RECOMMENDED ADOPTION OF
BC Energy Step Code

Purpose

• To provide Council with results and feedback from industry consultation on the proposed adoption approach to the BC Energy Step Code

• To seek Council approval for a recommended adoption approach to the BC Energy Step Code

• To seek Council’s direction to prepare the necessary building bylaw amendments necessary for Step Code adoption
Climate Leadership Plan
Targets for Buildings

- By 2030, all new buildings are “net zero energy ready”.
- Before 2050, all existing buildings are retrofitted to high efficiency standards (TBD).
- Oil heating is phased-out by 2030.
- Before 2050, all buildings will only use renewable energy.

BC Energy Step Code

Recommended Adoption of BC Energy Step Code
Recommended Adoption of BC Energy Step Code

Approach Taken for Industry Consultation
(Jan-Mar 2018)

+ $500 tiered fee structure program for energy advisor, mid- and post-construction blower door test

*Step 3 is considered an Upper Step for high-rise and commercial buildings, and this may result in design implications for these building typologies.

Industry Engagement

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th># Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Industry Survey</td>
<td>Aug-Sep 2017</td>
<td>57</td>
</tr>
<tr>
<td>CRD Housing Action Team Presentation</td>
<td>Oct 30, 2017</td>
<td>Approx. 20</td>
</tr>
<tr>
<td>Building Industry Workshop #1</td>
<td>Nov 1, 2017</td>
<td>90</td>
</tr>
<tr>
<td>Survey # 2</td>
<td>N/A</td>
<td>13</td>
</tr>
<tr>
<td>Building Inspectors Working Session</td>
<td>Nov 6, 2017</td>
<td>41</td>
</tr>
<tr>
<td>Elected Official Building Tour</td>
<td>Nov 10, 2017</td>
<td>25</td>
</tr>
<tr>
<td>BC Housing Building Smart Series: Lower Steps</td>
<td>Nov 16, 2017</td>
<td>87</td>
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<tr>
<td>Local Government Workshop</td>
<td>Nov 30, 2017</td>
<td>31</td>
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<tr>
<td>Realtor Workshop: “Selling Energy Efficiency”</td>
<td>Dec 8, 2017</td>
<td>32</td>
</tr>
<tr>
<td>Building Industry Workshop #2 – Option 1</td>
<td>Feb 21, 2018</td>
<td>45</td>
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<tr>
<td>Building Industry Workshop #2 – Option 2</td>
<td>Feb 22, 2018</td>
<td>36</td>
</tr>
<tr>
<td>Survey # 3</td>
<td>Closed Mar 28, 2018</td>
<td>102</td>
</tr>
<tr>
<td>Part 3 Residential Developers Focus Group</td>
<td>Mar 19, 2018</td>
<td>8</td>
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</tbody>
</table>
## Phase 2 Industry Feedback

| Step Requirements | • Step 3 generally seen as achievable for Part 9 (e.g., single family homes)  
• Step 3 generally seen as a challenge for Part 3 high-rise concrete residential and commercial office, as it is an ‘Upper Step’ |
|---|---|
| Timelines | • Step 3 for Part 9 (e.g., single family homes) viewed as a bit fast but achievable  
• January 2020 Step 3 for Part 3 high-rise concrete residential and commercial office viewed as ambitious in terms of timeline, as it is an ‘Upper Step’  
• *Accelerated timelines* – may be potential move up Step 1 timeline (September) but Step 3 January 2020 seen as fast and should not be accelerated |
| Application Process | • Tiered fee program for Part 9 (e.g., single family home) projects seen as a ‘nice to have’ but not hugely useful  
• Part 3 project teams advocate for requirements to be triggered at DP/rezoning as opposed to BP |

### Approach Taken for Industry Consultation (Jan-Mar 2018)

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<tbody>
<tr>
<td>Step 1 Nov 2018</td>
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<td>Step 1 Nov 2018</td>
<td>Step 1 Nov 2018</td>
</tr>
<tr>
<td>Step 3 Jan 2020</td>
<td>Step 2 Jan 2020</td>
<td>Step 3 Jan 2020</td>
<td>Step 3 Jan 2020</td>
<td>Step 3 Jan 2020</td>
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</tbody>
</table>

*Step 3 is considered an Upper Step for high-rise and commercial buildings, and this may result in design implications for these building typologies*

*500 tiered fee structure program for energy advisor, mid- and post-construction blower door test*
Final Recommended Approach

### Part 5
(excluding small SFD)
- Step 1: Nov 2018
- Step 3: Jan 2020
- Step 4/5: TBD*

### Part 9
Small SFD (garden suite)
- Step 1: Nov 2018
- Step 2: Jan 2020
- Step 3/4/5: TBD*

### Part 3
Residential (mid-rise)
- Step 1: Nov 2018
- Step 2: Jan 2020
- Step 3: Jan 2020
- Step 4: TBD*
- Step 3/4: TBD*

### Part 3
Residential (high-rise)
- Step 1: Nov 2018
- Step 2: Jan 2020
- Step 3: Jan 2020

### Part 3
Commercial
- Step 1: Nov 2018
- Step 2: Jan 2020
- Step 3: TBD*

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$500 tiered fee structure program for energy advisor, mid- and post-construction blower door test

*staff recommend taking a monitor and adapt approach for increasing Steps following January 2020

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Final Recommended Approach

**Focused on Lower Steps**

![Diagram showing energy efficiency steps]

**UPPER STEPS**
- Step 5
- Step 4
- Step 4
- Step 3

**LOWER STEPS**
- Step 3
- Step 3
- Step 2
- Step 2

**STEP 1**
- Step 1
- Step 1
- Step 1
- Step 1

*Recommended Adoption of BC Energy Step Code*
Option for Part 3 Buildings
Step 3 Rezoning Policy

- Step 2 as a base building requirement for Part 3 high-rise/concrete residential and commercial buildings
- Step 3 included as a rezoning policy consideration for these building types.

Tiered Fee Program
Part 9 Buildings

To be eligible for a reduced fee of $500, applicants will have to demonstrate that they have:

1. hired a licensed energy advisor,
2. conducted a mid-construction blower door test,
3. conducted a final, post-construction blower door test, and
4. completed an EnerGuide rating and label for the new home.

BC Hydro has announced a funding offer to assist eligible communities in providing such a program.
Application process
In-Stream Applications

<table>
<thead>
<tr>
<th>Nov 1 2018</th>
<th>Jan 1 2020</th>
<th>Monitor and adapt as necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 requirement</td>
<td>Step 3 requirement</td>
<td>Step 2 for small SFDs, Part 3 high-rise concrete residential, and commercial</td>
</tr>
</tbody>
</table>

Project A: No Step Code requirement

Project B: Step 3 requirement

Project C: Step 3 requirement

Updated Sustainability Checklist
For Rezoning and Development Permit Applications

The intention of this checklist would be to:

- provide sustainable design details of applications (including Step Code information) to Council in a more concise and structured format
- make the process more uniform and consistent, so that it is more efficient for both applicants and development services staff to undertake and/or process
Recommendation

1. That Council adopt the following approach to the BC Energy Step Code, and direct staff to prepare building bylaw amendments:
   a. For new Part 9 buildings:
      i. Step 1 building bylaw requirement starting Nov 1, 2018
      ii. Step 3 building bylaw requirement starting Jan 1, 2020 for all new Part 9 buildings with the exception of small single family homes/garden suites
      iii. Step 2 building bylaw requirement starting Jan 1, 2020 for all new small single family homes/garden suites
      iv. Development of a tiered fee program to support Part 9 builders to use an energy advisor, conduct a mid-construction blower-door test, conduct a post-construction verification blower-door test, and obtain a home EnerGuide label.

Recommendation (continued)

b. For new Part 3 buildings:
   i. Step 1 building bylaw requirement starting Nov 1, 2018
   ii. Step 2 building bylaw requirement starting Jan 1, 2020 for concrete high-rise residential buildings
   iii. Step 2 building bylaw requirement starting Jan 1, 2020 for commercial office buildings.
   iv. Step 3 building bylaw requirement starting Jan 1, 2020 for wood-frame mid-rise residential buildings

2. That staff proceed with preparation of a sustainability checklist for rezoning and development permit application forms that reference Step Code requirements as well as other sustainable design elements that are reflective of City goals and policies.