Energy Step Code
BC’s Transition to Net Zero Energy Ready New Buildings
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Leadership and Innovation in BC

Brock Commons UBC
Photo: Acton Ostry Architects
Context

Building Act
• Consistency, Competency & Innovation
• December 2017 – end of ‘local building requirements’
• New tools and opportunities

Climate Leadership Plan
• ‘Net zero ready’ by 2032
• ‘Stretch Codes’ for local governments to implement
• Refresh the Climate Action Charter
Energy Efficiency Working Group

Local Governments

NGOs

Utilities

Provincial Departments

Developers & Builders

Professionals & Trades
Energy Step Code – Overview

Current state:

- Range of programs and approaches to improve efficiency in each community
- Inconsistency
- Not compatible with the Building Act

Common issues:

- ‘Points’ vs. Performance
- The occupant paradox
Recommendation:

- Single ‘Step Code’ for all of BC
- Flexible to the needs and capacity of all communities and industry
  - Performance
  - Efficiency, not Carbon
- Steps to Net Zero buildings by 2032
Metrics – What Gets Measured (Pt. 9)

Mechanical Energy:
- ERS Reference House
- Mechanical EUI

Envelope:
- Thermal Energy Demand Intensity
- Peak Thermal Load
- Air Tightness

OR

AND
Metrics – What Gets Measured (Pt. 3)

Mechanical Energy:
- Total EUI

Envelope:
- Thermal Energy Demand Intensity
- Air Tightness

AND
Proposed Implementation

**Step Code Regulation** (December 2016)
- Step Code – Purely Technical Regulation
- Immediately available for voluntary incentive programs or builders to optionally build to.

**Opt-in Regulation** (December 2017)
- Opt-in Process
- Approved local governments will be able to ‘require’, in bylaw, that builders build to a particular performance step.

List of communities and steps they may reference in bylaw.
Opportunity for the Public Sector

• Cost/benefit
• Benefits Beyond the Building
• Institutional & Unique Occupancies
• Community Scale Innovation
• Relationship to GHGs
Questions?

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