



PROJECT REPORT
Capital Regional District
BC Energy Step Code Local Government & Realtor Workshop Series
CRD Energy Step Code Program

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Report Summary

This summary report follows the September 2017 to December 2017 delivery of 4 distinct workshops and educational materials in support of the Capital Regional District's Energy Step Code Education Program. The focus of these workshops was primarily on Part 9 buildings, but Part 3 BC Energy Step Code requirements were included in the discussions and in the elected official and senior staff home and building tour.

The goal of the program was to:

- Support the design and delivery of a four-part workshop series and develop educational materials on the BC Energy Step Code for local government staff and elected officials and real estate agents within the Capital Region in the fall of 2017.
- Educate, build capacity and identify opportunities for regional or sub-regional consistency of BC Energy Step Code programming and/or policies, referencing the materials and content (under development or to be released shortly) of the BC Energy Step Code Council.

Core deliverables included:

- Education program planning
- Design, delivery and facilitation of 4 workshops across the capital region for key target audiences
- Provide content for 2 energy literacy brochures (new homes and existing homes)
- Provide a summary report

Roles:

City Green was hired for:

- Program planning
- Workshop design and delivery and facilitation
- Energy literacy brochure content development
- Reporting

The CRD was responsible for the following activities:

- Planning and coordination
- Workshop recruitment, advertising and registration
- Space, catering and transportation logistics planning and costs
- Design work associated with the energy literacy materials
- Active participation in workshop delivery, including presentations on CRD activities

The Workshops

TITLE	DATE (2017)	LOCATION	ATTENDANCE
REGIONAL BUILDING INSPECTORS: THE BC ENERGY STEP CODE IMPLEMENTATION WORKSHOP (PART 9 BUILDINGS)	Nov. 6	Olympic View Golf Club	38
ELECTED OFFICIALS AND SENIOR LOCAL GOVERNMENT STAFF: INTRODUCTION TO THE BC ENERGY STEP CODE WITH ENERGY EFFICIENT BUILDING WALKING AND BUS TOUR	Nov. 10	CRD Commons Room	25
LOCAL GOVERNMENT: WORKING SESSION ON BC ENERGY STEP CODE POLICY & IMPLEMENTATION	Nov. 30	Cedar Hill Golf Course Club House	31
REALTORS®: SELLING THE BENEFITS OF ENERGY EFFICIENT HOMES WITH ENERGY EFFICIENT HOME BUS TOUR	Dec. 8	Victoria Real Estate Board	31

Key Findings

The workshop series identified the following key findings:

HIGH LEVEL OF INTEREST AND ONGOING ENGAGEMENT NEEDED TO PREPARE FOR IMPLEMENTATION

Participants of the workshops showed a high level of interest in learning about the BC Energy Step Code.

- The BC Energy Step Code is a new policy and all the key stakeholders have much to learn in preparation for implementation.
- There is a need for ongoing dialogue and engagement of all key stakeholders.
- There is a need for a clearing house for Frequently Asked Questions on the BC Energy Step Code.
- There is interest in accessing model BC Energy Step Code implementation documents.
- There is interest in understanding the baseline of how many builders have been building energy efficient homes prior to the introduction of the BC Energy Step Code and in tracking the annual uptake in the region.

REGIONAL COLLABORATION AND COORDINATION

There is a high level of interest in regional collaboration and coordination. See Appendix 3 for more details. The priorities and highlights identified for regional collaboration and coordination include:

- **Model Materials, Processes and Language:** Interest in access to model BC Energy Step Code processes (process maps) for integrating the BC Energy Compliance Report into existing permitting processes and in model language and materials for planning.
- **Encouragement of Step Code: To assist market demand and voluntary industry participation in the BC Energy Step Code the preferred options identified were:**
 - Consumer engagement on value proposition for purchasing efficient homes
 - Supporting BC Energy Step Code builder orientation sessions and learning forums.
- **Incentives: The preferred option to financially incentivize the BC Energy Step Code was identified as:**
 - Mid-construction blower door test subsidies
 - Pre-construction energy evaluation subsidies

- A common concern was that the concept of incentivizing energy efficient new construction was a cost to the community, when there is limited budget or other community priorities.
- **Policy Development:** Jurisdiction-wide building bylaw (e.g. Step 1)
- **Role for CRD Climate Action:**
 - Continuing to play a coordination role in advancing BC Energy Step Code education and continuing to bring local governments together for workshops and education.
 - Providing local governments with access to the results of the CRD BC Energy Step Code Education program
 - Development and/or sharing of model BC Energy Step Code policies and programs
 - Advancing discussions on appropriate BC Energy Step Code incentives

BC ENERGY COMPLIANCE REPORT

The BC Energy Compliance Report was presented in the Building Inspector workshop in a draft version and the approved version in the Local Government Implementation workshop. The feedback on the BC Energy Compliance Report can be summarized as follows:

- There was positive feedback on the concept of a BC Energy Compliance Report template to provide a standardized and consistent report for verification purposes.
- The building inspectors provided valuable recommendations on changes that could be made to the draft version of the report. These recommendations were incorporated into the final version.
- There are many questions about which industry stakeholders can produce the compliance report, the capacity of energy modellers (will there be enough) and about how the providers of BC Energy Step Code Compliance Report can be located.

ENERGY ADVISORS/SERVICE ORGANIZATIONS: CAPACITY, ABILITY TO LOCATE, CREDENTIALS, & QUALITY ASSURANCE

Given the BC Energy Step Code is a performance based approach that requires energy modelling and the services of energy advisors there were many questions about the energy advisor and service organization industry and about other professionals that can provide Part 9 energy modelling services. Local governments should continue to work with the CRD Climate Action Program, BC Building Safety Standards Branch and the BC Energy Step Code Council to provide further information and support, as required.

Recommended Next Steps

The following are proposed for consideration as recommended next steps:

1. **Regional Collaboration and Coordination:** Based on input from workshop participants the CRD should formalize a regional collaboration and coordination plan. This plan could include information on:
 - The ongoing role of CRD Climate Action in advancing coordination and collaboration in the region.
 - Collaboration opportunities with the BC Energy Step Code Council and other Regional Districts.
 - Specific goals, activities and timelines for engaging local governments, builders and the energy advisor industry.
2. **BC Energy Step Code Information:** It was identified there is a need for access to more summarized information, which may include:

- Well-developed BC Energy Step Code website resources:

- BC Energy Step Code Fact Sheets
- BC Energy Step Code Frequently Asked Questions
- Sample BC Energy Step Code information that can be provided to local governments to post on their own websites
- BC Energy Step Code resource staff people to contact with questions

3. **Compliance Report:** Local governments in the capital region should consider formally adopting the BC Energy Compliance Report for BC Energy Step Code compliance purposes. To assist this process of adoption, the CRD should ask the BC Energy Step Code Council to consider:
 - Developing a summary document to explain what the BC Energy Compliance Report is and how to use it for:
 - Local Governments
 - Builders
 - Continue advancing discussions and sharing of information on best practices for integrating the BC Energy Compliance Report into local government planning processes.
4. **Communication to Energy Advisor and Service Organization Sector:** The CRD should ask the BC Energy Step Code Council to communicate to the EnerGuide Rating System energy advisor and service organization industry that there is a need to respond to questions about:
 - Capacity to meet market demand (by region, and remote areas)
 - Insurance and WCB coverage
 - Average cost of services
 - Credentials (training, licencing, registration, code of ethics)
 - Defining the roles of NRCan, service organizations and registered energy advisors
 - How/where can builders/local governments locate all EnerGuide Rating System energy advisors
 - Quality assurance (on EnerGuide Rating System files and on the BC Energy Compliance Report)
 - What is verified at the As-Built (post construction) stage
5. **Further Engagement of REALTORS®:**
 - a) Local governments and other stakeholders should consider what further engagement can be advanced with REALTORS® to enhance their ability to communicate with home buyers and sellers about the benefits of energy efficient homes.
 - b) A recommendation has been made to the BC Home Energy Coach program to provide a webinar introducing the program to REALTORS®.
 - c) BC Hydro and FortisBC should be involved in discussions about potential future opportunities for educating REALTORS® about energy efficiency programs for existing home retrofits and efficient new construction.

Appendix 1: Building Inspector Workshop

Workshop Agenda

THE BC ENERGY STEP CODE IMPLEMENTATION WORKSHOP (PART 9 BUILDINGS)

Audience: Municipal Building Inspectors in the Capital Region

Date: November 6, 2017

Location: Olympic View Golf Club

What You Will Learn:

The **BC Energy Step Code** is a voluntary provincial standard enacted in April 2017 that provides an incremental and consistent approach to achieving more energy-efficient buildings that go beyond the requirements of the base BC Building Code. It does so by establishing a series of measurable, performance-based energy-efficiency requirements for construction that builders can choose to build to, and (as of December 15, 2017) communities may voluntarily choose to adopt in bylaws and policies.

The **BC Energy Compliance Report for Part 9 Buildings** provides a standardize report template for Part 9 buildings complying with subsection 9.36.5 and 9.36.6 of the BC Building Code. The compliance report may be used by:

- EnerGuide Rating System (ERS) energy advisors and other energy modellers to produce a standardized compliance report.
- Local governments to verify builders are complying with a bylaw or policy.
- Local governments and utilities to process incentives or rebates that maybe aligned with EnerGuide Rating System (ERS) or BC Energy Step Code metrics.

This workshop will provide:

- An introduction to the purpose and vision of the BC Energy Step Code.
- A detailed review of the energy efficiency metrics for the BC Energy Step Code.
- An explanation of the roll of EnerGuide Rating System energy advisors and other service providers in verifying compliance with the BC Energy Step Code.
- A working session on using the BC Energy Compliance Report – Part 9 Buildings for buildings complying with subsection 9.36.5 or 9.36.6 of the BC Building Code.
- Update on Part 3 compliance reporting (if available)

Presenters:

- City Green Solutions: Peter Sundberg and Zhi Chen
- Capital Regional District: Nikki Elliott

About the Presenters:

City Green Solutions is a non-profit organization that provides energy efficiency services and programs for government and utilities. City Green is a licensed Service Organization for the EnerGuide Rating System for new and existing homes, the chair of the Natural Resources Canada ENERGY STAR for New Homes Technical Advisory Committee and on the Executive of the Home Performance Stakeholder Council. City Green has actively contributor to the development of the BC Energy Step Code and was contracted to develop the BC Energy Step Code Compliance Report for Part 9 Buildings.

Workshop Attendance

Attendance

Participants (32 staff, 4 presenters, 2 staff) = **38**

Local Governments in the Capital Region = **11**

Province= **1**

Organization	Representatives
Central Saanich	3
Colwood	1
Electoral Areas (CRD)	7
Esquimalt	Regrets
Highlands	Regrets
Langford	3
Metchosin	Regrets
North Saanich	Regrets
Oak Bay	2
Saanich	6 (including 1 presenter)
Sidney	3
Sooke	Regrets
Victoria	7 (including 1 presenter)
View Royal	1
CRD Climate Action	2 (Presenter, Staff)
City Green Solutions	2 (Presenter, Staff)
BC Building Safety and Standards Branch	1

Appendix 2: Elected Officials and Senior Staff Workshop:

Workshop Agenda

INTRODUCTION TO THE BC ENERGY STEP CODE, WITH ENERGY EFFICIENT BUILDING WALKING AND BUS TOUR

Audience: Municipal Elected Officials and Senior Staff

Date/Time: November 10, 2017 @ 12:30pm to 4:00pm.

Location: CRD Headquarters, Commons Room

Format: Presentation with Q&A and guided tour of energy efficient buildings and homes.

Lunch and Refreshments: Arrive at 12:30 for working lunch and refreshments.

What you will learn:

In April 2017, the Province of British Columbia adopted the BC Energy Step Code as regulation. The new standard is a tool designed to help both governments and industry chart a course to a future in which all new construction across the province is 'net-zero-energy ready' by 2032.

Attend this interactive session to:

- Hear from Andrew Pape-Salmon, the Executive Director of the Building and Safety Standards Branch about the purpose and vision of the BC Energy Step Code.
- Network and ask questions of industry and government staff representatives from the BC Building and Safety Standards Branch, the City of Victoria, Capital Regional District, District of Saanich, Passive House Canada, Canadian Home Builders Association Victoria, City Green Solutions.
- Hear a brief overview of industry and stakeholder feedback received to date
- Understand other green building standards and how they relate to the BC Energy Step Code
- Participate in a walking and bus tour of an energy efficient building and home:
 - Part 3 (Commercial) Building:
 - Tour: 1515 Douglas Street, Jawl Properties, Ltd
1515 Douglas Street is a six storey class AA LEED Platinum office and retail building located across from Victoria City Hall showcasing thoughtful architecture and urban design.
 - Part 9 (Residential) Building:
 - Tour: 235 Montreal Street, Interactive Construction Inc.
 - Tour: 734 Mary Street, Bernhardt Contracting
 - Drive By: 860 Queens Ave, North Park Passive House, Bernhardt Contracting

Presenters:

- Andrew Pape-Salmon, Executive Director, Building and Safety Standards Branch
- Facilitator: Peter Sundberg, City Green Solutions and Nikki Elliott, CRD
- Home/Building Tour Presenters:
 - Mark Bernhardt: Bernhardt Contracting
 - Russ Barry: Interactive Construction Inc
 - Robert Jawl: Jawl Properties
 - Erica Sangster: D'Ambrosio Architecture + Urbanism
 - Andy Chong: Integral Group.

Workshop Attendance

Attendance

Participants (24 Elected Officials and Senior staff, 7 presenters, 2 staff) = **25**

Local Governments in the Capital Region = **10**

Province= 1

First Nations = 2

Organization	Representatives
Central Saanich	1
Colwood	2
Esquimalt	Regrets
Highlands	Regrets
Juan de Fuca Electoral Area	Regrets
Langford	2
Metchosin	1
North Saanich	1
Oak Bay	2
Saanich	4 (including 1 presenter)
Salt Spring Island Electoral Area	Regrets
Sidney	2
Songhees Nation	3
Sooke	Regrets
Southern Gulf Islands Electoral Area	Regrets
Tsawout First Nation	1
Victoria	2 (including 1 presenter)
View Royal	1
CRD	4 (including 1 presenter and 2staff)
City Green Solutions	1 (Presenter)
BC Building Safety and Standards Branch	1 (Presenter)
CHBA / Passive House Canada/ Builder	2 (Presenter, facilitator)
City Green Solutions	1 (Presenter)

Appendix 3: Local Government Policy and Implementation Workshop

Workshop Agenda

WORKING SESSION ON BC ENERGY STEP CODE POLICY & IMPLEMENTATION

Audience: Local government officials

Date/Time: November 30, 2017 @ 10:30am to 2:00pm

Location: Cedar Hill Golf Course Club House

In April 2017, the Province of British Columbia adopted the BC Energy Step Code as regulation. The new standard is a tool designed to help both governments and industry chart a course to a future in which all new construction across the province is 'net-zero-energy ready' by 2032. This working session will:

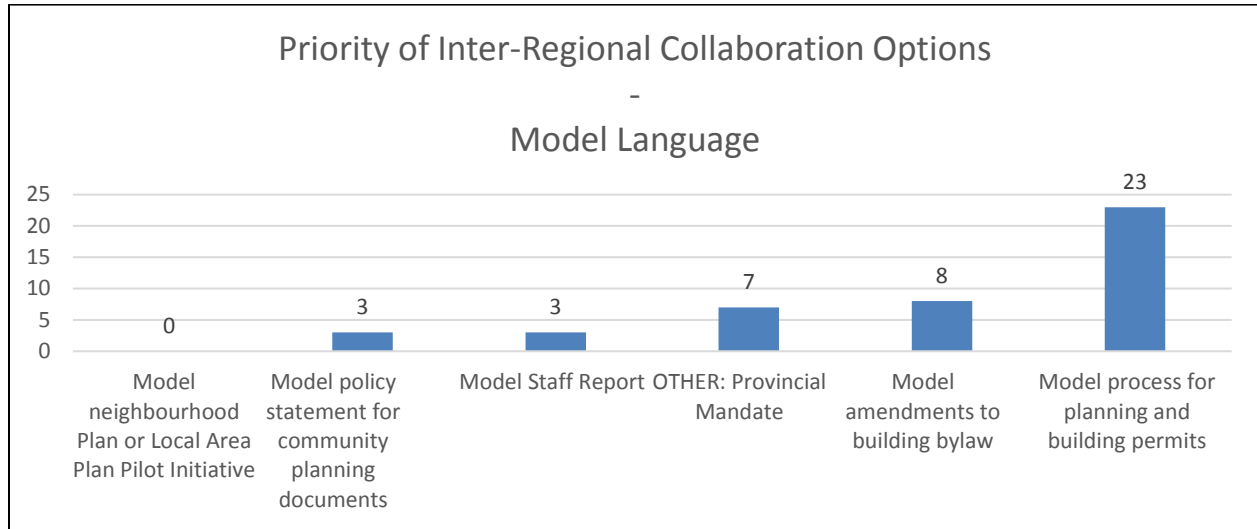
- Provide a local government perspective (New Westminster, Victoria, Saanich) on preparing to implement the BC Energy Step Code
- Review a range of options and opportunities for encouraging, incentivizing or adopting the BC Energy Step Code
- Summarize the local government planned adoption of the BC Energy Step Code (as of date of workshop)
- Summarize the range of industry and stakeholder positions on the BC Energy Step Code
- Introduce and summarize the BC Energy Step Code – A Best Practices Guide for Local Governments
- Introduce the BC Energy Compliance Report – Part 9 Buildings
- Facilitate a working discussion on barriers, policy considerations, training needs, implementation options, regional collaboration, task leaders and timelines
- Provide opportunities to ask questions on the BC Energy Step Code

10:30 - 10:40 AM	WELCOME, INTRODUCTION, REVIEW OF WORKING SESSION OBJECTIVES
10:40 - 11:50 AM	PRESENTATION: INTRODUCTION TO CRD PROGRAM & THE BC ENERGY STEP CODE <ul style="list-style-type: none"> ○ Speaker: Nikki Elliott, CRD Climate Action Program ○ Speaker: Peter Sundberg, Executive Director City Green, BC Energy Step Code Technical Sub-Committee PRESENTATION: LOCAL GOVERNMENT PERSPECTIVES: THE BC ENERGY STEP CODE <ul style="list-style-type: none"> ○ Speaker: Norm Connolly, Community Energy Manager - City of New Westminster, BC Energy Step Code Council Member & Co-Chair of the Technical Sub-Committee ○ Speaker: Nikki Elliott, CRD Climate Action Program – Overview of Regional Building Industry Feedback Received to Date ○ Speakers: Rebecca Newlove, District of Saanich and Devon Miller, City of Victoria - Overview of BC Energy Step Code Policy Considerations and Timelines.
	WORKING LUNCH SERVED
12:10 - 12:30 PM	PRESENTATION: SUMMARY OF A BEST PRACTICES GUIDE FOR LOCAL GOVERNMENTS & INTRODUCTION TO THE BC ENERGY COMPLIANCE REPORT - PART 9 BUILDINGS <ul style="list-style-type: none"> ○ Speaker: Peter Sundberg
	FACILITATED BREAK-OUT GROUP QUESTIONS AND DISCUSSION
12:30 - 1:50 PM	<p>Attendees were given the opportunity to identify and discuss a number of topics related the BC Energy Step Code in their community. Topics included: barriers, training, compliance, processes, incentives and readiness. Attendees then participated in an exercise to identify priority areas for regional coordination. Results are below.</p> <ul style="list-style-type: none"> ○
1:50 PM	CLOSING STATEMENTS

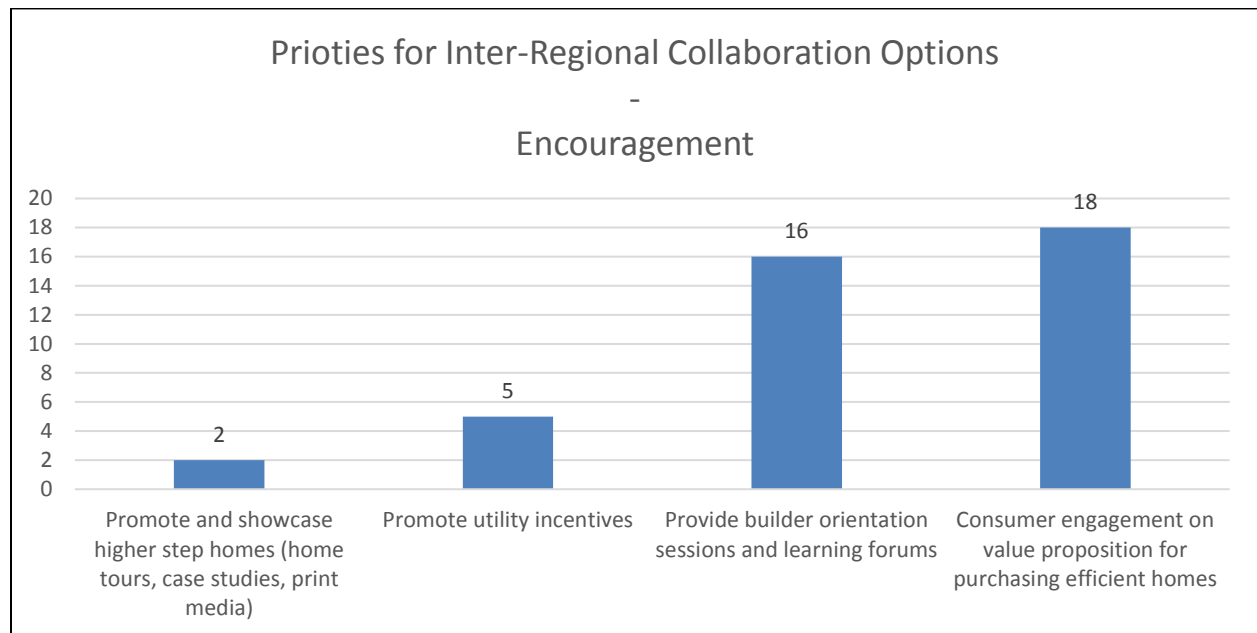
Workshop Break-Out – Ranking and Prioritizing Answers for Regional Collaboration Opportunities

Participating staff were provided with two sticky dots for each Break-Out Category (for example Model Language). They were asked to stick the dots in the line item that they felt was most important or had the highest level of priority. If an option was not provided they were asked to write in a new option in the 'other' row. All numbers represent a sticky dot vote.

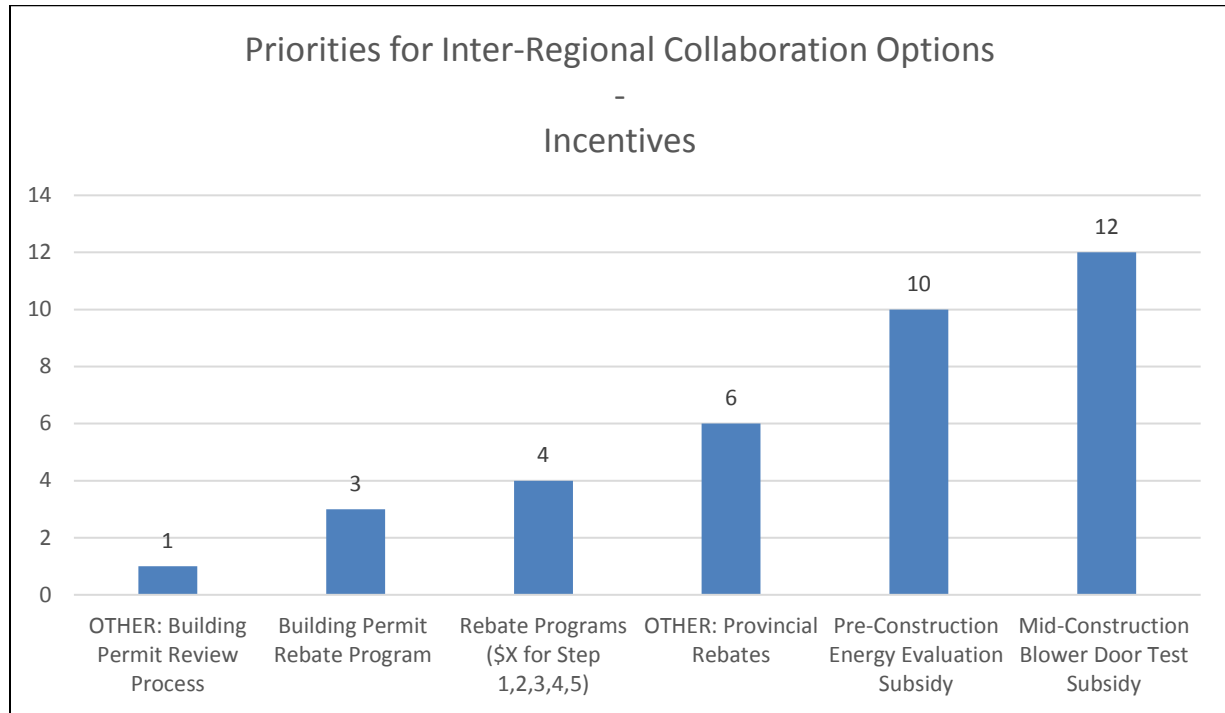
Category 1 – Model Language



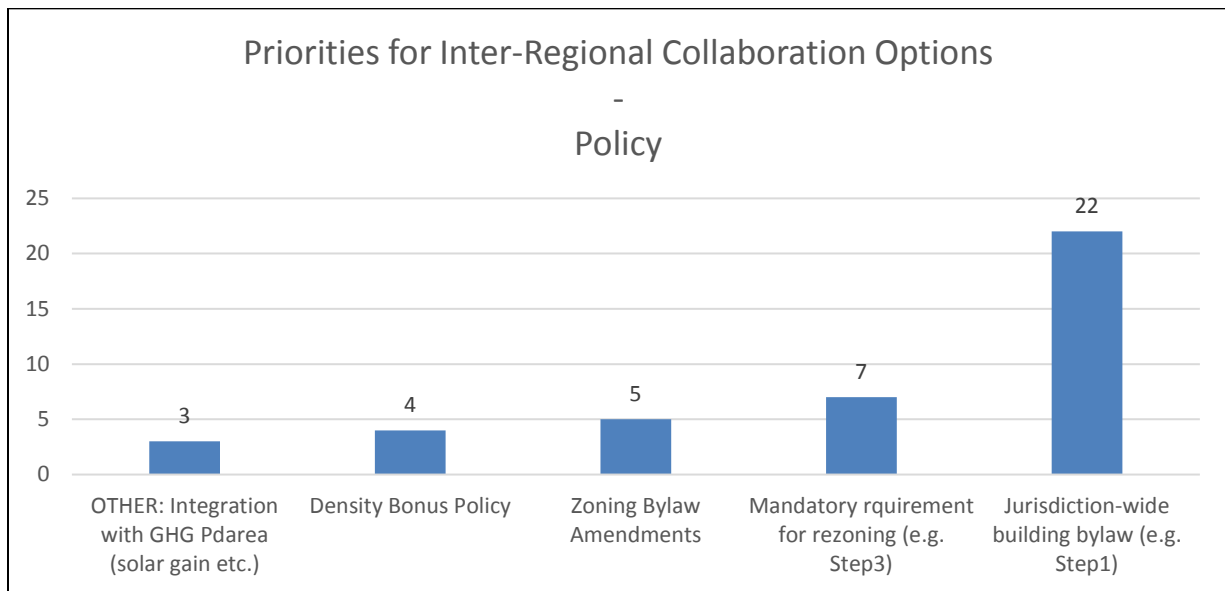
Category 2 – Encouragement



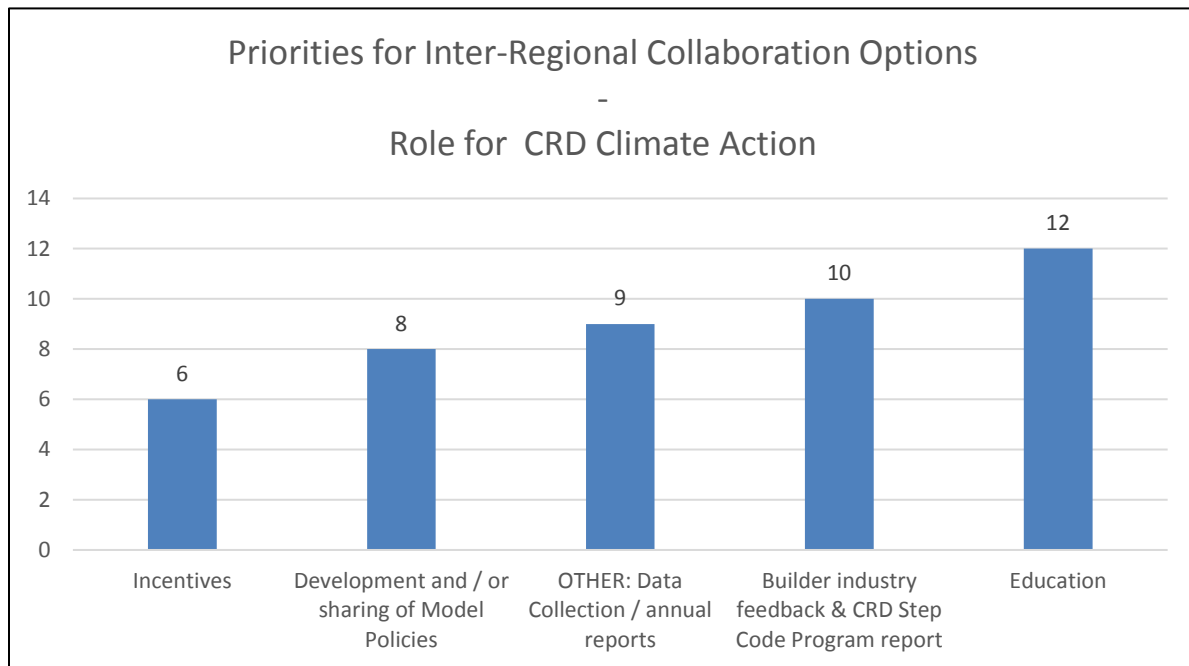
Category 3 – Incentives



Category 4 – Policy



Category 5 – Role for CRD Climate Action



Workshop Attendance

Participants (29 staff, 3 presenters, 2 staff) = **31**

LGs in the Capital Region = **13**

Organization	Representatives
Central Saanich	2
Colwood	Regrets
Electoral Areas (CRD)	2
Esquimalt	1
Highlands	Regrets
Juan de Fuca Electoral Area (CRD)	3
Langford	3
Metchosin	1
North Saanich	1
Oak Bay	2
Saanich	3
Salt Spring Island Electoral Area	1
Sidney	2
Sooke	Regrets
Victoria	2
View Royal	2
Cowichan Valley Regional District	1
City of New Westminster	1 (presenter)
CRD Climate Action	2 (1 presenter and 1 staff)
City Green Solutions	2 (1 presenter and 1 staff)

Appendix 4: REALTORS® Selling the Benefits of Efficient Homes Workshop & Tour

Workshop Agenda

SELLING THE BENEFITS OF ENERGY EFFICIENT HOMES, WITH ENERGY EFFICIENT HOME BUS TOUR

Date/Time: December 8th

Location: Victoria Real Estate Board

Format: 1 Hour Presentation and Discussion/2 Hour Bus Tour of Energy Efficient Homes

Attend this interactive session to:

- Learn how to explain and sell the features and benefits of energy efficient products and homes in easy to understand language for home buyers and sellers.
- Selling a fixer upper? Learn how to connect home buyers with all the current home energy improvement rebates, including CMHC and Genworth Mortgage Loan Insurance rebates, and community-specific rebates throughout the Capital Region.
- Learn about the full value of an energy evaluation for home buyers and sellers. Learn about what happens in an energy evaluation, how to read a home energy label and how to help your clients find an energy advisor.
- Learn what the BC Energy Step Code is and how to explain it to home buyers in the market for a new home.
- Participate in bus tour of energy efficient homes:
 - **Net-Zero Retrofit Home in Vic West:** See an 1890's home that has been retrofitted to achieve Net Zero Energy Use. Retrofit measures include: high performance windows R6; insulation upgrades; air sealing; mini split heat pump for heating; heat pump for domestic hot water, and a 4.2 kW solar photovoltaic system
 - **New Construction Passive House Duplex in Quadra/Hillside:** See a newly constructed home built to Passive House Standards.

Presenters:

- Peter Sundberg, City Green Solutions
- Jack Meredith, Homeowner
- Reed Cassidy: Adapt Energy Advising

Workshop Attendance

Attendance

Participants (31 REALTORS, 2 presenters, 3 tours guides; 1 staff) = **37**