ENERGY STEPCODE BUILDING BEYOND THE STANDARD





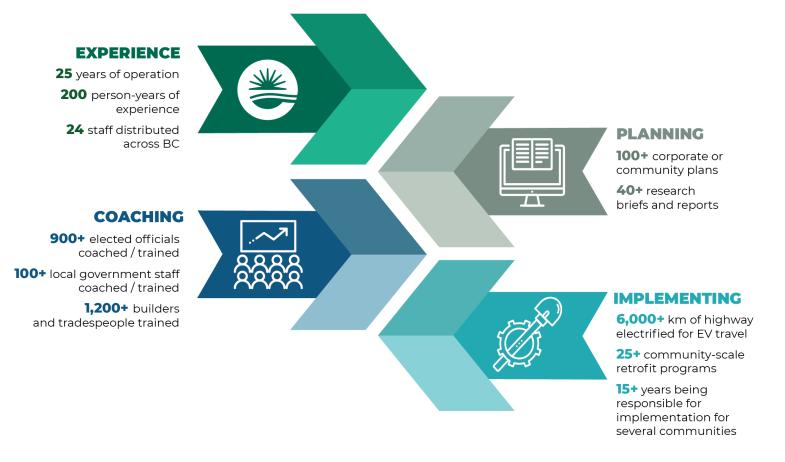
CRD Step Code Acceleration: Part 3 Buildings March 2, 2022

Maya Chorobik, CEA





CEA is the only non-profit in BC focused exclusively on supporting local governments and Indigenous communities on **CLIMATE** and **ENERGY** activities.



Energy Step Code Council

Industry





ARCHITECTURAL INSTITUTE OF **BRITISH COLUMBIA**



Building Owners and Managers Association of British Columbia



The Voice of the Residential Construction Industry in BC



Government



Homeowner Protection Office Branch of BC Housing

CITY





Utilities



Academia & NGO



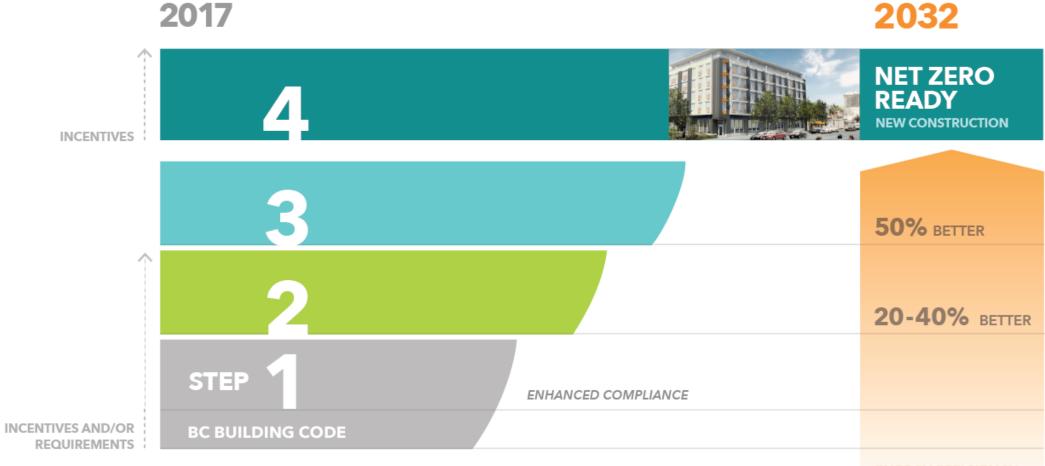


THE UNIVERSITY **OF BRITISH COLUMBIA**



The Steps: Part 3 Wood Buildings

PATHWAY TO 2032: PART 3 (WOOD-FRAME RESIDENTIAL)



ENERGY EFFICIENCY

The Steps: Part 3 Concrete Buildings

PATHWAY TO 2032: PART 3 (CONCRETE RESIDENTIAL)



2032



Roadmap to Net-Zero Energy-Ready Buildings

Timeline for Energy Efficiency Regulatory Requirements in the BC Building Code Here's what the province's CleanBC plan will mean for new-construction requirements. **NET-ZERO ENERGY-READY** UP TO: 80% 2032 **STEP 5** STEP 4 40% 2027* STEP 4 STEP 3 2022* **STEP 3 STEP 2 Energy-efficiency improvement** PART 9 PART 3 ***NEW TARGET** above 2018 BC Building Code BUILDINGS DEADLINES **BUILDINGS** requirements

ENERGY STEPCODE BUILDING BEYOND THE STANDARD



What does the Energy Step Code Measure

'Energy Efficiency' in the Energy Step Code:

- ✓ Envelope Efficiency
- ✓ Equipment Efficiency
- ✓ Performance based

Step Code is Fuel Neutral – No GHG Metrics

GREENHOUSE GAS EMISSIONS BY HEATING TYPE



Source:

Metro Vancouver Climate 2050 Roadmap: Buildings (Oct 2021)

Roadmap to 2030



Roadmap to 2030



- Already working with LGs to develop voluntary carbon pollution standards
- Zero Carbon new construction by 2030
- Highest efficiency standards for new space and water heating equipment

Current State of Step Code Implementation

- 53 LGs reference Step Code in their Building Bylaw
 - 53 LGs have Part 9 requirements
 - 42 LGs have Part 3 requirements
- 6 LGs reference upper steps
- 8 LGs have relaxations for low carbon energy systems (LCES)

Step Code in the CRD

| Local Government | Part 3 |
|------------------|---|
| Central Saanich | Step 3 for low rise wood residential Step 2 for other residential and most commercial Step 1 for others |
| Colwood | Step 3 for <7 story wood residential Step 2 for other residential and most commercial |
| North Saanich | Step 3 |
| Oak Bay | Step 2 |
| Saanich | Step 3 for <7 story wood residential Step 2 for other residential and most commercial |
| Sooke | Step 3 for low rise wood residential Step 2 for other residential and most commercial |
| Victoria | Step 3 for <7 story wood residential Step 2 for other residential and most commercial |

Leading Local/Regional Governments:

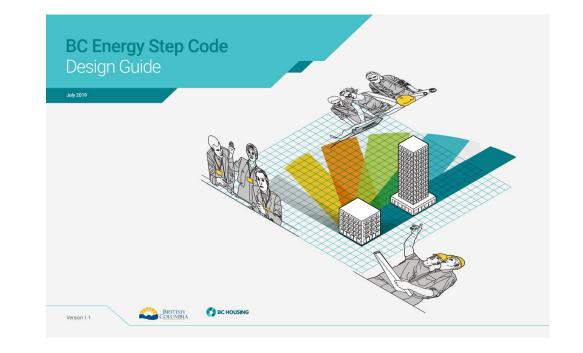
- Moving to mandatory upper steps
- Industry capacity building for upper steps and GHGI
- Low Carbon Energy System Relaxation (step up/step down)
- Planning to step up once code changes
- Plans to opt-in to Carbon Pollution Standard when available

Province-wide

- "20% better" minimum standard for energy efficiency in progress
 - Planned to take effect by end of 2022

Resources – Part 3

- BC Energy Step Code Design Guide
- Design Guide Supplement on Overheating and Air Quality
- Building Envelope Thermal Bridging Guide
- Energy Efficient Building Enclosures Design Guide
- Building Enclosure Design Guide: Wood-Frame MURBs
- Heat Recovery Ventilation Guide for MURBs
- Illustrated Guide: Achieving Airtight Buildings



www.energystepcode.ca/builder-guides

Get in Touch!

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