

**ENERGY**  
**STEP** CODE  
BUILDING BEYOND THE STANDARD



## CRD Step Code Acceleration: Part 9 Buildings

March 9, 2022

Maya Chorobik, CEA

# About Us



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



**ASTTBC**  
TECHNOLOGY  
PROFESSIONALS



**ARCHITECTURAL  
INSTITUTE OF  
BRITISH COLUMBIA**



Building Owners and Managers  
Association of British Columbia



CANADIAN  
HOME BUILDERS' ASSOCIATION  
**BRITISH COLUMBIA**

*The Voice of the Residential Construction Industry in BC*



Professional Engineers  
and Geoscientists of BC

## Government



Natural Resources Canada  
Ressources naturelles Canada

**Canada**



Homeowner  
Protection Office  
Branch of BC Housing



**LGMA**  
LOCAL GOVERNMENT  
MANAGEMENT ASSOCIATION  
OF BRITISH COLUMBIA



UNION OF  
BRITISH  
COLUMBIA  
MUNICIPALITIES



## Utilities



**BC Hydro**  
Power smart

## Academia & NGO



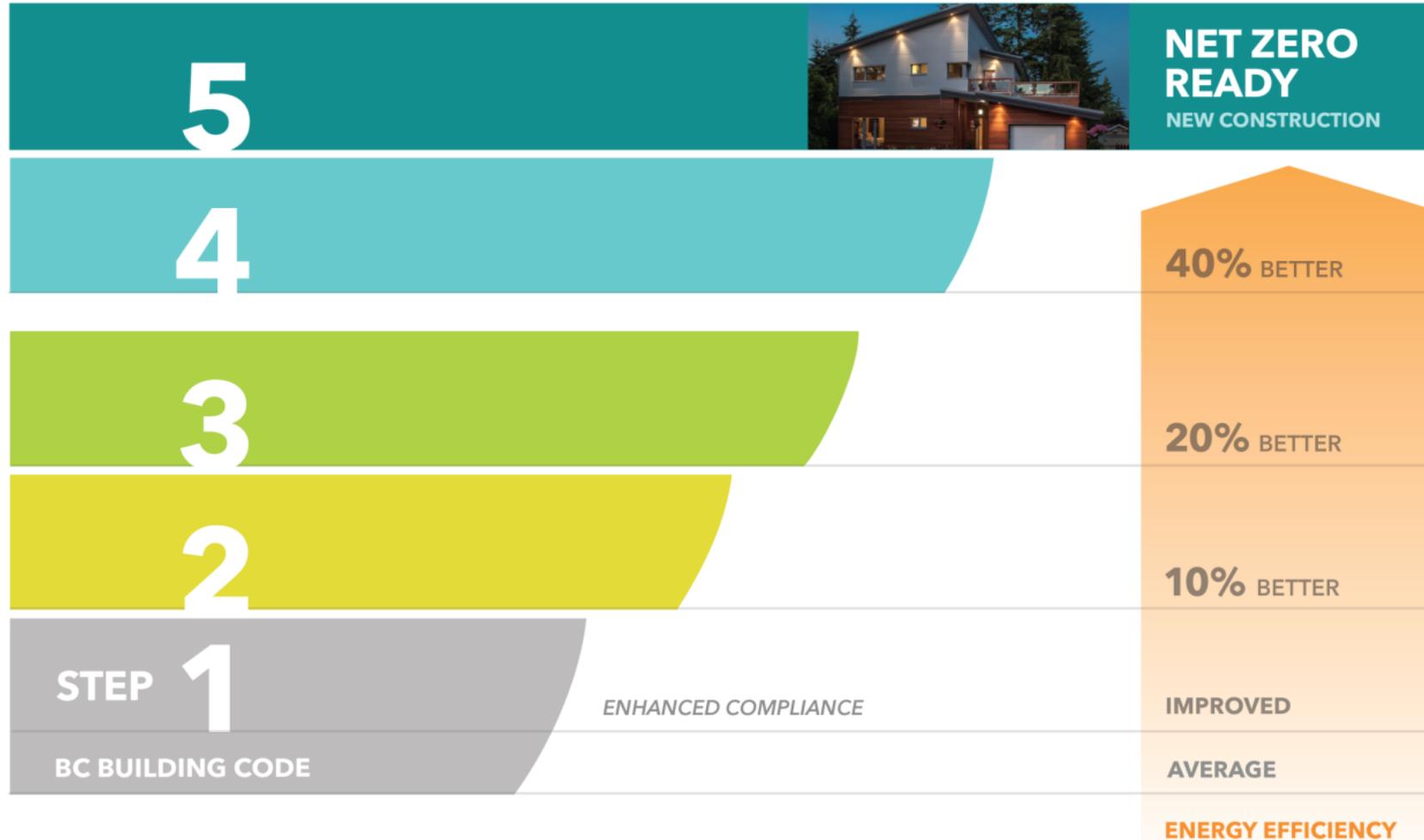
THE UNIVERSITY  
OF BRITISH COLUMBIA



# The Steps: Part 9 Buildings

2017

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.



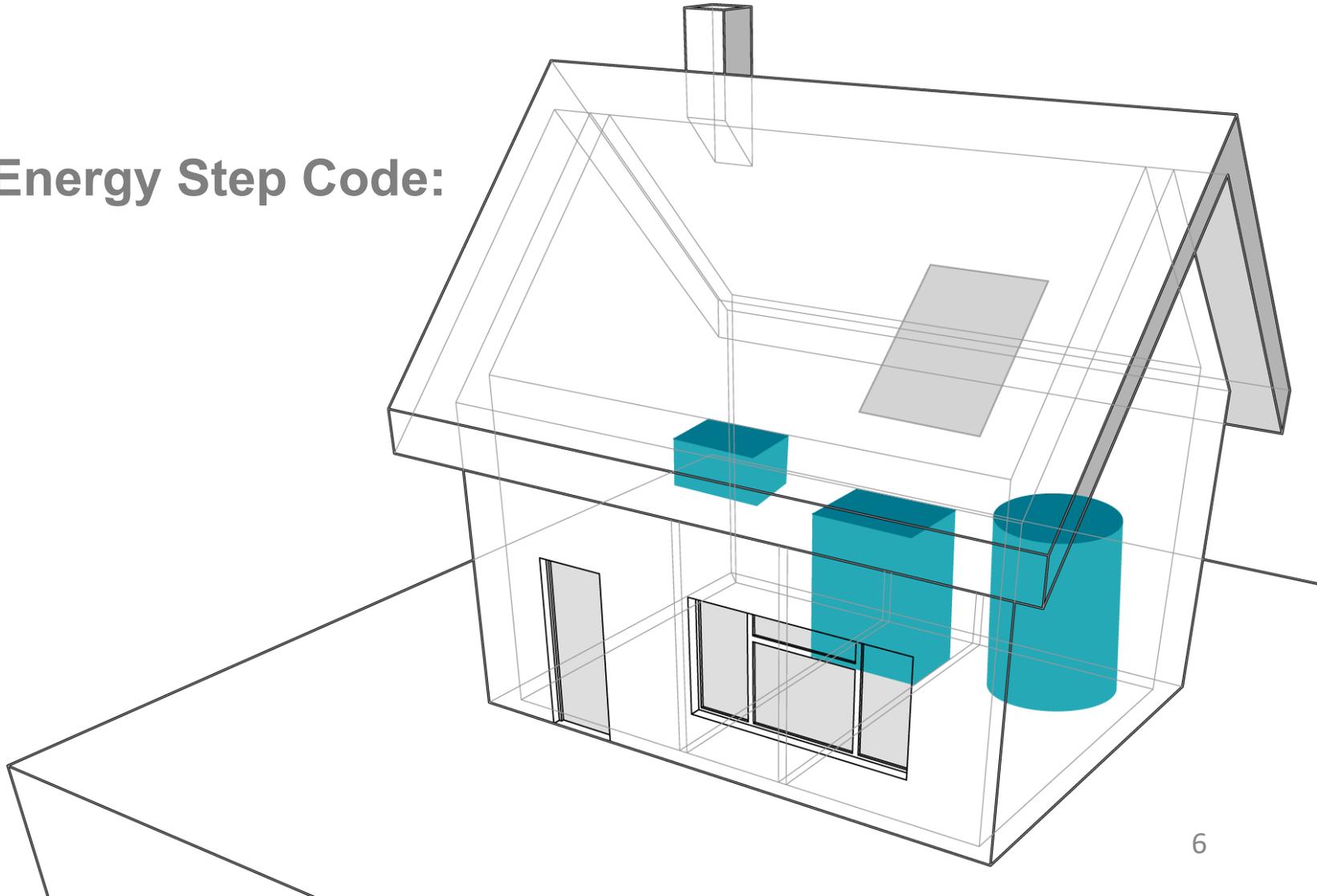
ENERGY  
**STEP**CODE  
BUILDING BEYOND THE STANDARD



# 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

NATURAL GAS  
HEATING  
EMISSIONS



Step 1      Step 3      Step 5

ELECTRIC  
HEATING  
EMISSIONS



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	Part 9
Central Saanich	Step 3 for low rise wood residential Step 2 for other residential and most commercial Step 1 for others	Step 3
Colwood	Step 3 for <7 storey wood residential Step 2 for other residential and most commercial	Step 3
North Saanich	Step 3	Step 3 Step 2 for small homes
Oak Bay	Step 2	Step 3
Saanich	Step 3 for <7 storey wood residential Step 2 for other residential and most commercial	Step 3 Step 2 for small homes
Sooke	Step 3 for low rise wood residential Step 2 for other residential and most commercial	Step 3
Victoria	Step 3 for <7 storey wood residential Step 2 for other residential and most commercial	Step 3 Step 2 for small homes

# Advancing Step Code Adoption

## Leading Local/Regional Governments:

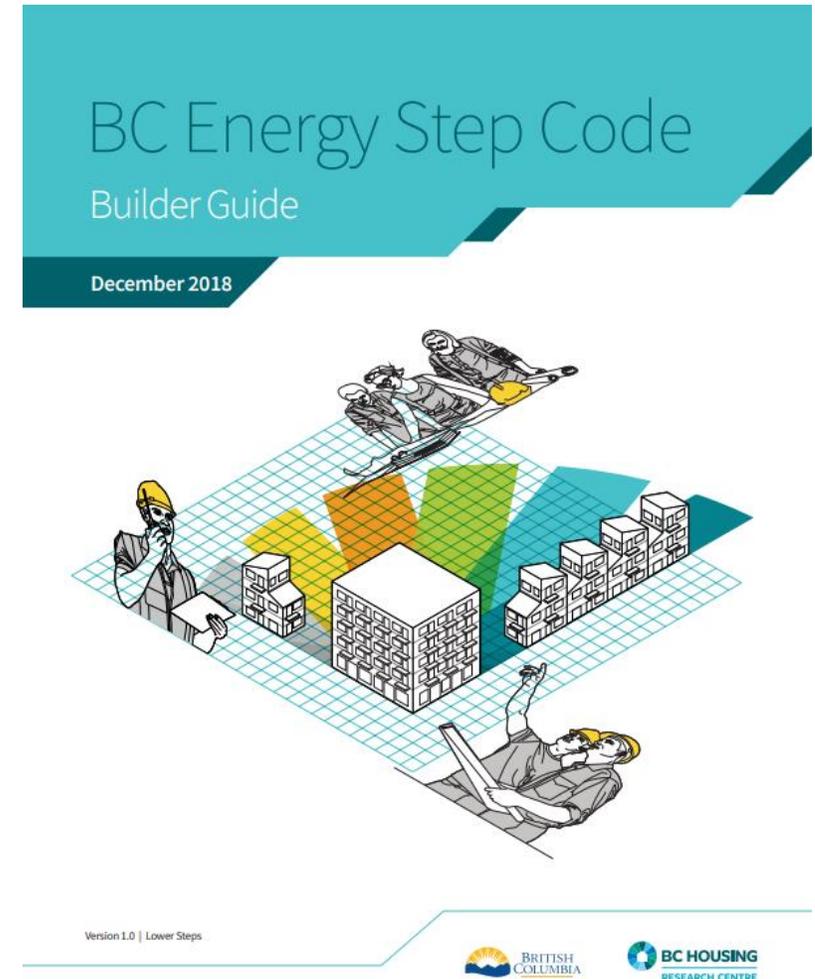
- Moving to mandatory upper steps
- Industry capacity building for upper steps and GHGI
- Low Carbon Energy System Relaxation (step up/step down)
- Planning to step up once code changes
- Plans to opt-in to Carbon Pollution Standard when available

## Province-wide

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

# Resources – Part 9

- BC Energy Step Code Builder Guide BC
- Energy Step Code Design Guide
- Building Envelope Guide for Houses: Part 9 Residential Construction
- Consumer Guide to High Performance Homes
- Building Envelope Thermal Bridging Guide
- Heat Recovery Ventilation Guide for Houses
- Illustrated Guide: Achieving Airtight Buildings
- Pathways to High-Performance Housing in British Columbia



# Get in Touch!

Maya Chorobik

Director of Climate Leadership

Community Energy Association

[mchorobik@communityenergy.bc.ca](mailto:mchorobik@communityenergy.bc.ca)

