2019 BC Energy Step Code Local Government Survey

Prepared by: **BC Housing's Research Centre and the Community Energy Association**

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BC HOUSING RESEARCH CENTRE

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Community Energy Association

Community Energy Association (CEA) supports local governments in developing and implementing community e nergy and emissions plans (also known as climate action plans, community energy plans, and local action plans). They also help local governments with carbon neutral action plans for their operations. CEA led the survey design and distribution of the 2019 BC Energy Step Code Local Government Survey.

ACKNOWLEDGEMENTS

BC Housing and CEA gratefully acknowledge BC Hydro, Fortis BC, and the Real Estate Foundation of BC for supporting this study. We would also like to sincerely thank all the local government staff who shared their perspectives on the BC Energy Step Code through this survey.

BC Hydro Power smart

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real estate foundation BRITISH COLUMBIA

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RESEARCH HIGHLIGHTS

- One hundred and fifteen respondents from 76 local governments (municipalities and regional districts) responded to the March 2019 BC Energy Step Code Local Government Survey.

- Knowledge of the BC Energy Step Code has increased across the province since 2017. In the 2019 survey:
    - 88 per cent of survey respondents rated their local government as having moderate, good or excellent knowledge of the BC Energy Step Code, compared to 82 per cent in 2018, and 61 per cent in 2017.
    - 93 per cent of all survey respondents reported having watched or participated in an information session on the BC Energy Step Code, compared with 91 per cent in 2018, and 66 per cent in 2017.
    - 83 per cent of all respondents reported having accessed the Best Practices Guide for Local Governments, which was published in 2017, the same percentage of respondents as in 2018 (83 per cent).

- Implementation of the BC Energy Step Code is underway across the province. Fourteen local governments reported implementing the BC Energy Step Code and 17 local governments reported they were in the process of implementing at the time of the survey.

- Thirty-three local governments indicated they currently use policy tool(s) to encourage, incentivize or require BC Energy Step Code adoption for Part 9 buildings, while 23 local governments indicated they currently use policy tool(s) to encourage, incentivize or require BC Energy Step Code adoption for Part 3 buildings.

- Twenty-five local governments reported that a number of builders and developers in their communities have experience working with energy advisors. The proportion of builders and developers varied substantially by region. Information on local Energy Advisors was identified as the top ranked barrier to local governments adopting the BC Energy Step Code.

- Fourteen local governments reported that Part 9 units were built in their communities in the past year under the BC Energy Step Code, while one local government reported that Part 3 units were built under the BC Energy Step Code.

- Identified barriers to using the BC Energy Step Code for local governments, the real estate community, and builders and developers were similar in 2019 to 2018 and 2017, however the percentage of survey respondents that rated barriers as "high barrier" decreased for most barriers compared to previous years, indicating that comfort with the BC Energy Step Code has increased.

- Survey respondents were asked to indicate what tools and resources would help their local government implement the BC Energy Step Code or make their local government more likely to adopt the BC Energy Step Code in the future. The trends were similar to 2018 and 2017, with training, implementation support, and resources to address information gaps identified as important.

INTRODUCTION

RESEARCH PURPOSE AND METHODOLOGY

This report presents information collected through the BC Energy Step Code Local Government Survey. This survey is conducted annually in March of each year (beginning in 2017) and is administered by the Community Energy Association.

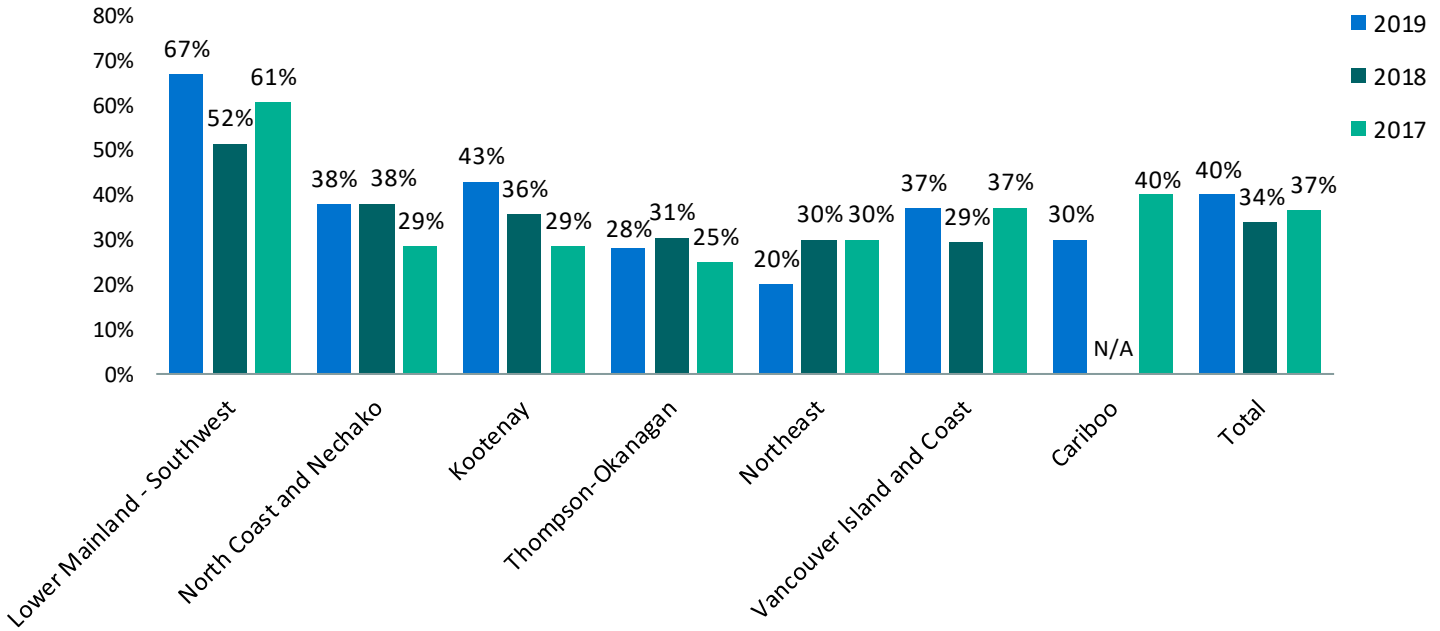
The purpose of this survey is to determine the current level of knowledge of the BC Energy Step Code that exists in communities across British Columbia, their status in adopting the BC Energy Step Code, and the number of residential units that have been built to the BC Energy Step Code. It also includes information on the barriers to adoption and the resources that would assist local governments in implementing the BC Energy Step Code in their communities. Survey results include data on new construction for both Part 3 and Part 9 buildings.

Seventy-six local governments responded to the survey in 2019, a higher response rate than the 2018 survey (64 local governments).[1] These local governments include both municipalities and regional districts and represent over 40 per cent of the local governments in B.C. governed by the BC Building Act, and 75 per cent of B.C.'s population (not including the City of Vancouver).[2] Seventeen local governments responded to the survey in all three years.

The Lower Mainland-Southwest region had the highest response rate in 2019: 67 per cent of local governments in the region responded to the survey in 2019, an increase from 52 per cent in 2018. Twenty-nine per cent of all local governments that responded to the survey in 2019 are located in the Lower Mainland-Southwest region.

Approximately 30-40 per cent of local governments in other regions of the province responded to the survey in 2019, with the exception of the Northeast region, which had 20 per cent of local governments respond to the survey. See Figure 1 for a map of these regions.

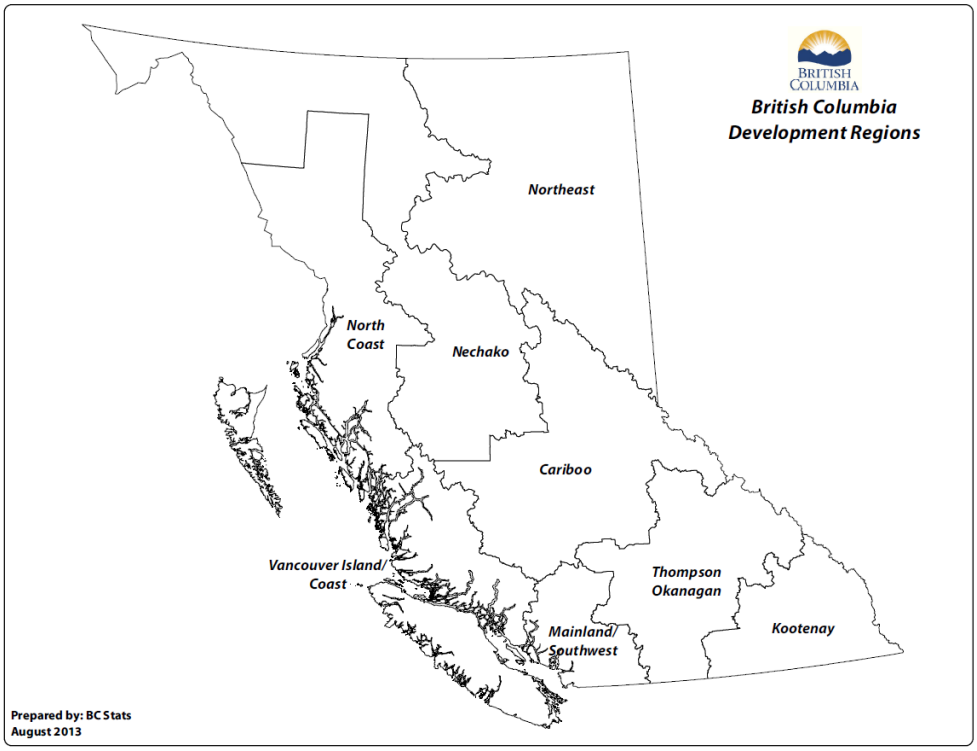
Chart 1. Percentage of Local Governments in each Region that Responded to the Survey, 2017 to 2019



[1] There were 95 responses to the 2017 survey. The higher number of useable responses in 2019 is in part because partial responses could be included in 2019 because of a modification to the survey.

[2] Government of British Columbia. Ministry of Community, Sport and Cultural Development. (May 5, 2017). Retrieved from: http://www.cscd.gov.bc.ca/lgd/infra/municipal_stats/municipal_stats2015.htm

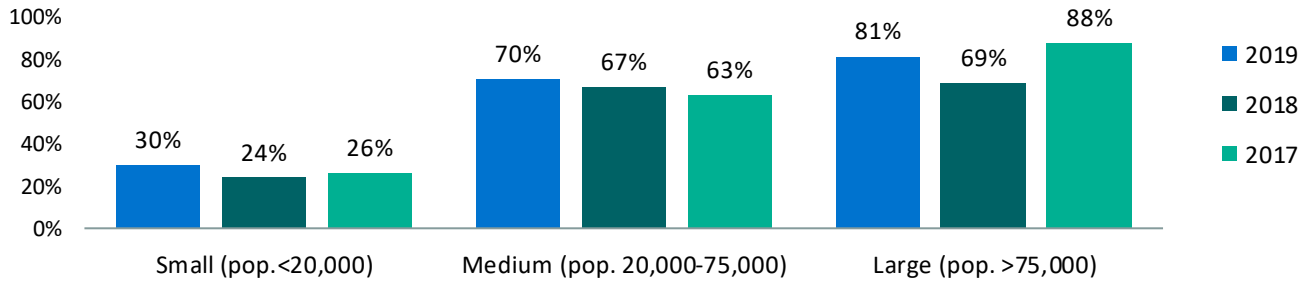
Figure 1. Map of British Columbian Regions Used in this Report[3]



There are more small communities (with populations under 20,000) than medium or large-sized communities in the province of B.C. and the majority of local governments that responded to the survey in 2019 were small communities. Thirty per cent of all small communities in the province responded to the survey in 2019, compared to 24 per cent in 2018, and 26 per cent in 2017.

Eighty-one per cent of large-sized communities (populations >75,000) responded to the survey in 2019, compared to 69 per cent in 2017.[4] The per cent of medium-sized communities that responded to the survey has increased slightly since 2017, from 63 to 70 per cent.

Chart 2. Percentage of Local Governments of each Size in the Province that Responded to the Survey, 2017 to 2019

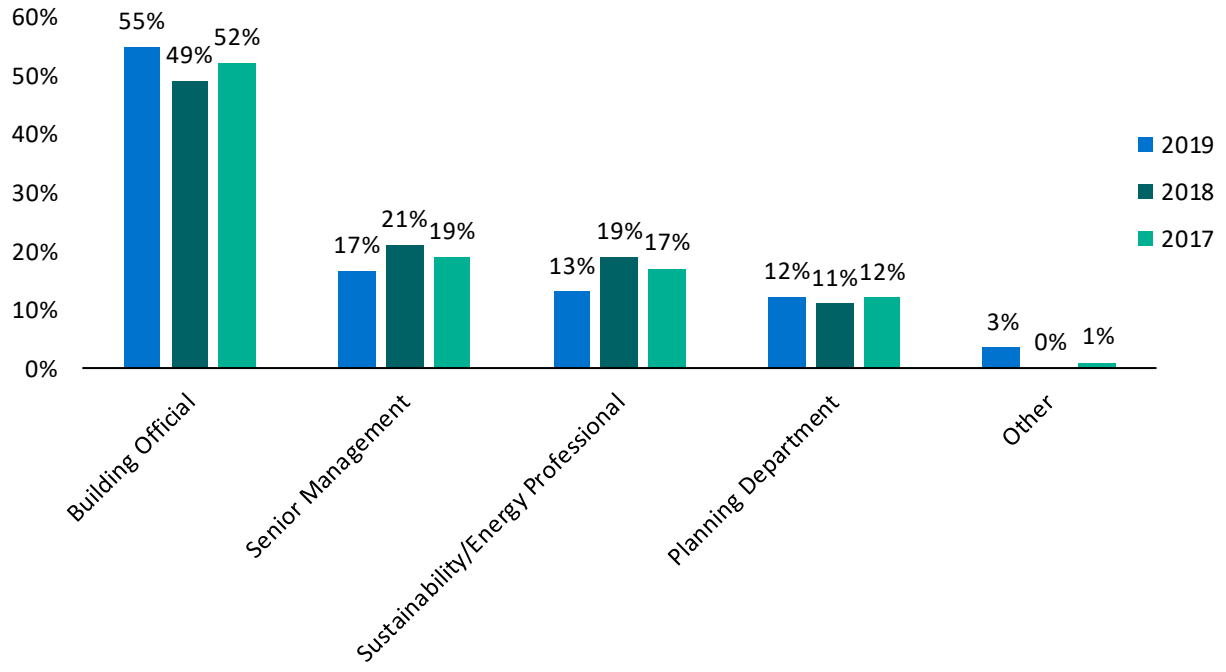


[3] Government of British Columbia. (June 14, 2017). Retrieved from: http://www2.gov.bc.ca/gov/content/data/geographic-data-services/land-use/administrative-boundaries/census-boundaries

[4] For Regional Districts, only the unincorporated areas were used in this calculation.

Between one and five staff members responded to the survey from each of the 76 local governments (115 respondents in total). Building officials represented 55 per cent of respondents, followed by senior management (17 per cent), sustainability/energy professionals (13 per cent), and planning department staff (12 per cent). The breakdown of staff members by position is similar to the 2018 and 2017 surveys, as illustrated in Chart 3.

Chart 3. Percentage of Survey Respondents by Position, 2017 to 2019



Under the *Homeowner Protection Act*, all new homes in the province must be registered with BC Housing. The new homes registry data measures residential construction activities at the beginning of a project before construction starts. Registered new homes data are a leading indicator of housing and economic activity in B.C.

In 2018, over 69 per cent of all new housing registrations in the province occurred in the communities that responded to the 2019 survey, indicating that the survey reached areas of the province where a significant amount of housing development is taking place.[5,6]

[5] These housing registrations include multi-unit, single-detached, and purpose-built rental buildings.

[6] BC Housing New Homes Registration Data, 2018

MOVING FORWARD WITH THE BC ENERGY STEP CODE

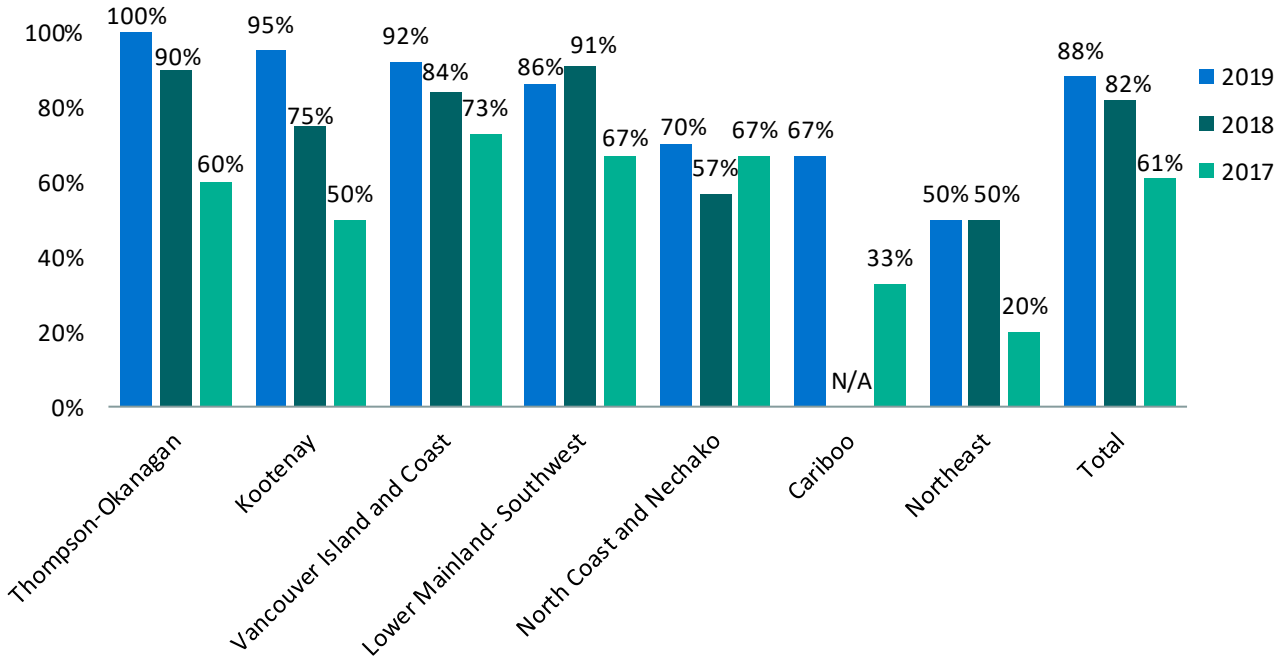
LOCAL GOVERNMENT KNOWLEDGE OF THE BC ENERGY STEP CODE

General Knowledge

In the 2019 survey, 88 per cent of survey respondents rated their local government as having moderate, good or excellent knowledge of the BC Energy Step Code, compared to 82 per cent in 2018, and 61 per cent in 2017. The percentage of respondents who indicated that their local government had poor or no knowledge of the BC Energy Step Code dropped to 12 per cent in 2019, from 39 per cent in 2017.

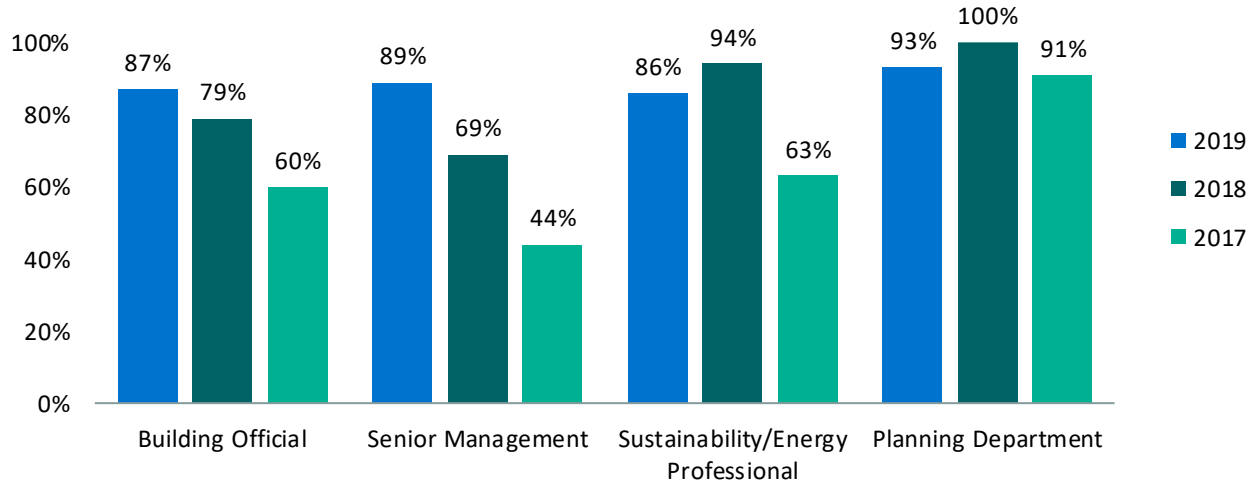
Respondents from the Thompson-Okanagan (100 per cent), Kootenay (95 per cent), and Vancouver Island and Coast (92 per cent) regions were most likely to indicate that their local government had moderate to excellent knowledge of the BC Energy Step Code. A higher proportion of respondents in all regions reported that their local government had moderate to excellent knowledge of the BC Energy Step Code than in 2017.

Chart 4. Percentage of Survey Respondents Indicating their Local Government has Moderate/Good/Excellent Knowledge of the BC Energy Step Code by Region, 2017 to 2019



Both building officials and senior managers increased their confidence in their local government's knowledge significantly since 2018.

Chart 5. Percentage of Survey Respondents Indicating their Local Government has Moderate/Good/Excellent Knowledge of the BC Energy Step Code by Staff Position, 2017 to 2019

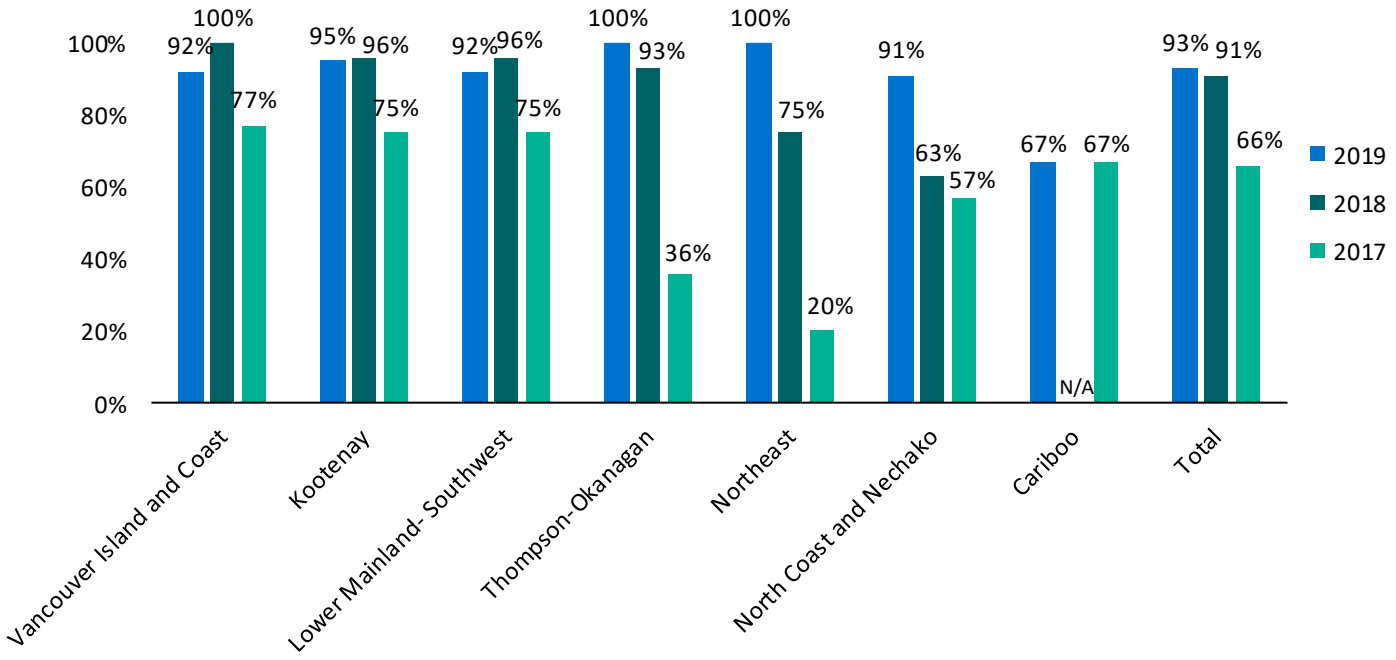


Information Sessions

Ninety-three per cent of all survey respondents reported having watched or participated in an information session on the BC Energy Step Code in the 2019 survey, compared with 91 per cent in 2018, and 66 per cent in 2017.

Regional differences were apparent for those who reported attending a BC Energy Step Code information session: 100 per cent of Thompson Okanagan and Northeast region respondents reported having attended an information session, compared with 67 per cent of Cariboo respondents. The percentage of survey respondents who had attended an information session remained fairly stable across all regions compared to 2018, with the exception of the Northeast and North Coast and Nechako regions which saw an increase in 2019 compared to 2018.

Chart 6. Percentage of Survey Respondents by Region Who Attended a BC Energy Step Code Information Session, 2017 to 2019

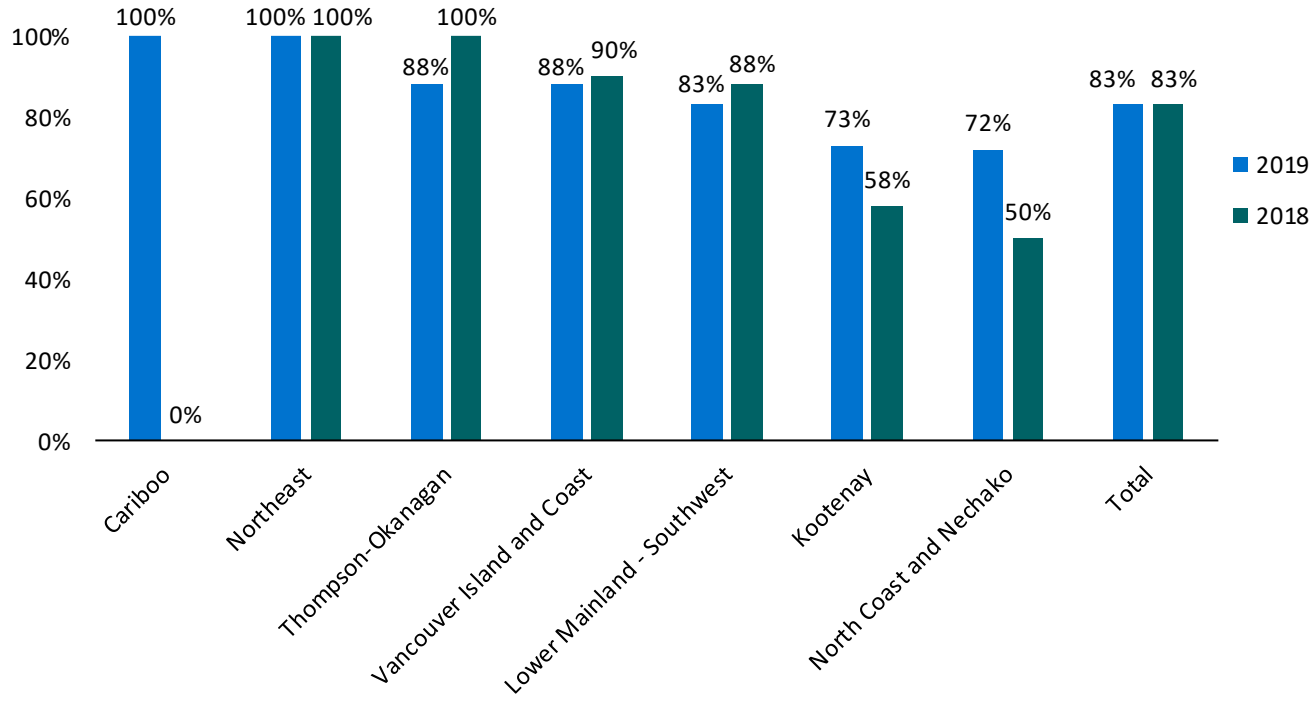


The Best Practices Guide for Local Governments

"BC Energy Step Code: A Best Practices Guide for Local Governments" was published in 2017 on the BC Energy Step Code Council website and survey results indicate that it has been well utilized. Eighty-three per cent of all respondents reported having accessed this Guide in 2019, the same percentage as in 2018.

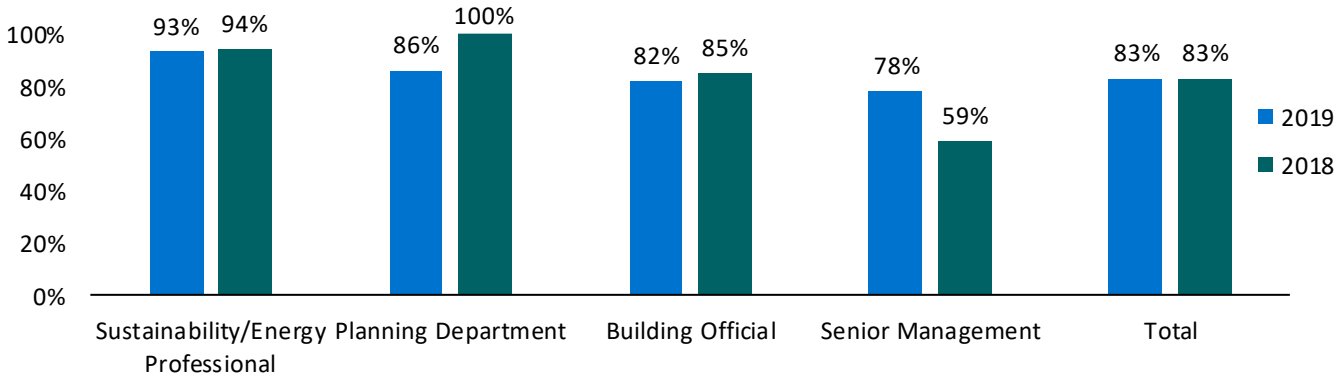
The Best Practices Guide for Local Governments was accessed by the highest percentage of respondents in the Cariboo and Northeast regions (100 per cent), followed by the Thompson-Okanagan and Vancouver Island and Coast regions (88 per cent).

Chart 7. Percentage of Survey Respondents by Region Who Accessed the Best Practices Guide for Local Governments[7]



Sustainability/energy professionals were most likely to have accessed the Guide (93 per cent), followed by staff in planning departments (86 per cent), and building officials (82 per cent). Seventy-eight per cent of senior managers reported having accessed the document, an increase from 59 per cent in 2018.

Chart 8. Percentage of Survey Respondents by Staff Position Who Accessed the Best Practices Guide for Local Governments



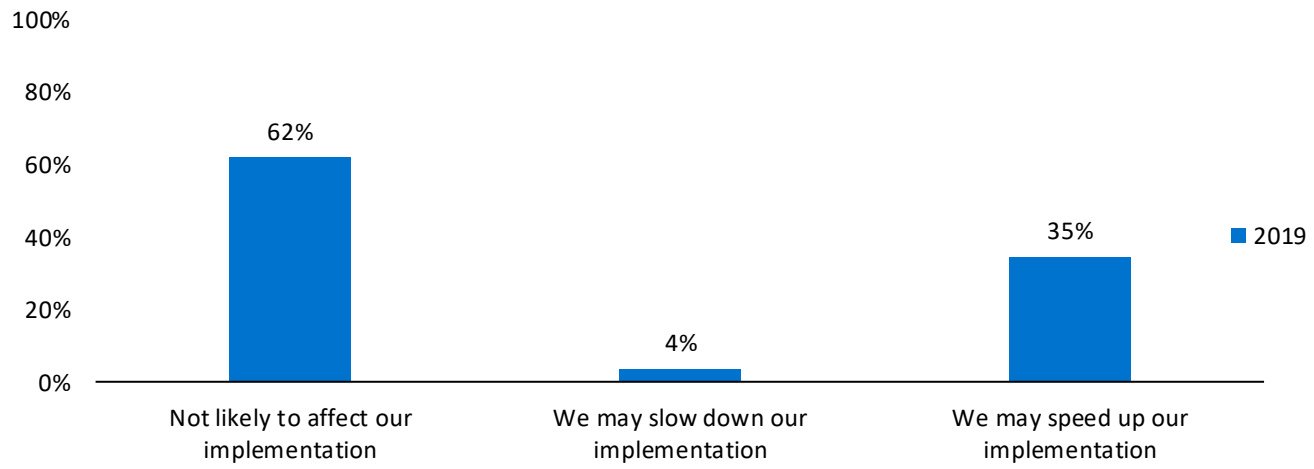
[7] This question was asked for the first time in the 2018 survey.

IMPLEMENTATION OF THE BC ENERGY STEP CODE

In the 2019 survey, respondents were asked to comment on whether they were aware of the provincial policy outlined in CleanBC that establishes deadlines for the government's adoption of BC Energy Step Code metrics in the base building code. Eighty-three per cent (83 per cent) of local governments indicated that they were aware of the Provincial policy.

Thirty-five per cent (35 per cent) of local governments indicated that they may speed up their implementation based on the CleanBC Plan, while the majority of local governments indicated that these deadlines would not affect their implementation.

Chart 9. Percentage of Local Governments and the Effect of CleanBC on their BC Energy Step Code Implementation



Survey results demonstrate that implementation of the BC Energy Step Code is underway across the province. The implementation status discussed in the following pages is from the time of the survey and this information will change as more communities adopt the BC Energy Step Code.

The term "implementation" was not defined in the 2019 BC Energy Step Code Local Government Survey and was open to interpretation by local government staff filling in the survey. Depending on the staff member's interpretation, implementation may mean referencing the BC Energy Step code in a voluntary, incentive-based program, or referencing it in a community-wide requirement.

In addition, this survey only collects data on local governments who responded to the survey. For a more complete picture of which local governments are consulting on the BC Energy Step Code, using the BC Energy Step Code as part of a community-wide requirement, or referencing it in their voluntary programs, visit the Energy Step Code council website: https://energystepcode.ca/implementation_updates/

Fourteen local governments that responded to the 2019 BC Energy Step Code local government survey indicated that they have implemented the BC Energy Step Code. Nine of these local governments have implemented for both Part 3 and Part 9 buildings, and five have implemented for only Part 9 buildings.

Sixteen local governments were in the process of implementing the BC Energy Step Code at the time of the 2019 survey. Seven of these local governments are implementing for both Part 3 and Part 9 buildings. The following section of this report has been divided into results for Part 9 and Part 3 buildings. [8]

Part 9 Buildings

- **Implemented**: Fourteen local governments (18 per cent of local government survey respondents) indicated they had implemented the BC Energy Step Code for Part 9 buildings. This is an increase compared to 5 local governments in the 2018 survey. Seven of these local governments are located in the Lower Mainland-Southwest region of the province, three are located in the Vancouver Island and Coast region, and the remaining local governments are located in Kootenay and Thompson-Okanagan regions.
- **In Process**: Fifteen local governments (20 per cent) indicated they were in the process of implementing the BC Energy Step Code for Part 9 buildings. This is an increase compared to 14 local governments respondents in the 2018 survey. The majority of these local governments are located in the Lower Mainland-Southwest, Vancouver Island and Coast, and Kootenay regions of the province.
- **Interested**: Eighteen local governments (24 per cent) indicated they were interested in implementing the BC Energy Step Code for Part 9 buildings in the future, a decrease compared to 22 local governments in the 2018 survey. This decrease is expected as governments move ahead through the implementation process.
- **Not Interested**: Twenty local governments (26 per cent) indicated that they are not currently interested in implementing the BC Energy Step Code for Part 9 buildings. This is an increase compared to 14 local governments in the 2018 survey. Staff from 9 local governments did not answer this question for Part 9 buildings.

Table 1. Implementation Status by Number of Communities for the BC Energy Step Code for Part 9 Buildings

Region	Implemented	In Process	Interested	Not Interested	No Answer	Total Respondents
Kootenay	2	4	2	2	2	12
Lower Mainland-Southwest	7	6	3	4	2	22
North Coast and Nechako	0	0	3	5	0	8
Northeast	0	0	1	1	0	2
Thompson-Okanagan	2	1	5	1	1	10
Vancouver Island and Coast	3	4	4	6	2	19
Cariboo	0	0	0	1	2	3
Provincial Total	**14**	**15**	**18**	**20**	**9**	**76**

[8] Part 9: These buildings are three storeys or less and have a building area or "footprint" no more than 600 square metres (approximately 6,500 square feet). This category includes single-family homes, duplexes, townhomes, small apartment buildings, and small stores, offices, and industrial shops.
Part 3: These buildings are four storeys and taller and greater than 600 square metres in building area or "footprint". This category includes larger apartment buildings, condos, shopping malls, office buildings, hospitals, care facilities, schools, churches, theatres, and restaurants.

Part 3 Buildings

- **Implemented**: Nine local governments (12 per cent of local governments that responded to the survey) indicated they have already implemented the BC Energy Step Code for Part 3 buildings. This is an increase from 3 local governments in 2018. All of these local governments also indicated that they had implemented for Part 9 buildings. The majority of these local governments are located in the Lower Mainland-Southwest and Vancouver Island and Coast regions of the province.
- **In Process:** Ten local governments (13 per cent) indicated they are in the process of implementing the BC Energy Step Code for Part 3 buildings. Of these ten local governments, 5 are also in the process of implementing for Part 9 buildings. All of these local governments are located in the Lower Mainland-Southwest, Vancouver Island and Coast, and Kootenay regions of the province.
- **Interested:** Twenty-one local governments (28 per cent) indicated they are interested in implementing the BC Energy Step Code for Part 3 buildings in the future.
- **Not Interested:** Twenty-six local governments (34 per cent) responded that they have no current interest in implementing the BC Energy Step Code for Part 3 buildings. Ten local governments did not answer this question for Part 3 buildings.

Table 2. Implementation Status by Number of Communities for the BC Energy Step Code for Part 3 Buildings

Region	Implemented	In Process	Interested	Not Interested	No Answer	Total Respondents
Kootenay	1	0	7	2	2	12
Lower Mainland-Southwest	5	6	2	6	3	22
North Coast and Nechako	0	0	2	6	0	8
Northeast	0	0	1	1	0	2
Thompson-Okanagan	0	1	5	3	1	10
Vancouver Island and Coast	3	3	4	7	2	19
Cariboo	0	0	0	1	2	3
Provincial Total	**9**	**10**	**21**	**26**	**10**	**76**

When asked to briefly explain their implementation status and their local government's approach to implementation, survey respondents provided a variety of responses, including:

- Wanting to keep pace with changes to the B.C. Building Code;
- Involved in other initiatives on climate action;
- Feel that home owners and builders are willing to meet step codes for better performing homes;
- Worried about cost effectiveness during an affordable housing crisis;
- Feel that there is a lack of qualified professionals in their region to implement building design and testing; and
- Mayor and council not yet providing a directive on BC Energy Step Code.

POLICY TOOLS TO GUIDE ADOPTION OF THE BC ENERGY STEP CODE

Tables 3 and 4 show the number and percentage of local governments with respondents who indicated their local government currently uses or may use a specific policy tool or tools to encourage, incentivize, or require new buildings to be built to steps of the BC Energy Step Code.

Policy Tools to Incentivize/Require: These policy tools are mechanisms used by local governments to either require (e.g. through a bylaw) or incentivize (e.g. through a financial incentive) builders and developers to build to a certain step of the BC Energy Step Code.

Policy Tools to Encourage: These policy tools are "softer" tools aimed at encouraging builders and developers to build to a certain step of the BC Energy Step Code through assistance such as education, checklists, and leading by example.

Part 9 Buildings

Respondents from 33 local governments indicated they currently use policy tool(s) to encourage, incentivize or require BC Energy Step Code adoption for Part 9 buildings. [9]

- **Incentivize/Require:** Of the policy tools to incentivize or require, the highest number of local governments indicated that they currently use a bylaw requirement applicable to all new construction for Part 9 buildings (18 local governments), followed by an energy audit rebate or subsidy (14 local governments). This is an increase from the results of the 2018 survey, in which 2 local governments indicated they used a bylaw requirement, and 4 local governments indicated that they used an energy audit rebate or subsidy.

- **Encourage:** Of the policy tools to encourage, the highest proportion of local governments indicated that they currently use builder forums and educational outreach for Part 9 buildings (17 local governments), followed by checklists for use by building officials or the building community (12 local governments). This is an increase from the results of the 2018 survey, in which 11 local governments indicated they used builder forums and educational outreach, and 4 local governments indicated they used checklists for use by building officials or the building community.

[9] 24 local governments had multiple respondents to the survey. For questions regarding policy tools, their answers were amalgamated. If there were conflicting responses within a community, responses were selected from respondents whose job descriptions indicated they more most likely to have the most accurate information.

Table 3. Policy Tools to Encourage, Incentivize or Require Adoption of the BC Energy Step Code for Part 9 Buildings

	Part 9		
	# of Local Governments Currently Using	# of Local Governments Planning to Use/Might Use in Future	% of Local Governments Using or Planning to Use
Tool(s) to encourage, incentivize or require B.C. Energy Step Code adoption	**33**	**49**	**66%**
Tool(s) to Incentivize/require	29	45	62%
Tool(s) to encourage but not incentivize/require	4	4	4%
Did not indicate any policy tool(s) to be used for BC Energy Step Code adoption	**43**	**27**	**34%**
Total	**76**	**76**	**100%**
Policy Tools to Incentivize/Require	**# of Local Governments Currently Using**	**# of Local Governments Planning to Use/Might Use in Future**	**% of Local Governments Using or Planning to Use**
Bylaw requirement applicable for all new construction	18	28	61%
Energy audit rebate or subsidy	14	20	45%
Permit fee rebate	8	17	33%
Rezoning policy or rezoning consideration	9	14	30%
Condition related to density (e.g. density bonus)	4	11	20%
Bylaw requirement applicable for specific neighbourhoods or building types	4	11	20%
Priority permitting	2	9	14%
Development cost charge reduction	2	7	12%
Tax exemption or reduction	0	3	4%
Condition for sale of local government owned land	2	7	12%
Policy Tools to Encourage	**# of Local Governments Currently Using**	**# of Local Governments Planning to Use/Might Use in Future**	**% of Local Governments Using or Planning to Use**
Builder forums/educational outreach	17	23	53%
Checklists for use by building officials or building community	12	26	50%
Leading by example - building better local government buildings	3	18	28%

Part 3 Buildings

Respondents from 23 local governments indicated they currently use policy tool(s) to encourage, incentivize or require BC Energy Step Code adoption for Part 3 buildings. [10]

- **Incentivize/Require:** Of the policy tools to incentivize or require, the highest proportion of local governments indicated that they currently use a bylaw requirement applicable to all new construction for Part 3 buildings (12 local governments), followed by a rezoning policy or rezoning consideration (11 local governments). This is an increase from the results of the 2018 survey, in which 2 local governments indicated they used a bylaw requirement, and one local government indicated they used a rezoning policy or consideration.

- **Encourage:** Of the policy tools to encourage, the highest proportion of local governments indicated that they currently use builder forums and educational outreach for Part 3 buildings (9 local governments), followed by

[10] 24 local governments had multiple respondents to the survey. For questions regarding policy tools, their answers were amalgamated. If there were conflicting responses within a community, responses were selected from respondents whose job descriptions indicated they more most likely to have the most accurate information.

checklists for use by building officials or the building community (6 local governments). This is similar to the results of the 2018 survey, in which 8 local governments indicated they used builder forums and educational outreach, and one local government indicated they used checklists for use by building officials or the building community.

Table 4. Policy Tools to Encourage, Incentivize or Require Adoption of the BC Energy Step Code for Part 3 Buildings

	Part 3		
	# of Local Governments Currently Using	# of Local Governments Planning to Use/Might Use in Future	% of Local Governments Using or Planning to Use
Tool(s) to encourage, incentivize or require B.C. Energy Step Code adoption	**23**	**37**	**51%**
Tool(s) to Incentivize/require	22	32	46%
Tool(s) to encourage but not incentivize/require	1	5	5%
Did not indicate any policy tool(s) to be used for BC Energy Step Code adoption	**53**	**39**	**49%**
Total	**76**	**76**	**100%**
Policy Tools to Incentivize/Require	**# of Local Governments Currently Using**	**# of Local Governments Planning to Use/Might Use in Future**	**% of Local Governments Using or Planning to Use**
Bylaw requirement applicable for all new construction	12	21	43%
Rezoning policy or rezoning consideration	11	14	33%
Energy audit rebate or subsidy	6	10	21%
Bylaw requirement applicable for specific neighbourhoods or building types	3	7	13%
Condition related to density (e.g. density bonus)	3	12	20%
Permit fee rebate	5	14	25%
Priority permitting	2	5	9%
Tax exemption or reduction	0	2	3%
Development cost charge reduction	2	7	12%
Condition for sale of local government owned land	0	5	7%
Policy Tools to Encourage	**# of Local Governments Currently Using**	**# of Local Governments Planning to Use/Might Use in Future**	**% of Local Governments Using or Planning to Use**
Builder forums/educational outreach	9	17	34%
Checklists for use by building officials or building community	6	21	36%
Leading by example - building better local government buildings	2	16	24%

CURRENT EXPERIENCE WITH ENERGY ADVISORS AND BUILDING TO BC ENERGY STEP CODE

Twenty-five local governments reported that a number of builders and developers in their communities have experience working with energy advisors (76 per cent of the local governments that answered the question). The percentage of builders and developers in each community ranged from 3 per cent to 100 per cent.

Eight local governments reported that none of the builders and developers in their communities had experience working with energy advisors (24 per cent). Forty-three local governments did not answer this question.

The proportion of builders and developers reported to have experience working with energy advisors was highest in the Lower Mainland-Southwest, Vancouver Island and Coast, and Kootenay regions of the province (up to 100 per cent in some communities) and significantly lower in other regions of the province.

Table 5 below shows the estimated percentage of builders and developers that have experience working with energy advisors in surveyed communities.

Table 5. Estimated Percentage of Builders and Developers in a Community that have Experience Working with an Energy Advisor, 2018 and 2019

Percentage of Builders/Developers that have Experience Working with Energy Advisors	Number of Local Governments in 2019	Number of Local Governments in 2018
Builders with Experience	25	23
1-10%	7	9
11-20%	8	6
21-30%	2	1
30-50%	5	5
>50%	3	2
No Builders with Experience	8	8
Total Local Governments	**33**	**31**

UNITS BUILT TO THE BC ENERGY STEP CODE IN SURVEYED COMMUNITIES

Survey respondents were asked to estimate the number of residential units built in their communities over the past year, including units built to one of the steps of the BC Energy Step Code. In some communities with more than one respondent, the estimates provided by respondents differed.[11] Therefore, the following numbers should be a treated with caution and used only as a general guide to identify year-to-year trends.

Part 9 Buildings

Fourteen local governments reported that Part 9 buildings had been built in their communities in the past year that met the BC Energy Step Code (33 per cent of those who answered the question). Part 9 homes built to the BC Energy Step Code were distributed across the Upper (steps 3, 4, 5) and Lower Steps (steps 1 and 2) and totaled an estimated 104 units in fourteen communities. The majority of the reported units were built in the Lower Mainland-Southwest and Vancouver Island and Coast regions (79 per cent); however, the Kootenay region also saw a number of units (32 units), including units in the Upper Steps.

Table 6. Units Built to the BC Energy Step Code in Surveyed Communities in the Past Year for Part 9 Buildings

	# of Units	% of Units	# of Local Governments[12]	% of Local Governments
Units Built to Step 1	16	<1%	5	12%
Units Built to Step 2	17	<1%	3	7%
Units Built to Step 3	60	1%	6	14%
Units Built to Step 4	5	<1%	2	5%
Units Built to Step 5	6	<1%	4	10%
Total Units Built to Any Steps	104	2%	14	33%
Total Units Built to BC Building Code	4,970	98%	35	83%
Total All Units	**5,074**	**100%**	**42**	**100%**

Part 3 Buildings

One local government reported that Part 3 residential units were built to a step of the BC Energy Step Code in their community in the past year (<1 per cent of those who answered the question). This answer appeared to indicate a number of buildings instead of a number of units and the answer could not be used for analysis.

[11] 24 local governments had multiple respondents to the survey. If there was a disparity between respondents regarding units, the most complete answer was used.

[12] Local governments may have units built to more than one step.

BARRIERS TO ADOPTION OF THE BC ENERGY STEP CODE

The local government survey asked respondents to indicate what local governments, the building community, and the real estate community might perceive as barriers to adopting the BC Energy Step Code. The data presented below reflects the opinion of the local government staff who responded to the survey. Data on perceived barriers has not been gathered directly from the building or real estate community. Barriers with an asterisk (*) were either added to the multiple-choice question for the first time in 2018 or were modified in the 2018 survey. Respondents were asked to rank barriers on a scale of zero to five, with zero being "not a barrier" and five being a "very high barrier".

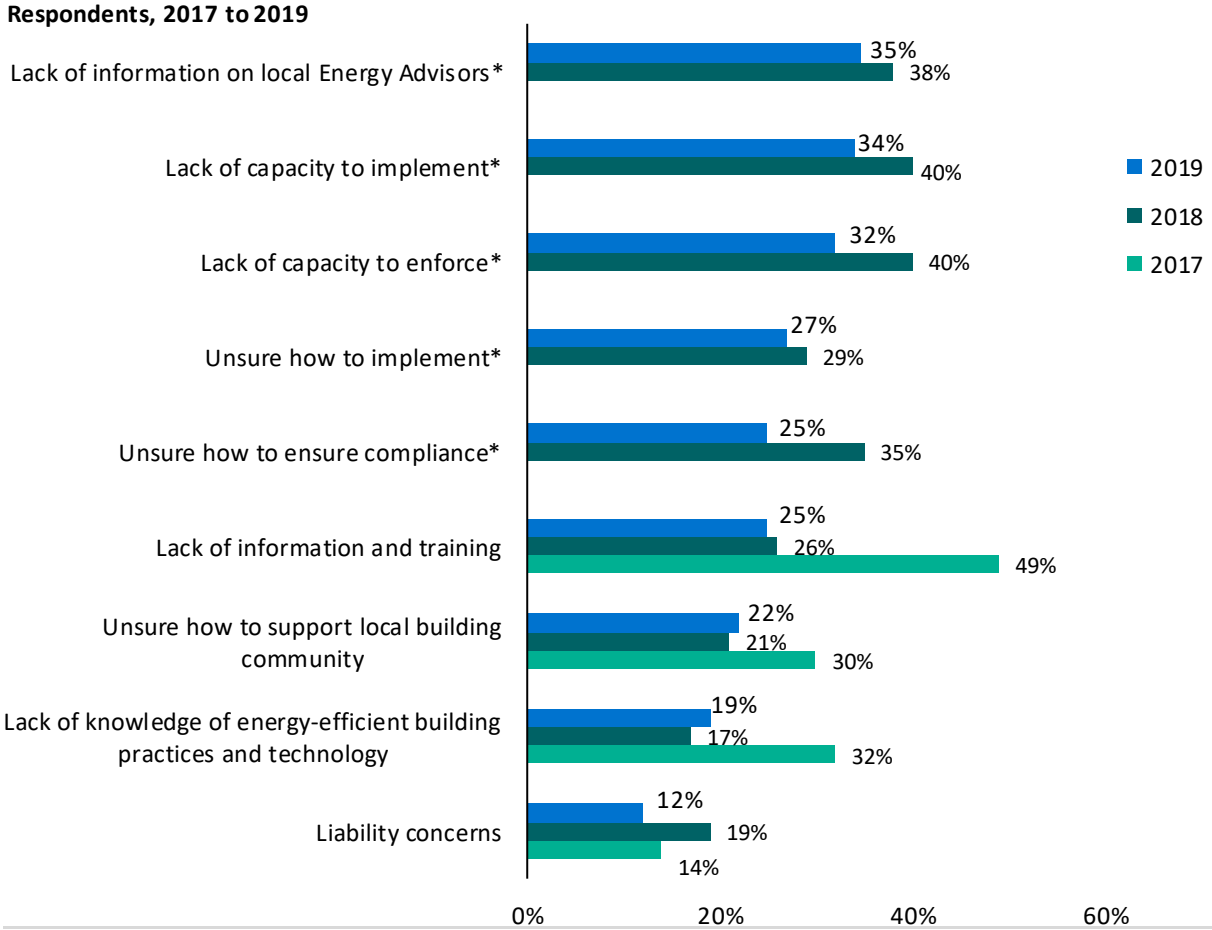
Barriers to Local Government

The barriers most likely to be rated as high (four or five on a scale of zero to five) for local governments were:

- Lack of information on local Energy Advisors (35%)
- Lack of capacity to implement (34%)
- Lack of capacity to enforce (32%)

Chart 10 shows the percentage of respondents ranking perceived barriers as "high barriers" to local governments. In 2019, all barriers were more likely to be ranked as "no barrier" and "low barrier", and less likely to be ranked as "high barrier". This suggests increasing comfort with the BC Energy Step Code among respondents. The barrier of "Lack of information and training" saw a substantial reduction in the percentage of respondents who indicated this was a high barrier, down to 25 per cent from 49 per cent in 2017.

Chart 10. Barriers Rated as "High Barrier" to Local Governments to Adopting the BC Energy Step Code by Percentage of Respondents, 2017 to 2019



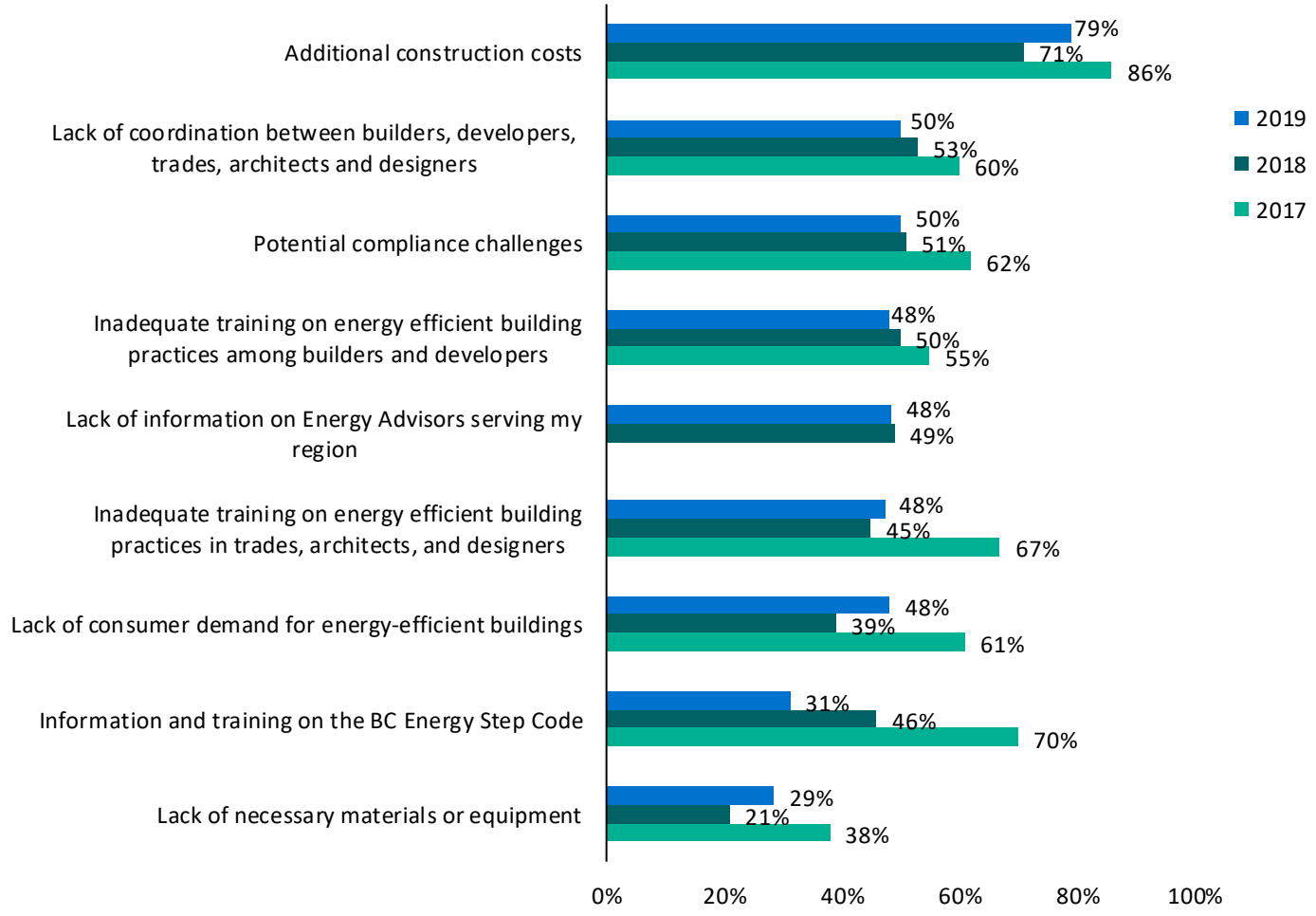
Barriers to the Building Community

The barriers most likely to be rated as high for the building community in the 2019 survey were:

- Additional construction costs[13] (79%)
- Lack of coordination between builders, developers, trades, architects and designers (50%)
- Potential compliance challenges (50%)
- Inadequate training on energy efficient building practices among builders and developers (48%)

Chart 11 shows the percentage of survey respondents ranking perceived barriers as "high barriers" to the building community. While the barriers most likely to be rated as high barrier in 2019 are similar to the 2018 and 2017 results, "information and training on the BC Energy Step Code" saw a substantial reduction in the percentage of respondents who indicated this was a high barrier for the building community, down to 31 per cent from 70 per cent in 2017.

Chart 11. Barriers Rated as "High Barrier" to the Building Community by Percentage of Respondents, 20



17 to 2019

[13] The Energy Step Code Costing Study was published in September 2017. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/reports/bc_energy_step_code_metrics_research_report_full.pdf

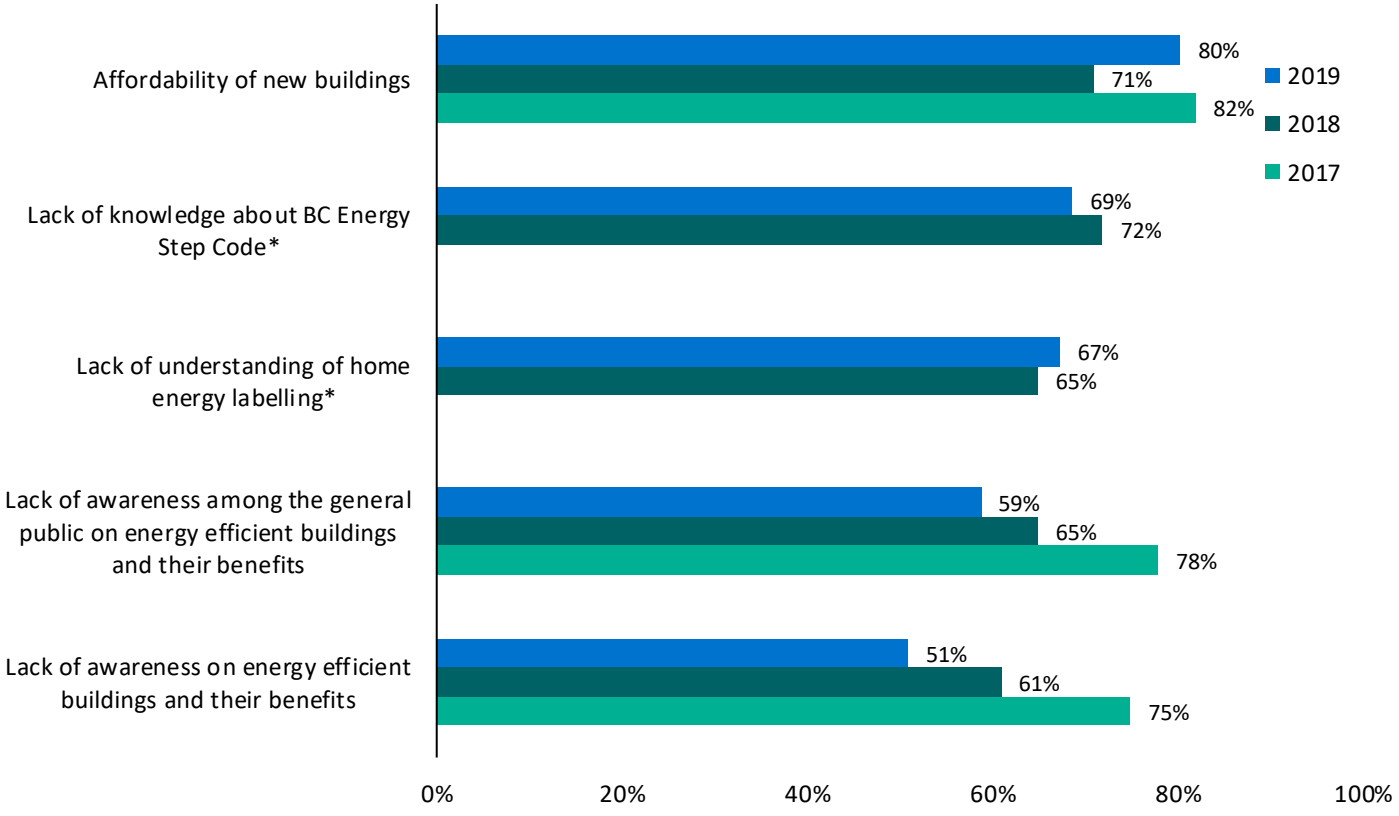
Barriers to the Real Estate Community

The barriers most likely to be rated as high for the real estate community were:

- Affordability of new buildings (80%)
- Lack of knowledge about BC Energy Step Code (69%)
- Lack of understanding of home energy labelling (67%)

Chart 12 shows the percentage of survey respondents ranking perceived barriers as "high barriers" to the real estate community. For most barriers, a lower or similar percentage of survey respondents ranked each barrier as "high barrier" in 2019 compared to 2018 and 2017. The exception was the "Affordability of new buildings" which increased from 71 per cent in 2018 to 80 per cent in 2019.

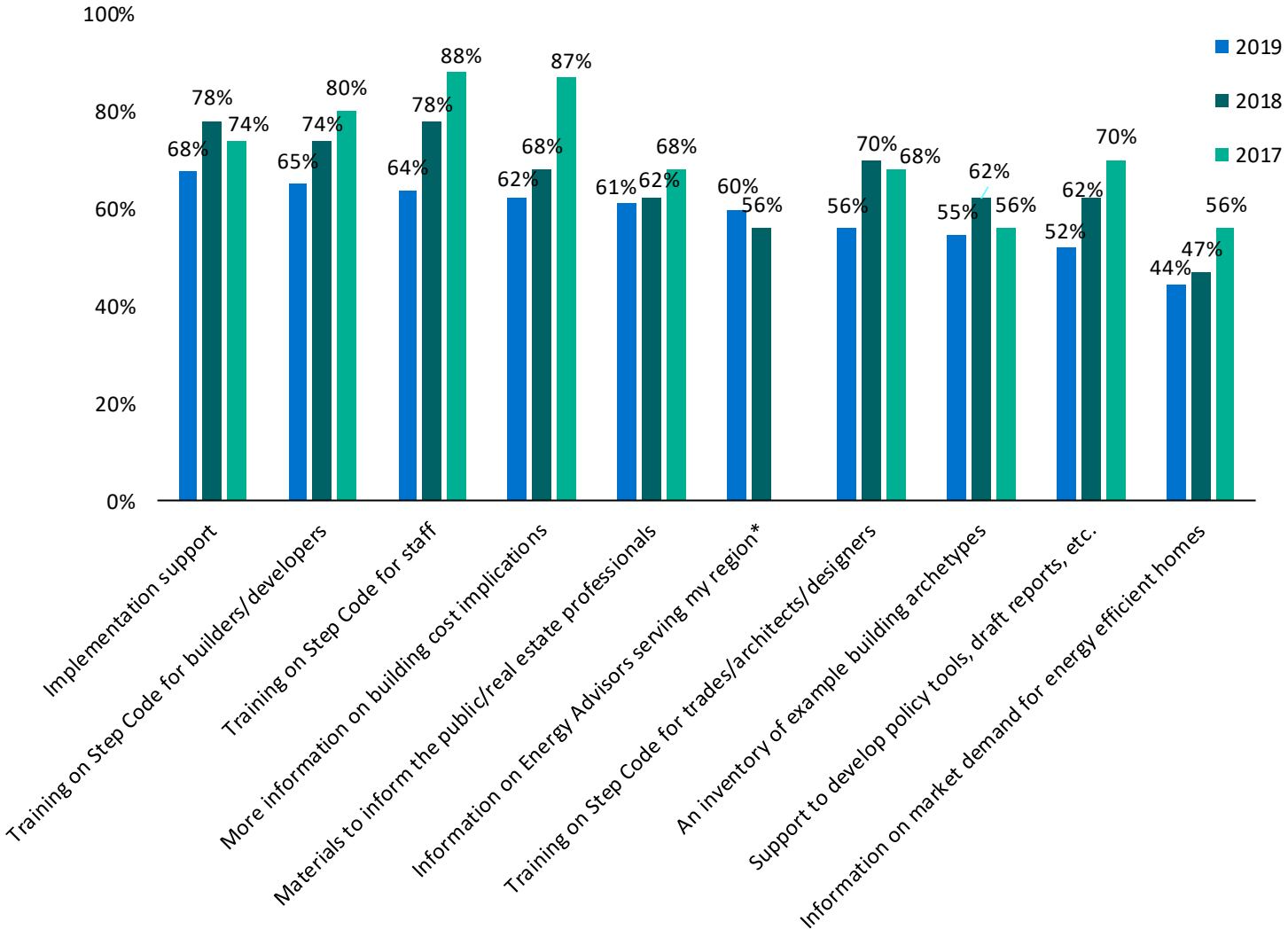
Chart 12. Barriers Rated as "High Barrier" to the Real Estate Community by Percentage of Respondents, 2017 to 2019



FACTORS FOR SUCCESS

Survey respondents were asked to indicate what tools and resources would make their local government more likely to adopt the BC Energy Step Code or make their current implementation of the BC Energy Step Code easier. Chart 18 shows which tools and resources were most often selected by survey respondents in 2017, 2018 and 2019.[14] Tables 7, 8 and 9 on the following pages show regional differences, differences by staff position, and differences by community size.

Chart 13. Resources That Would Assist Local Governments in Adopting/Implementing the BC Energy Step Code by Percentage of Respondents, 2017 to 2019



[14] Respondents were asked about "Information on local Energy Advisors" for the first time in 2018.

Training and Education

- **All Respondents:**
  - Sixty-five per cent of respondents indicated a desire for training on the BC Energy Step Code for builders and developers, while 56 per cent indicated they would like training for trades, architects and designers.
  - Sixty-four per cent of survey respondents reported that training on the BC Energy Step Code for staff would facilitate implementation or adoption, compared to 78 per cent in 2018, and 88 per cent in 2017.
- **Regional Differences:**
  - A higher proportion of respondents from the Vancouver Island and Coast and Kootenay regions indicated that they would like training opportunities for staff, compared to other regions.
  - Respondents in the Vancouver Island and Coast and Lower-Mainland Southwest regions were more likely to indicate that training for builders, developers, trades, architects and designers would assist their local government in adopting the BC Energy Step Code.
- **Differences by Staff Position:**
  - Sustainability and energy professionals and staff in the planning department were most likely to identify a need for training for staff compared to other staff positions.
  - Sustainability and energy professionals, senior managers, and staff in the planning department were also most likely to identify that training for builders and developers, and trades, architects and designers was important for implementation.

Addressing Information Gaps

- **All Respondents:**
  - Sixty-two per cent of survey respondents reported that they would like to see information on BC Energy Step Code building cost implications, compared to 68 per cent in 2018, and 87 per cent in 2017.[15]
  - Fifty-five per cent of survey respondents indicated that an inventory of example building archetypes that meet the BC Energy Step Code and information on market demand for energy-efficient homes would also be useful, a decrease compared to 62 per cent in 2018, and similar to 56 per cent in 2017.
- **Regional Differences:**
  - A higher proportion of respondents from the Vancouver Island and Coast region indicated that information on building cost implications would be useful compared to other regions.
- **Differences by Staff Position:**
  - Sustainability and energy professionals and staff in the planning department saw the most value in tools to address information gaps, with a higher percentage indicating information on building cost implications would be useful.
  - Planning department staff saw the most need for materials to inform the public and real estate marketing professionals about high-performance buildings, and an inventory of example building archetypes, compared to other staff positions.

[15] The Energy Step Code Costing Study was published in September 2017. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/reports/bc_energy_step_code_metrics_research_report_full.pdf

Implementation Support

- **All Respondents:**
  - Sixty-eight per cent of survey respondents agreed that implementation support, such as templates and checklists, would be useful in assisting adoption and implementation of the BC Energy Step Code, compared to78 per cent in 2018, and 74 per cent in 2017.
  - Fifty-two per cent of survey respondents reported that policy tools, draft reports, presentations to Council, and help with regional adoption of the BC Energy Step Code would be beneficial, compared to 62 per cent in 2018, and 70 per cent in 2017.
- **Differences by Staff Position:**
  - A higher proportion of respondents from the Thompson-Okanagan and Vancouver Island and Coast regions indicated that implementation support, such as templates and checklists would be useful, compared to other regions.
  - Respondents in the North Coast and Nechako and Vancouver Island and Coast regions were more likely to indicate that support to develop policy tools, draft reports and presentation to council would assist their adoption of the BC Energy Step Code, compared to other regions.
- **Differences by Staff Position:**
  - A higher proportion of staff in the Planning Department saw value in implementation support, such as templates and checklists, compared to other staff positions.
  - Senior Management and staff in the Planning Department were more likely to indicate that support to develop policy tools, draft reports, presentations to Council, etc. would help their local governments adopt or implement the BC Energy Step Code compared to other staff positions.

Table 7. Percentage of Survey Respondents Indicating Which Resources Would Assist Their Local Government in Adopting/Implementing the BC Energy Step Code, by Region[16,17]

	% of Survey Respondents					
Resources	All Regions (n=77)	Kootenay (n=14)	Lower Mainland-Southwest (n=23)	North Coast and Nechako (n=9)	Thompson-Okanagan (n=11)	Vancouver Island and Coast (n=17)
Training on BC Energy Step Code for staff	64%	71%	57%	56%	45%	82%
Implementation support, such as templates and checklists	68%	57%	65%	56%	73%	76%
Training on BC Energy Step Code for builders and developers	65%	64%	65%	67%	64%	71%
Training on BC Energy Step Code for trades, architects and designers	56%	57%	65%	33%	45%	65%
Information on BC Energy Step Code building cost implications	62%	64%	52%	56%	55%	82%
Support to develop policy tools, draft reports, presentations to Council, help regional adoption of the BC Energy Step Code, etc.	52%	57%	39%	67%	55%	67%
Materials to inform the public and real estate marketing professionals about high-performance buildings	61%	79%	61%	67%	55%	53%
An inventory of example building archetypes that meet the BC Energy Step Code	55%	64%	57%	33%	64%	53%
Information on Energy Advisors serving my region	60%	50%	57%	78%	64%	65%
Information on market demand for energy-efficient homes	44%	36%	48%	56%	45%	41%
My community is not interested in BC Energy Step Code at this time	6%	7%	9%	11%	0%	6%

[16] Thirty-eight survey respondents did not answer this question and are not included in the denominator (n=77).

[17] Due to a limited number of respondents for this question, the Cariboo and Northeast Regions are not separated out in this table.

Table 8. Percentage of Survey Respondents Indicating Which Resources Would Assist Their Local Government in Adopting/Implementing the BC Energy Step Code, by Staff Position[18]

Resources	All Staff Positions (n=77)	Building Officials (n=40)	Planning Department (n=12)	Senior Management (n=13)	Sustainability/ Energy Professionals (n=10)
Training on BC Energy Step Code for staff	64%	53%	92%	62%	80%
Implementation support, such as templates and checklists	68%	63%	83%	69%	70%
Training on BC Energy Step Code for builders and developers	65%	58%	67%	69%	80%
Training on BC Energy Step Code for trades, architects and designers	56%	48%	75%	46%	70%
Information on BC Energy Step Code building cost implications	62%	55%	83%	54%	70%
Support to develop policy tools, draft reports, presentations to Council, help regional adoption of the BC Energy Step Code, etc.	52%	43%	67%	62%	50%
Materials to inform the public and real estate marketing professionals about high-performance buildings	61%	58%	83%	62%	40%
An inventory of example building archetypes that meet the BC Energy Step Code	55%	43%	100%	38%	60%
Information on Energy Advisors serving my region	60%	48%	75%	69%	80%
Information on market demand for energy-efficient homes	44%	38%	67%	38%	50%
My community is not interested in BC Energy Step Code at this time	6%	10%	0%	0%	10%

[18] Thirty-eight survey respondents did not answer this question and are not included in the denominator (n=77).

Table 9. Percentage of Survey Respondents Indicating Which Resources Would Assist Their Local Government in Adopting/Implementing the BC Energy Step Code, by Size of Community[19],[20]

Resources	All Sizes (n=77)	Small (pop. <20,000) (n=40)	Medium (pop. 20,000-75,000) (n=15)	Large (pop. >75,000) (n=22)
Training on BC Energy Step Code for staff	64%	68%	53%	64%
Implementation support, such as templates and checklists	68%	70%	60%	68%
Training on BC Energy Step Code for builders and developers	65%	68%	73%	55%
Training on BC Energy Step Code for trades, architects and designers	56%	58%	47%	59%
Information on BC Energy Step Code building cost implications	62%	75%	67%	36%
Support to develop policy tools, draft reports, presentations to Council, help regional adoption of the BC Energy Step Code, etc.	52%	58%	60%	36%
Materials to inform the public and real estate marketing professionals about high-performance buildings	61%	75%	40%	50%
An inventory of example building archetypes that meet the BC Energy Step Code	55%	55%	60%	50%
Information on Energy Advisors serving my region	60%	63%	60%	55%
Information on market demand for energy-efficient homes	44%	53%	27%	41%
My community is not interested in BC Energy Step Code at this time	6%	5%	7%	9%

[19] Thirty-eight survey respondents did not answer this question and are not included in the denominator (n=77).

[20] For Regional Districts, only the unincorporated areas were used in this calculation.