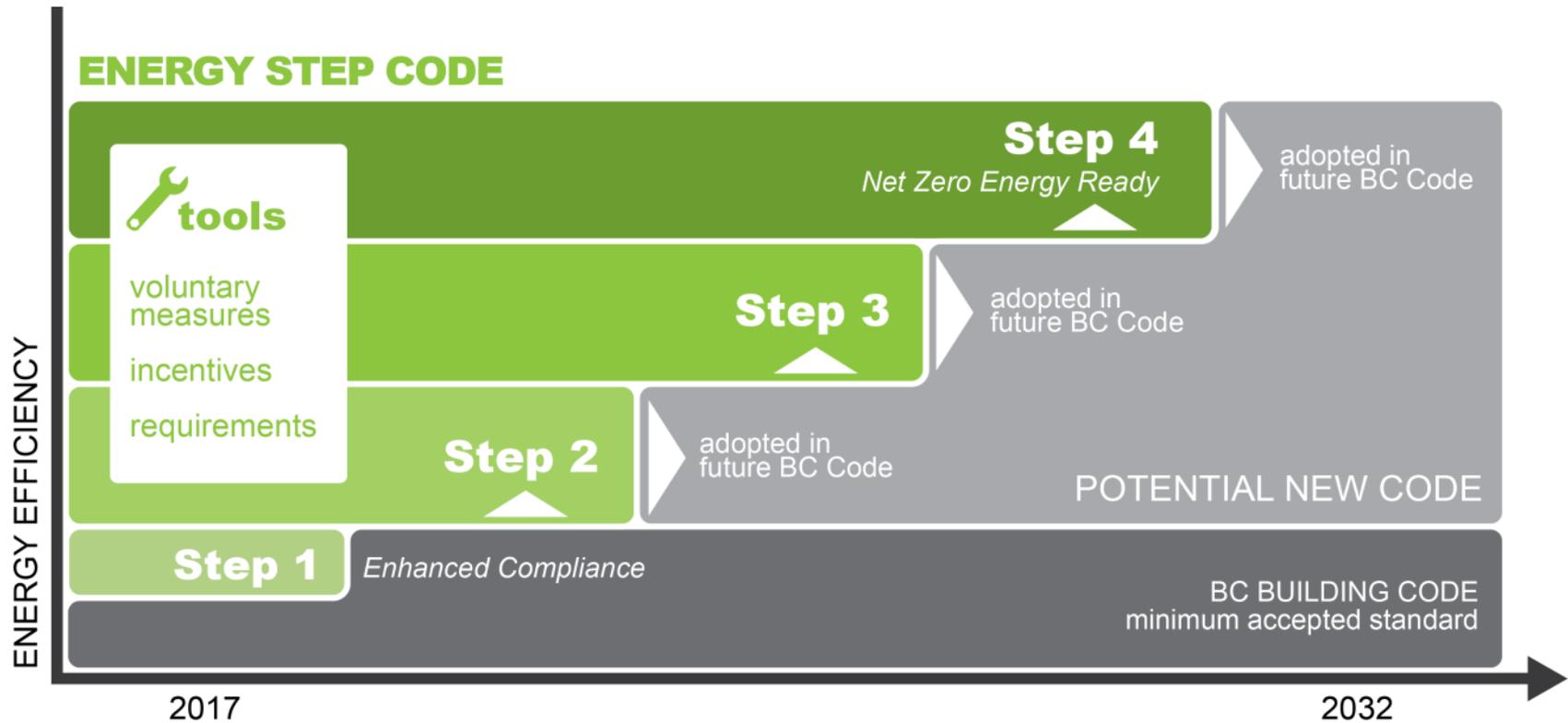
BC Building Code
requirement
2032



Creates a high performance staircase ... to 2032



Stepping on ... through market demand, incentives, requirements



Next Step

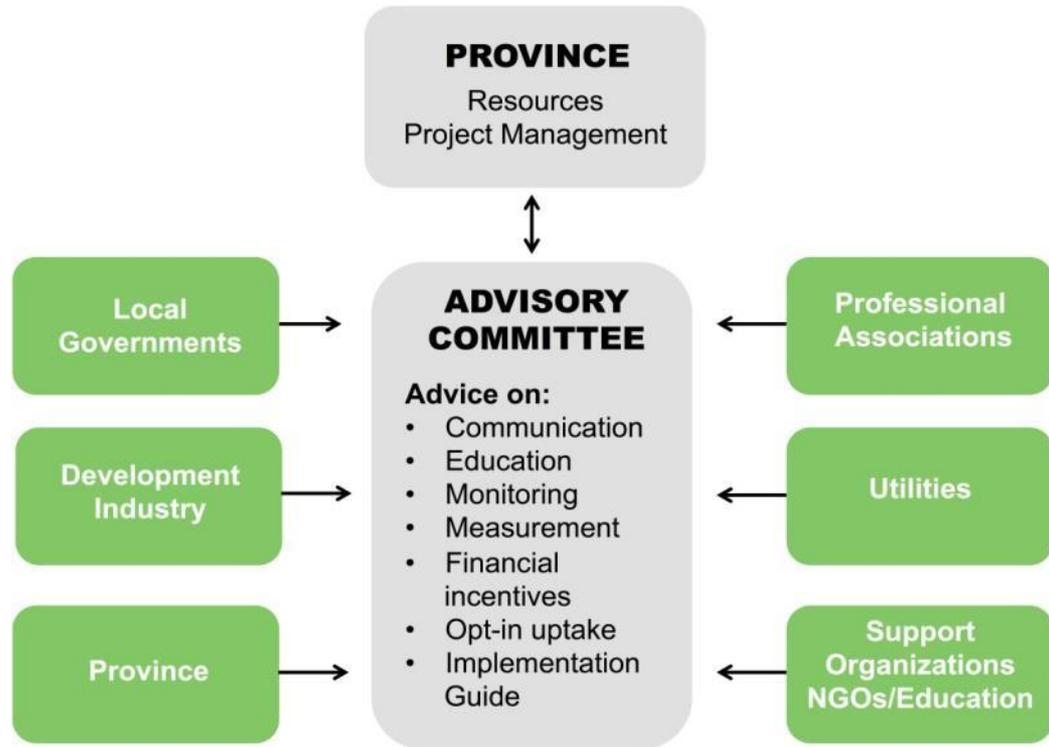
Stretch Code Implementation Working Group

Energy Step Code Implementation Recommendations

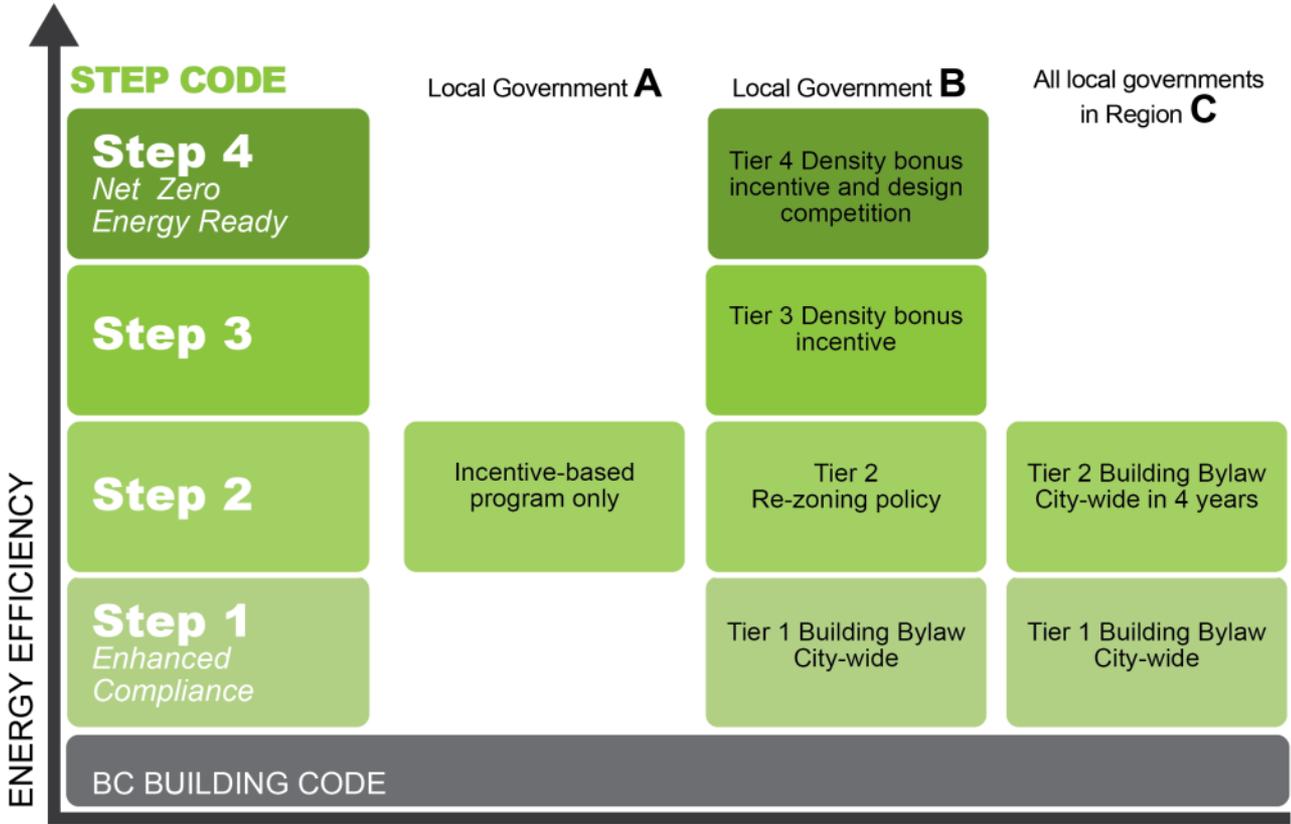
Final Report

August, 2016

Prepared by Pinna for
Building and Safety Standards Branch
Office of Housing and Construction Standards



2017 Local Governments Opt-in to use the Step Code



STRATEGIC QUESTION

What can the City do to positively influence the environment for ultra-low energy homes?

Planning policy alignment

Zoning bylaw changes / 'green' amendments

Performance-based FSR / thicker wall exemptions

Site density increases or density transfer

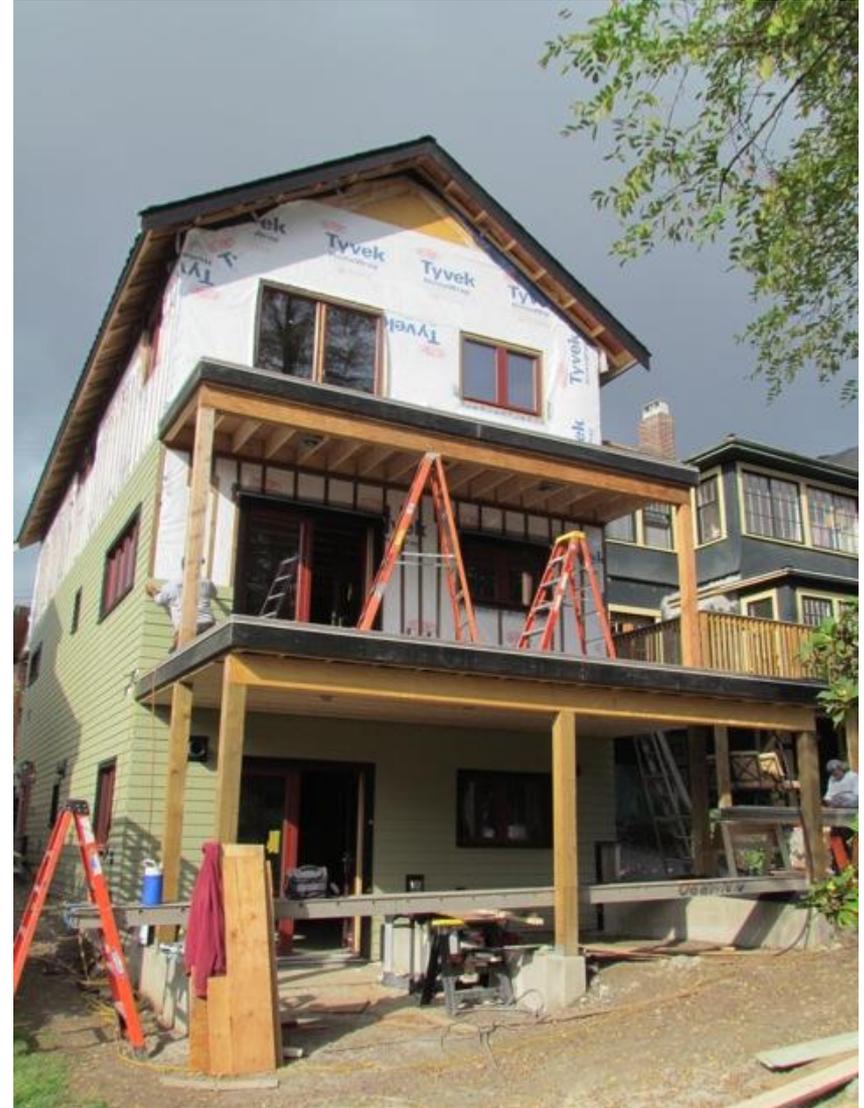
Development review / permitting process

Pilot programs

Other ideas?

PASSIVE DESIGN EXCLUSIONS

- City staff working on a policy recommendation for Council to support a **floor space exclusion** that would accommodate **improved building performance (envelope and thermal insulation)**.
- A review is underway of existing New Westminster zoning bylaw requirements for RS-1 and NR-1 (one and two-family zones).



PASSIVE DESIGN EXCLUSIONS



Initial direction is heading towards policy design similar to the **City of Vancouver's existing Passive Design Exclusions** but customized to align with both the Passive House standard and the proposed BC Step Code.

Under consideration

- Floor area (FSR) exclusions for thicker insulated walls
- Set-back and side-yard relaxations to accommodate extra floor area or passive shading devices
- Height exemptions for more attic insulation
- The removal of floor space exclusions for bay-windows



PASSIVE DESIGN EXCLUSIONS

PROJECT STEPS

1. Kick off meeting with City Staff (October 31)
2. Develop and recommend technical requirements for Passive Design Floor Space Exclusion
3. Review Current Floor Space Exclusions
4. Review technical requirements of Step Code and propose floor space exclusions
5. Hold technical workshop with planning staff on proposed exclusions
6. Draft recommendation to Council (January 2017)



**BUILD
AN EVEN BETTER
HOME**

**ENERGY STAR® FOR NEW HOMES
BUILDER WORKSHOP**

Workshops in:
**Victoria, Surrey, Fernie, Invermere, Cranbrook, Prince George,
Kamloops, Chilliwack**

 www.communityenergy.bc.ca  

- **Community Energy Association** is hosting workshops across BC designed to support knowledge building and training on energy efficiency in new homes
- Primarily aimed at **homebuilders and building officials**, key topics to be explored at the workshop include Section 9.36 of the BC Building Code, EnerGuide, ENERGY STAR® for New Homes and utility support.
- The next workshop is scheduled for **Friday, December 1st** at Surrey Sport & Leisure Centre. Early bird price is \$158.00 for full day course.

THANK YOU

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