

Energy Code Compliance Evaluation: Focus Group Questions

Thank you for completing the BC Energy Code Compliance Survey conducted in May/June 2015 and agreeing to participate in future research by providing your contact information. We invite you to complete an additional questionnaire and participate in a focus group discussion that will build upon the results of the survey.

The online survey and follow-up focus group discussion are part of an independent evaluation of compliance with the energy efficiency standards for buildings referenced by the BC Building Code and Vancouver Building Bylaw since December 2013. The evaluation is being conducted on behalf of a working group comprising building inspectors, government officials, professional associations and energy utility representatives who are interested in the state of code compliance with energy requirements and its impact on local and provincial goals such as energy conservation and GHG reduction.

This follow-up questionnaire provides the basis for the focus group discussion, as follows:

- Participants each answer questionnaire independently and submit to facilitator (RDH).
- Facilitator develops anonymous summary of the responses.
- Participants discuss results at a face-to-face meeting in Fall 2015 and propose revisions to responses.
- Facilitator further synthesizes results and develops conclusions; participants will have the opportunity to review and comment independently on the conclusions.

The primary objective of this focus group is to explore areas of non-consensus in the results from the online survey. A companion online survey summary paper provides background from the online survey.

The questionnaire has been distributed to those online survey respondents who expressed interest in follow-up discussion. Should additional individuals wish to complete the questionnaire, they are requested to complete the online survey first and submit their contact information to the facilitator:

<https://www.surveymonkey.com/r/BCenergycodecompliance>

Should you have any questions, please contact the facilitators:

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Questionnaire

Energy Code Compliance: Compliance Rate Estimates

1. Based on survey respondents' individual practice, the province-wide rate of compliance with the energy efficiency standards for buildings referenced by the BC Building Code and Vancouver Building Bylaw since December 2013 was estimated to be 79%. (*Recall that the definition of energy code compliance rate in the survey was the proportion of buildings that strictly meet ALL requirements of the applicable standards*).

Does this estimate reflect your experience? Why or why not?

2. What do you consider to be the three most important actions on part of the Province of BC, local authorities, energy utilities and professional associations that has helped increase the compliance rate from the previously estimated 70% in 2012?

3. The estimated compliance rate of 79% is a province-wide average. Please indicate whether you think the compliance rate is higher or lower than 79% in any of the following cases:

a. Consider the compliance rate in the **City of Vancouver** (Vancouver Building Bylaw) only:

60% to 69%

70% to 79%

80% to 89%

90% to 99%

100%

b. **Consider the rest of BC**, not including the City of Vancouver (BC Building Code). Which jurisdictions do you consider to have **additional enforcement actions** beyond Letters of Assurance?

Consider the compliance rate in these jurisdictions only:

60% to 69%

70% to 79%

80% to 89%

90% to 99%

100%

c. **Consider the rest of BC**, not including the City of Vancouver (BC Building Code). Which jurisdictions do you consider to have **no enforcement actions** other than submission of Letters of Assurance?

Consider the compliance rate in these jurisdictions only:

60% to 69%

70% to 79%

80% to 89%

90% to 99%

100%

4. Would considering the different compliance paths (prescriptive, trade-off, and performance) and different reference standards (ASHRAE 90.1-2010 and NECB) affect your estimates in the previous question? How?

Energy Code Compliance: Definitions

Recall that the definition of energy code compliance rate in the survey was the proportion of buildings that strictly meet ALL requirements of the applicable standards (ASHRAE 90.1-2010 or NECB-2011). Several comments from the survey highlighted the complexities of defining energy code compliance and a measurable compliance rate, including:

- differing technical requirements in applicable standards and compliance paths
- variable legal requirements between the Vancouver Building Bylaw and BC Building Code
- different administrative requirements across different jurisdictions
- different building occupancy types
- an acceptable level of compliance from substantial compliance to strict compliance with requirements of technical standards
- relative impact of different technical requirements on energy performance
- potential changes in compliance at different project stages; “as-designed” and “as-built”

5. In your opinion, what is an appropriate definition of energy code compliance, given the considerations noted above?

6. What is an appropriate definition of compliance rate? (i.e. a compliance rate of 80% could mean that 80% of buildings strictly comply while 20% of building do not comply on a pass/fail basis; or it could mean that the average building is 80% compliant on a sliding scale.)

7. Other comments on the definition of compliance and compliance rate?

Options for Improving Energy Code Compliance

- 8. Please describe what you think are the top three challenges that you face in your role in the compliance or enforcement of energy codes in BC.

- 9. Consider jurisdiction-specific energy code compliance across the province. Please describe what you think are the top three best practices to support enhanced energy code compliance and indicate the jurisdiction(s) in which they exist.

10. Consider jurisdiction-specific energy code compliance across the province. Please describe what you think are the top three challenges or barriers to enhanced energy code compliance and indicate the jurisdiction(s) in which they exist.

11. Please describe the top three initiatives that could be undertaken province-wide that you feel would have a positive influence on energy code compliance in BC. This can include those listed in the online survey such as checklists, energy modeling guidelines, education and outreach by professional associations, or additional options such as disclosure of energy consumption of buildings (“benchmarking”).

12. Any other comments on the future directions of energy codes?