

BC Energy Step Code Builder Breakfast #1

February 20, 2019

Summary of Discussion

Number of attendees: 18

Discussion Questions and Comments from Attendees:

1. Have any of you built a performance based home or any green building rating system certified? If so, what was your experience?

- Some builder breakfast attendees have built in the City of Vancouver and/or done design work in other jurisdictions that have adopted the BC Energy Step Code.
- Attendees noted that it is important to engage the Energy Advisor at the design stage to reduce any delay in the permitting process. When changes occur in the design or construction, the Energy Advisor and the City must be notified as soon as possible.
- Attendees expressed that more understanding is needed as to when an Energy Advisor is expected to inspect or visit the construction site regarding any changes.
- Some attendees reported that meeting performance targets is satisfying in the sense that their building operates as designed and they can verify what is built.

2. The City is exploring providing supplementary coaching and professional development. What kind of support would you find beneficial?

Attendees offered coaching and professional development suggestions such as:

- On site walk-through with an Energy Advisor including mid-construction blower door testing;
- Financial incentive for early adoption/meeting higher steps in advance of regulation;
- Building permit rebate;
- Training and professional development for sub-trades;
- More information and research available on Step Code applications;

- Builder-to-builder training and learning opportunities and/or facilitated networking with other builders and energy advisors;
- An illustrated guide for wall assemblies, approved by the City of Port Moody, that defines blended prescriptive and performance elements;
- Provide illustrated samples of building assemblies that meet each level of Step Code for different archetypes;
- Graphics and illustrated materials targeted at sub-trades;
- Signs and prompts for construction sites regarding air tightness targeted at sub-trades; and
- Separate and faster building/development permit queue for properties targeting high efficiency.

3. What do you think about the adoption strategies presented today?

- Overall, the majority of attendees preferred the gradual adoption strategy to allow more time to become comfortable with a performance-based approach.
- Attendees expressed that incentives would be valuable alongside the gradual adoption approach.
- It was noted that the gradual approach allows more time and opportunity for sub-trades to be trained.
- Attendees felt that waiting for regulation to kick in would not be appropriate. There was consensus in the group that preparing early is key to long term success.

4. How have Certified Energy Advisors previously fit into your building projects or process? Please elaborate on your experience.

- Some attendees have previously worked with a certified energy advisor, noting there is a period of trial and error where both parties need to work together to find solutions and correct issues.
- Overall, most experiences were positive, involving energy advisors in Energy Star and Step Code construction.
- Attendees requested more clarification in future sessions about the level of assurance and reliance on energy advisors.
- It was noted that working with an energy advisor provides additional information to the building owner/buyer and mitigates contractor liability when working with an additional consultant.
- Working with an energy advisor requires more time and energy but results in better building quality.

5. Have you ever completed an energy model as a part of one of your projects? If yes, is this something regularly done in your practice?

- Some attendees have worked with an energy modeller and/or produced an energy model as a component of one of their projects.
- Attendees would like further information about what constitutes a good energy model and qualified energy advisor.

6. Have you ever conducted a blower door test or mid-construction blower door test? If so, were any sub trades involved? Did you find it valuable?

- Some attendees reported that they have completed blower door testing.
- Attendees suggested a program to provide financial assistance to perform mid-construction blower door testing regardless of whether the property is pursuing Step Code. This would allow the builder to know where they currently perform in terms of air leakage and learn techniques to improve performance if needed.
- Attendees noted issues with lack of training for sub-trades and turnover of sub-trades personnel that creates issues for builders in meeting compliance.
- Attendees thought it would be valuable to define the process and expectations around blower door testing techniques and reporting.
- Attendees suggested professional development for insulation sub-trade workers, as they are key players in successful airtightness.

7. What is your biggest concern moving forward with adoption of the Energy Step Code in Port Moody?

- Attendees felt that they would feel most comfortable knowing what the requirements are as early as possible for budgeting purposes.
- Some attendees felt that the operational energy savings costs are not a strong enough case to justify higher upfront costs and the payback often takes longer than homeowners live in the home.
- It was expressed that only about 10% of homeowners request energy efficient design or features and would prefer to spend additional funds on high-end finishings.
- More clarification at which stage Step Code will be enforced and required, i.e. development permit or building permit stage.
- Understanding the cost implications for clients.
- Understanding liability associated with using new systems.
- How would Step Code apply to applications in stream?

8. Other comments from attendees:

- There needs to be more communication and discussion around building officials expectations and builder practice. Often times the builders are not aware of what the building officials expect on site or look for during inspection.
- There are countless wall assembly examples but most builders will find what works for them and stick to it. Need to explain the prescriptive elements of wall assemblies that work for this region.
- Council and the Community Planning Advisory Committee need to be educated on expectations surrounding the design of energy efficient buildings. In order to meet energy efficiency metrics, the design of buildings can be affected and they can become more simple in design. This needs to be communicated to manage expectations around design creativity.
- Attendees suggested that the City's Sustainability Report Card be updated to reflect City priorities regarding energy efficient buildings. For example, reducing weighting for green building rating systems such as LEED and putting more emphasis on encouraging higher Step Code steps.
- Can and does the City of Port Moody inspect cladding?
- What are the energy performance benefits of using spray foam and what are the negative effects?
- Attendees suggested creating a newsletter that the building community or interested parties can sign up for to stay up to date on new requirements and resources/opportunities.
- Increased risk with targeting higher steps of the Step Code without understanding current performance.