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BC Office of Housing and Construction Standards
The Energy Step Code

BC’s Energy Step Code: Building Beyond the Standard

- Where we’re going
- How we plan to get there
- How to engage in the process
Two Provincial Initiatives Set the Stage

**Building Act**
- Consistency, Competency & Innovation
- December 2017 marks the end of local building requirements in bylaws.

**Climate Leadership Plan**
- Establishes a target that all new construction will be net-zero ready by 2032.
Pan Canadian Framework
• Net-zero energy ready by 2030
• Create plan for existing buildings by 2022

National Building Code of Canada
• Introduce a roadmap by 2020
• Building on lessons in BC
Eliminating the Patchwork:

- Local government adopted a wide range of programs and approaches to address building energy efficiency.
- Development industry struggled to stay on top of these requirements.
- BC Energy Step Code offers a common standard for achieving building energy goals.
Energy Efficiency Working Group

- PROVINCIAL GOV.
- BUILDERS & DEVELOPERS
- TRADES & PROFESSIONALS
- LOCAL GOVERNMENTS
- NGOs
- UTILITIES
A Focus on Performance
Performance Compliance

Energy modeling
Air-Tightness Testing
No Prescriptive Requirements
What Does the BC Energy Step Code Measure?

Performance Requirements For:

✓ Building envelope
What Does the BC Energy Step Code Measure?

Performance Requirements For:

✓ Building envelope
✓ Equipment and systems
What Does the BC Energy Step Code Measure?

Performance Requirements For:

- Building envelope
- Equipment and systems
- **Post-construction testing**
  - Airtightness
Part 9 | Step 1: Enhanced Compliance

2017 → 2032

BC BUILDING CODE

AVERAGE

ENERGY EFFICIENCY
Part 9 | Steps 2 and 3: The Lower Steps

2017 → 2032

STEP 1
BC BUILDING CODE
ENHANCED COMPLIANCE

STEP 2
IMPROVED
AVERAGE
ENERGY EFFICIENCY

STEP 3
20% BETTER
10% BETTER
Part 9 | Step 4: The Threshold to the Upper Steps

2017  →  2032

4  →  40% BETTER
3  →  20% BETTER
2  →  10% BETTER
1  →  IMPROVED
    →  AVERAGE
    →  ENERGY EFFICIENCY

STEP 1
BC BUILDING CODE

ENHANCED COMPLIANCE
<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
<th>Energy Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>5 netzero readyHome</td>
<td>40% Better</td>
</tr>
<tr>
<td></td>
<td>4 R-2000</td>
<td>20% Better</td>
</tr>
<tr>
<td></td>
<td>3 BuiltGreen</td>
<td>10% Better</td>
</tr>
<tr>
<td></td>
<td>2 BuiltGreen</td>
<td>Improved</td>
</tr>
<tr>
<td></td>
<td><strong>STEP 1</strong> BuiltGreen</td>
<td>Average</td>
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<td></td>
<td><strong>BC BUILDING CODE</strong></td>
<td><strong>ENERGY EFFICIENCY</strong></td>
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Part 3: High Performance Large + Complex Buildings

PATHWAY TO 2032: PART 3 (MULTI-UNIT RESIDENTIAL)

2017

4

3

2

STEP 1

BC BUILDING CODE

ENHANCED COMPLIANCE

INCENTIVES

INCENTIVES AND/OR REQUIREMENTS

2032

NET ZERO READY
NEW CONSTRUCTION

50% BETTER

20-40% BETTER

ENERGY EFFICIENCY
Part 9 Targets: Province Wide

Part 3 Targets: Lower Mainland and South Vancouver Island

Province may add or adjust targets in future
Alignment With Energy Efficiency Incentive Programs

Sample Programs:

City of North Vancouver

City of Richmond
City of Surrey

Sparwood, Invermere, Kimberley
Langley, Saanich

Resort Municipality of Whistler
City of New Westminster
## Putting into Practice: Possible Implementation Approaches

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Upper Steps</th>
<th>Lower Steps</th>
<th>A Local Government</th>
<th>B Local Government</th>
<th>C Local Government</th>
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<tbody>
<tr>
<td>BC Building Code</td>
<td>INCENTIVE BASED PROGRAM</td>
<td>CITY-WIDE BUILDING BYLAW AFTER 2020</td>
<td>STATE INTENT FOR CITY-WIDE BYLAW AFTER 2025</td>
<td>MAJOR DENSITY BONUS INCENTIVE</td>
<td>REZONING POLICY &amp; BUILDING PERMIT REBATE INCENTIVE</td>
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<td>CITY-WIDE BUILDING BYLAW IN 2018</td>
<td>CITY-WIDE BUILDING BYLAW</td>
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</table>
Research and Support Resources

Completed or Underway:

- Resource hub: energystepcode.ca
- Training and capacity assessment
- Costing study
- Local government readiness survey
- Peer network for local government staff
- Webinars and presentations
Getting to 2032:

- Clear destination
- Common approach
- Commitment to shared success
Questions?

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