

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



Recommended Adoption of BC Energy Step Code

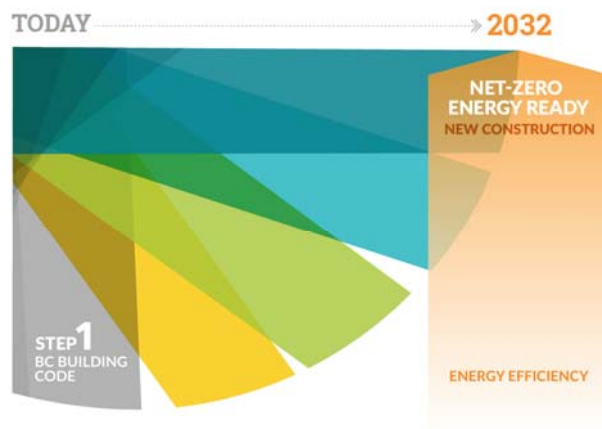
Climate Leadership Plan Targets for Buildings

- **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.



Recommended Adoption of BC Energy Step Code

BC Energy Step Code



energystepcode.ca



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Approach Taken for Industry Consultation (Jan-Mar 2018)



**Part 9
(excluding small SFD)**
Step 1 Nov 2018
Step 3 Jan 2020



**Part 9
Small SFD
(garden suite)**
Step 1 Nov 2018
Step 2 Jan 2020



**Part 3
Residential
(mid-rise)**
Step 1 Nov 2018
Step 3 Jan 2020



**Part 3
Residential
(high-rise)**
Step 1 Nov 2018
Step 3* Jan 2020



**Part 3
Commercial**
Step 1 Nov 2018
Step 3* Jan 2020

- + \$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*



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Industry Engagement

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



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Phase 2 Industry Feedback

Step Requirements	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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' <i>Accelerated timelines</i> – may be potential move up Step 1 timeline (September) but Step 3 January 2020 seen as fast and should not be accelerated
Application Process	<ul style="list-style-type: none"> 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



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Part 9 (excluding small SFD)
Step 1 Nov 2018
Step 3 Jan 2020



Part 9 Small SFD (garden suite)
Step 1 Nov 2018
Step 2 Jan 2020



Part 3 Residential (mid-rise)
Step 1 Nov 2018
Step 3 Jan 2020



Part 3 Residential (high-rise)
Step 1 Nov 2018
Step 3* Jan 2020



Part 3 Commercial
Step 1 Nov 2018
Step 3* Jan 2020

- + \$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*



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Final Recommended Approach



Part 9 (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 3 Jan 2020
Step 4 – TBD*



Part 3 Residential (high-rise)
Step 1 Nov 2018
Step 2 Jan 2020
Step 3/4 – TBD*



Part 3 Commercial
Step 1 Nov 2018
Step 2 Jan 2020
Step 3 – TBD*

- + \$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



PART 9 Residential



PART 3 Wood Frame Residential



PART 3 Concrete Residential



PART 3 Commercial






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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.

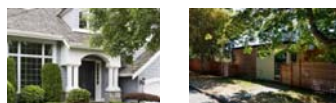
		
Part 3 Residential (mid-rise)	Part 3 Residential (high-rise)	Part 3 Commercial
Step 1 Nov 2018	Step 1 Nov 2018	Step 1 Nov 2018
Step 3 Jan 2020	Step 2 Jan 2020	Step 2 Jan 2020
Step 4 – TBD*	Step 3/4 – TBD*	Step 3 – TBD*



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Tiered Fee Program

Part 9 Buildings



Part 9 (excluding small SFD)	Part 9 Small SFD (garden suite)
Step 1 Nov 2018	Step 1 Nov 2018
Step 3 Jan 2020	Step 2 Jan 2020
Step 4/5 – TBD*	Step 3/4/5 – TBD*

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

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.

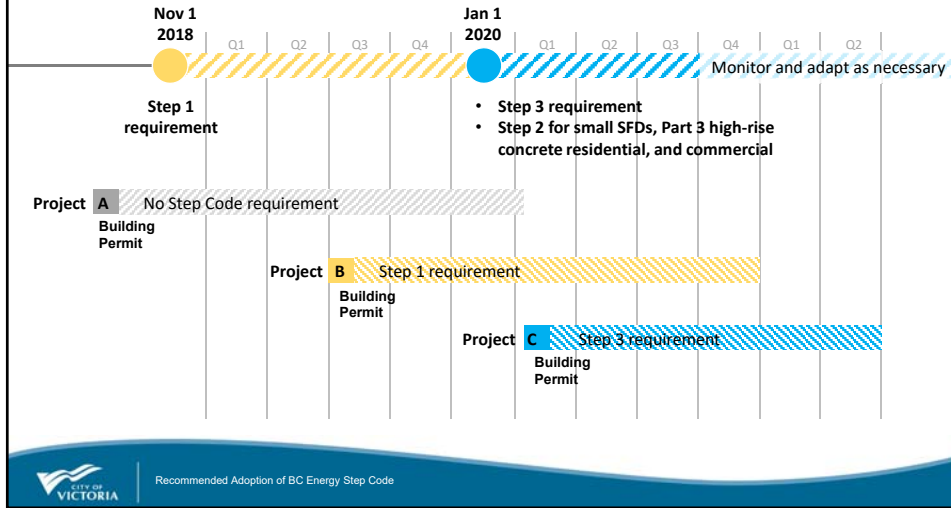
BC Hydro has announced a funding offer to assist eligible communities in providing such a program



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Application process

In-Stream Applications



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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

Sustainable Planning and Community Development City of Victoria 700-688-2222 604-383-8222 www.cityofvictoria.ca		Rezoning Information
Green Buildings and Green Building Incentives		
Under the general development (development) permit, the following information can be provided if that design includes Sustainable Building:		
Designing, building, operating and maintaining buildings to incorporate energy efficiency, water conservation, waste minimization, pollution prevention, resource efficiency and resilience or quality, with being certified at the time of construction, and post-construction, for Green Building Incentives.		
This includes a number of Council adopted policies, including:		
• Development Fee: The primary fee will be reduced in the case of buildings of development.		
• Accessibility: Enhanced the design, quality and availability of information for public and business.		
• Efficiency: Reduced energy, water, and waste in the development of buildings.		
• Resilience: The City will encourage development that leads to the highest possible green building.		
• Integration: Green building goals to be integrated throughout the organization and to be used to inform City policies and programs.		
How to use the Green Building Incentives:		
The incentives are in the form of a credit for building applications and a green building credit. It also serves as a credit for staff and Council building applications on behalf of an applicant. The green building credit is a requirement for all rezoning applications that include one or more incentives, and including the green building credit with the development application.		
Using the incentives as a credit, the applicant will submit details of the green building credit when the development application is submitted along with the other requirements for a rezoning application. The credit is included in the application and is used as a credit for the fee.		
In applying and getting the credits, the applicant is providing information to assist the green building credit to be used by Council in the case where the green building credit is required in a rezoning application. The credit is used by Council in the case where the green building credit is required in a rezoning application.		
Third Party Building Systems		
There are a number of green building rating systems that may be considered for the project. These rating systems may provide the program with guidance on how to incorporate green building features.		
• Building Green, as endorsed by the Built Green Society of Canada (www.builtgreen.ca)		
• Green Building, as endorsed and operated by the Green Building Institute (www.greenbuildinginstitute.com)		
Category	Green Rating	Source of Information and Resources
Rating system	Programs certified and verified in accordance with a building code or other applicable code and standards based.	• LEED (www.usgbc.org) • Built Green (www.builtgreen.ca) • Green Building Institute (www.greenbuildinginstitute.com)
Site selection and design	• Integrated Project Design (www.ipd.ca) • SmartSite (www.smartcity.com)	• See City of Vancouver Transit Design Guide • See City of Victoria Transit Design Guide
Accession and design	• Use an Integrated Design Process • Include all green design strategies that have been included in the building that have been specified in the building code.	• See Bids/Revision pages on the Integrated Design Process • See Public Works Construction Program
Building materials and finish	• Reduce building footprint • Use low-carbon building materials • Use low-carbon building materials • Describe plan for disposal of building materials	• City of Victoria Heritage Program • City of Victoria Green Building Program



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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.



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Recommendation (continued)

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



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