2018 BC Energy Step Code Local Government Survey

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RESEARCH HIGHLIGHTS

- Eighty-three respondents from 64 local governments (municipalities and regional districts) responded to the March 2018 BC Energy Step Code Local Government Survey.

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

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

- Fifty local governments indicated they currently used or might use policy tool(s) to encourage, incentivize or require BC Energy Step Code adoption for Part 9 buildings, while 37 local governments indicated they currently used or might use policy tool(s) to encourage, incentivize or require BC Energy Step Code adoption for Part 3 buildings.

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

- Six local governments reported that Part 9 units were built in their communities in the past year under the BC Energy Step Code, while 2 local governments 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 2018 to 2017, however barriers were less likely to be rated “high” and more likely to be rated as “low” or “no barrier”, 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 between 2017 and 2018, with training, implementation support, and resources to address information gaps identified as important.

INTRODUCTION

RESEARCH PURPOSE AND METHODOLOGY

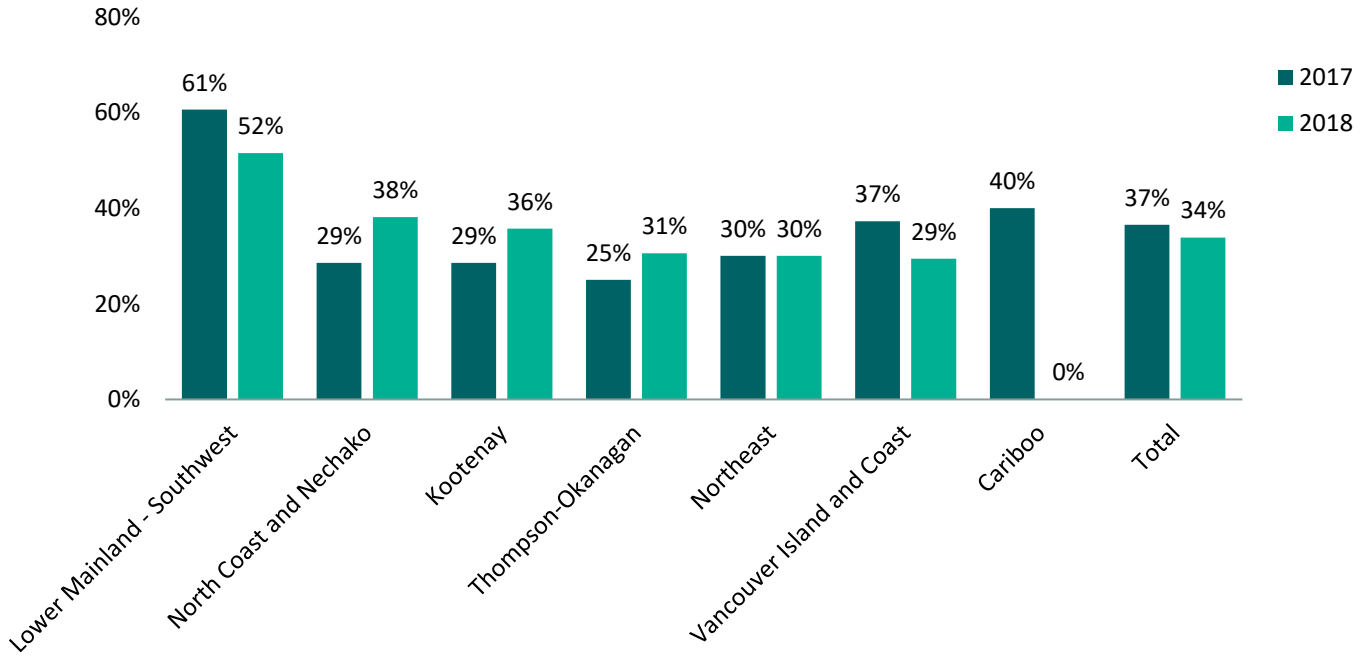
This report presents information collected through the BC Energy Step Code Local Government Survey. This survey is conducted annually in March of each year (beginning in 2017) and is administered by the Community Energy Association.

The purpose of this survey is to help 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.

Sixty-four local governments responded to the survey in 2018, similar to the response rate of the 2017 survey (69 local governments).[1] These local governments include both municipalities and regional districts and represent over a third of the local governments in B.C. governed by the BC Building Act, and 65% of B.C.'s population (not including the City of Vancouver).[2] Forty-one local governments responded to the surveys in both 2017 and 2018.

The Lower Mainland-Southwest Region had the highest response rate in 2018: 52% of local governments in the region responded to the survey in 2018, a drop from 61% in 2017. Approximately 30% to 40% of local governments in most other regions of the province responded to the survey in 2018, similar to 2017. The Cariboo region did not have any local governments respond to the survey in 2018, which is a decline from 40% of local governments in the region (four) in 2017. See Figure 1 for a map of these regions.

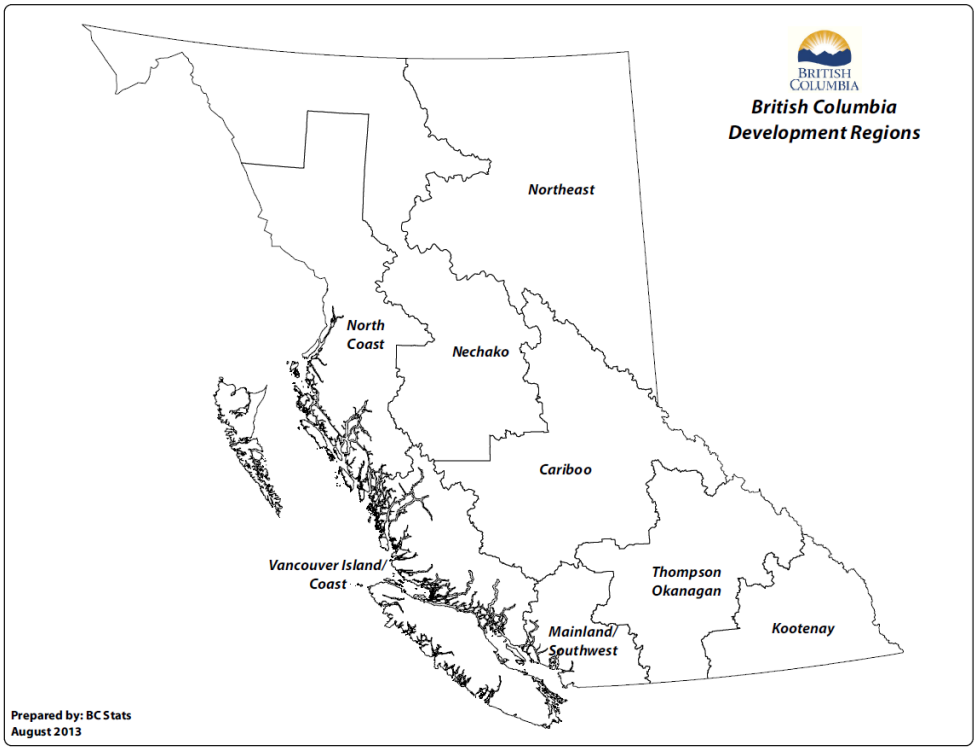
Chart 1. Percentage of Local Governments in each Region that Responded to the Survey, 2017 and 2018



[1] An additional 80 respondents began answering the survey but did not complete it. Their responses are not included in this analysis.

[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

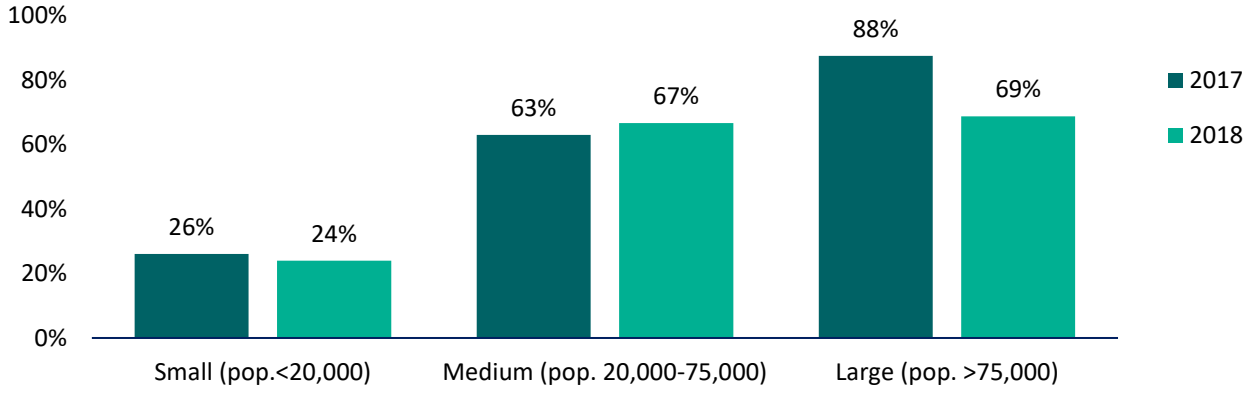
Figure 1. Map of British Columbian Regions Used in this Report[3]



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 2018 were small communities. Twenty-four percent of all small communities in the province responded to the survey in 2018, compared to 26% in 2017.

Sixty-seven percent of medium sized communities (populations between 20,000-75,000) responded to the survey in 2018 and 69% of large communities (populations of more than 75,000).[4] There was a larger decline in the percentage of large communities responding to the survey than in small communities responding to the survey.

Chart 2. Percentage of Local Governments of each Size in the Province that Responded to the Survey, 2017 and 2018

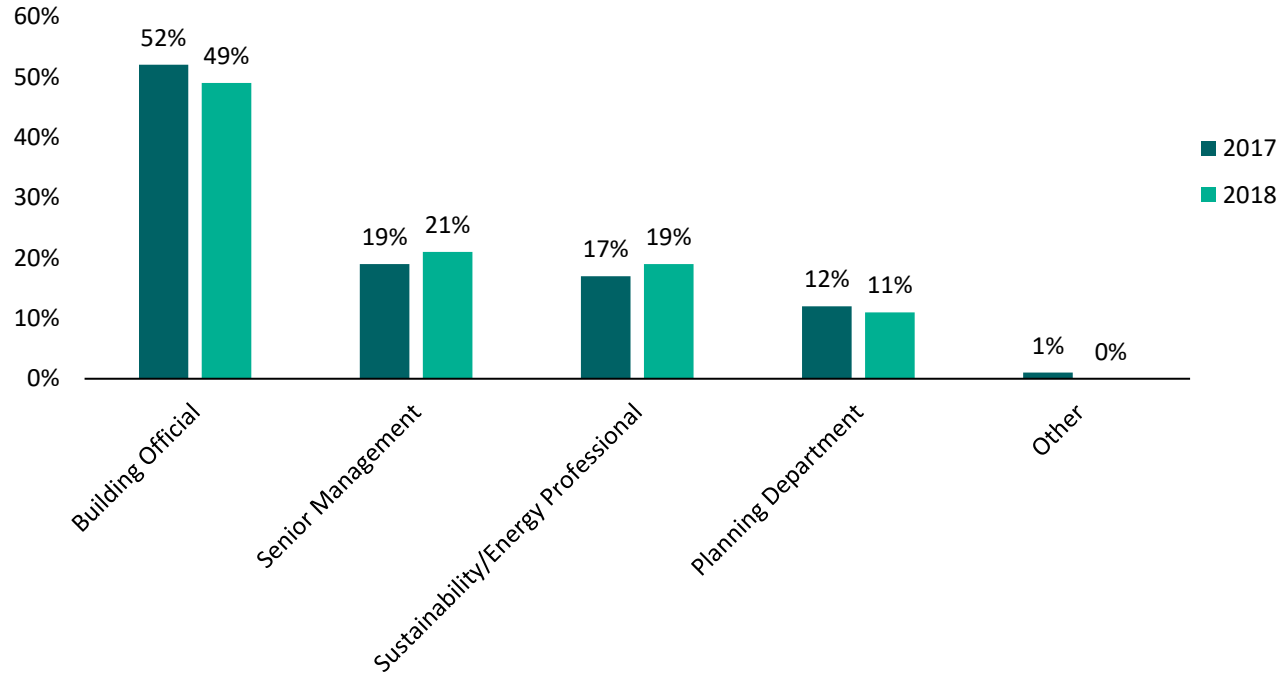


[3] Government of British Columbia. (June 14, 2017). Retrieved from: http://www2.gov.bc.ca/gov/content/data/geographic-data-services/land-use/administrative-boundaries/census-boundaries

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

Between one and three staff members responded to the survey from each of the 64 local governments (83 respondents in total). Building officials represented 49% of respondents, followed by senior management (21%), sustainability/energy professionals (19%), and planning department staff (11%). The breakdown of staff members by position is similar to the 2017 survey, as illustrated in Chart 3.

Chart 3. Percentage of Survey Respondents by Position, 2017 and 2018



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 commences. Registered new homes data are a leading indicator of housing and economic activity in B.C.. In 2017, over 50% of all new housing registrations in the province occurred in the communities that responded to the survey, indicating that the survey reached areas of the province where a significant amount of provincial development is taking place.[5][6] Most of these new housing registrations (49% of B.C.) occurred in the 36 communities that indicated at the time of the survey they implemented, were in process to implement, or were interested in implementing the BC Energy Step Code in their communities.[7]

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

[6] The 14 Regional Districts responding to the survey were not included in this calculation.

[7] BC Housing New Homes Registration Data, 2017

MOVING FORWARD WITH THE BC ENERGY STEP CODE

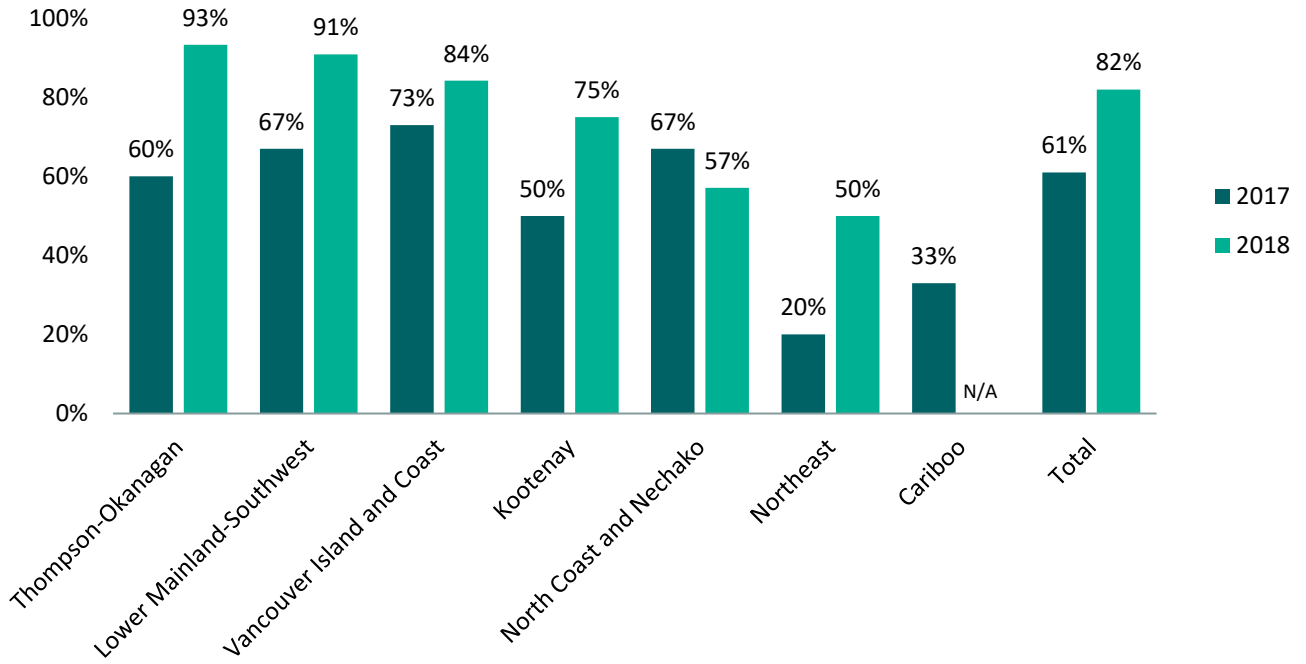
LOCAL GOVERNMENT KNOWLEDGE OF THE BC ENERGY STEP CODE

General Knowledge

In the 2018 survey, 82% of survey respondents rated their local government as having moderate, good or excellent knowledge of the BC Energy Step Code, compared to 61% in 2017. The percent of respondents who indicated that their local government had poor or no knowledge of the BC Energy Step Code dropped from 39% in 2017 to 18% in 2018.

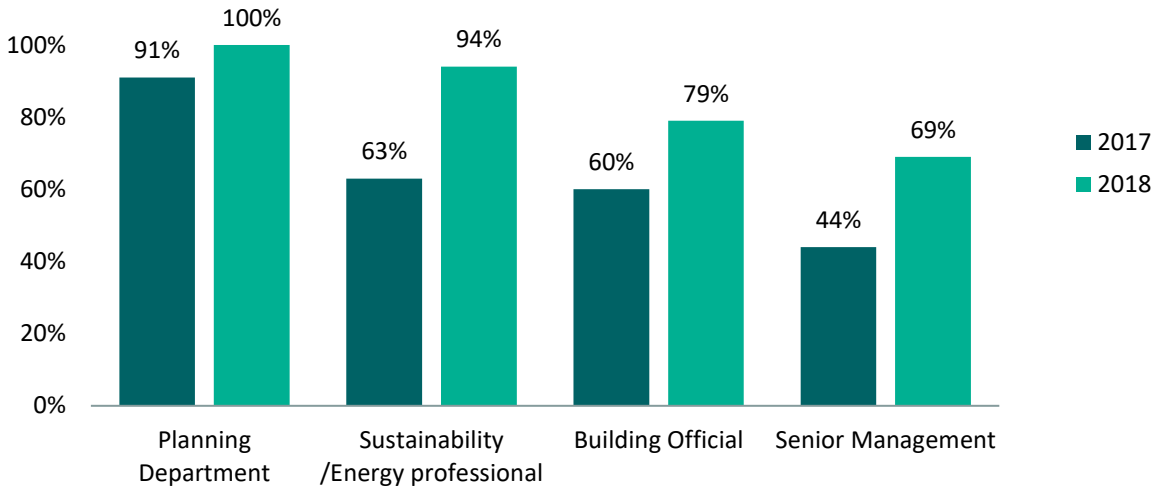
Respondents from the Thompson-Okanagan (93%), Lower Mainland-Southwest (91%), and Vancouver Island and Coast (84%) regions were most likely to indicate that their local government had moderate to excellent knowledge of the BC Energy Step Code. A higher proportion of respondents in all regions reported that their local government had moderate to excellent knowledge of the BC Energy Step Code than in 2017, with the exception of the North Coast and Nechako region.

Chart 4. Percentage of Survey Respondents Indicating their Local Government has Moderate/Good/Excellent Knowledge of the BC Energy Step Code by Region, 2017 and 2018



Survey respondents in planning departments were most confident in their local government's knowledge, with 100% responding that their local government had moderate to excellent knowledge of the BC Energy Step Code, compared to 94% of sustainability/energy professionals, 79% of building officials, and 69% of senior managers.

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 and 2018

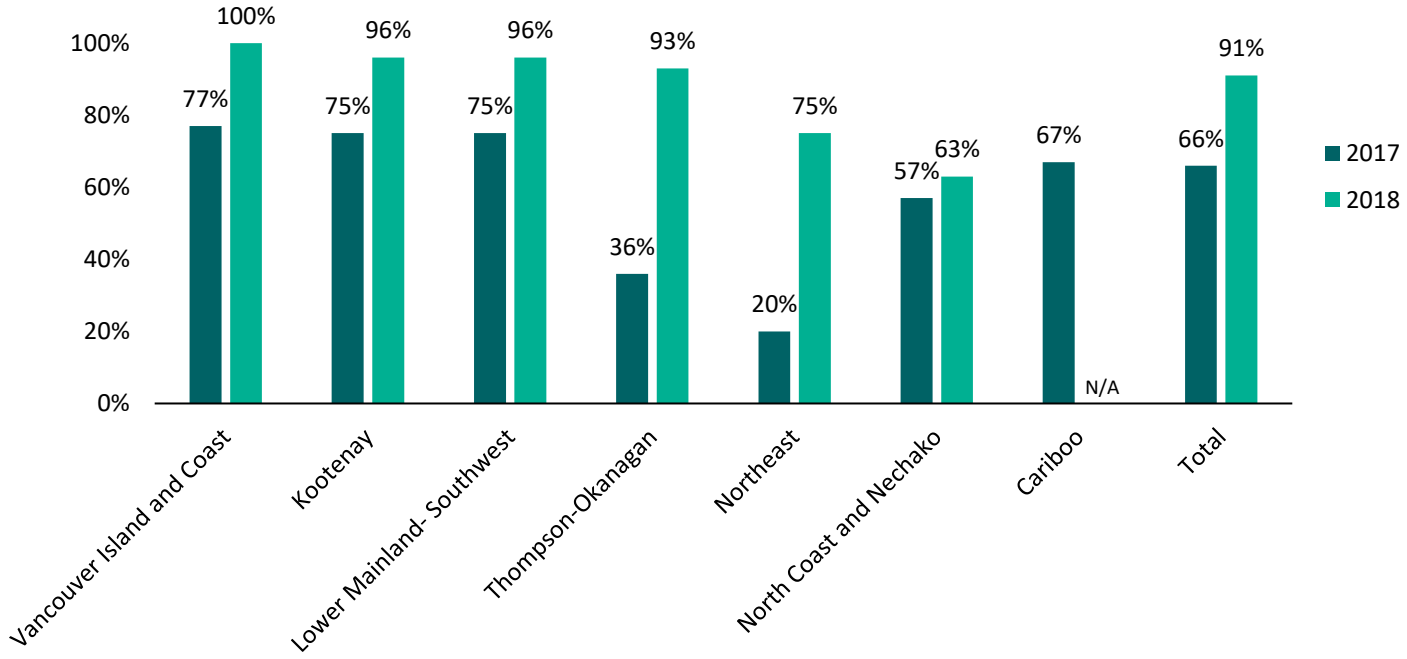


Information Sessions

Ninety-one percent of all survey respondents reported having watched or participated in an information session on the BC Energy Step Code in the 2018 survey, compared with 66% in 2017.

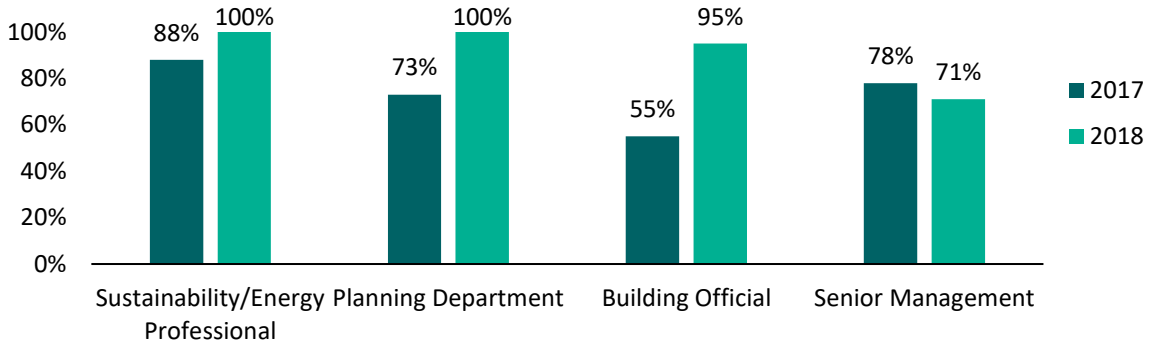
Regional differences were apparent for those who reported attending a BC Energy Step Code information session: 100% of Vancouver Island and Coast respondents reported having attended an information session, compared with 75% of Northeast respondents, and 63% of North Coast and Nechako respondents. The percentage of survey respondents who attended an information session or webinar increased in all regions of the province compared to the 2017 survey. The Northeast and Thompson-Okanagan regions saw the biggest improvements year-to-year.

Chart 6. Percentage of Survey Respondents by Region Who Attended a BC Energy Step Code Information Session, 2017 and 2018



Sustainability and energy professionals and staff in the planning department were most likely to have attended an information session (100%). A lower percentage of senior managers (71%) had attended or watched a session. The most notable change was among building officials, with 95% reporting that they had attended an information session, compared to 55% in 2017.

Chart 7. Percentage of Survey Respondents by Staff Position Who Attended a BC Energy Step Code Information Session

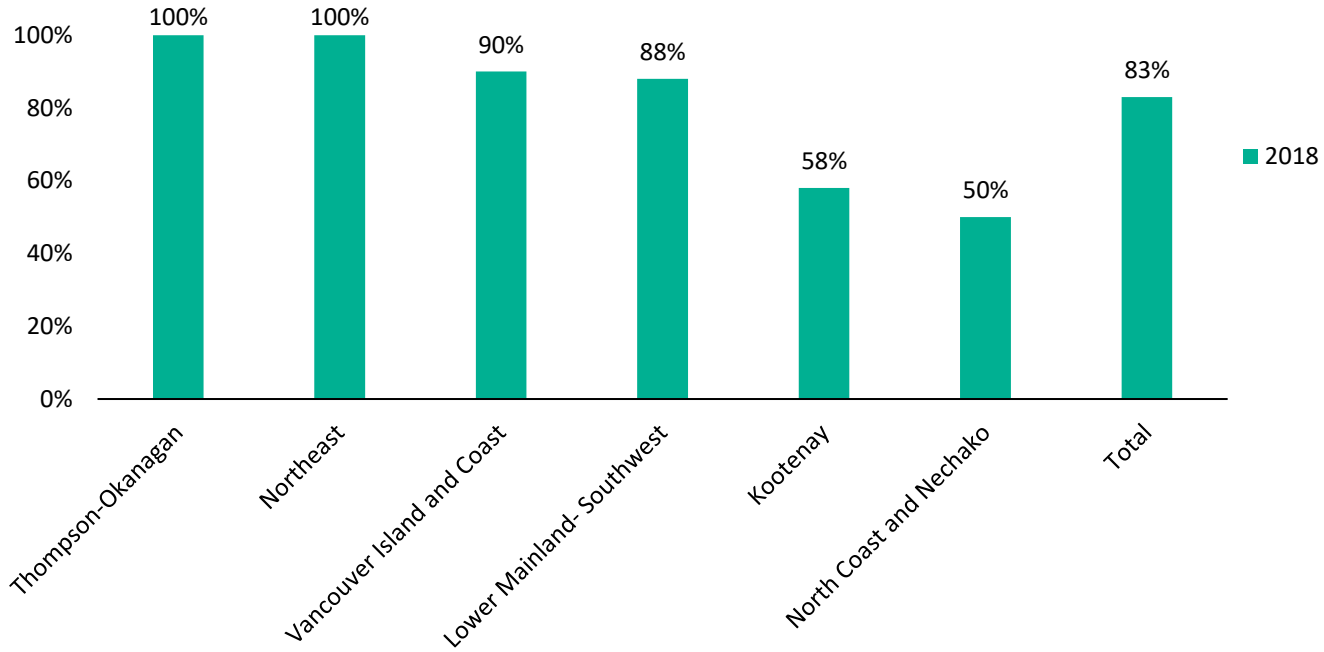


The Best Practices Guide for Local Governments

"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 percent of all respondents reported having accessed this Guide.

The Best Practices Guide for Local Governments was accessed by the highest percentage of respondents in the Thompson-Okanagan and Northeast regions (100%), followed by the Vancouver Island and Coast (90%), and Lower Mainland-Southwest regions (88%).

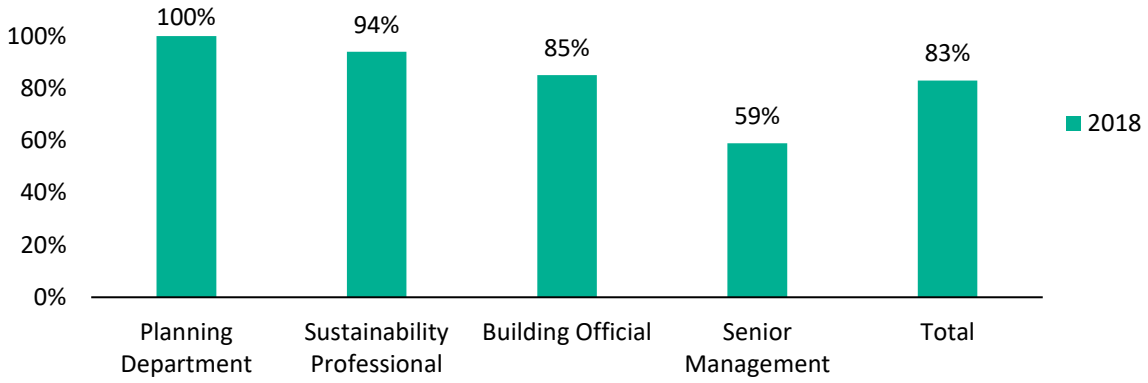
Chart 8. Percentage of Survey Respondents by Region Who Accessed the Best Practices Guide for Local Governments[8]



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

Planning department staff were most likely to have accessed the Guide (100%), followed by sustainability/energy professionals (94%), and building officials (85%). Fifty-nine percent of senior managers reported having accessed the document.

Chart 9. Percentage of Survey Respondents by Staff Position Who Accessed the Best Practices Guide for Local Governments



IMPLEMENTATION OF THE BC ENERGY STEP CODE

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

Five local governments had implemented the BC Energy Step Code at the time of the 2018 survey. Three of these local governments have implemented for both Part 3 and Part 9 buildings, and two have implemented for only Part 9 buildings.

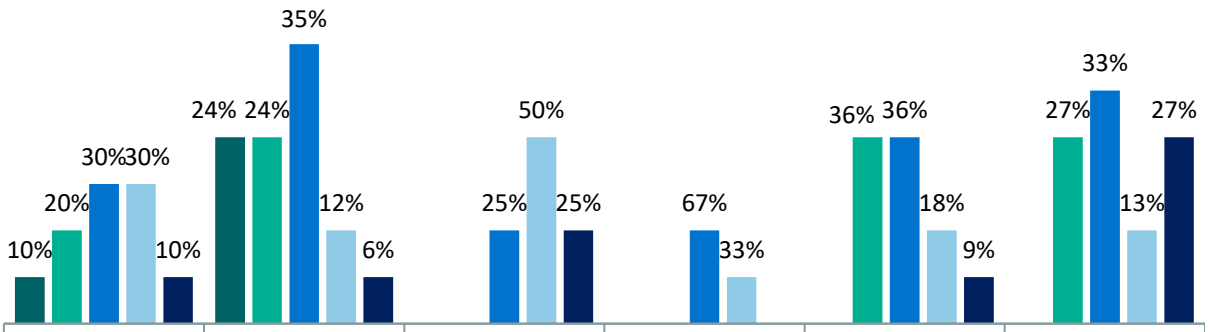
Seventeen local governments were in the process of implementing the BC Energy Step Code at the time of the 2018 survey. Five of these local governments are implementing both Part 3 and Part 9 buildings. The following section has been divided into results for Part 9 and Part 3 buildings. [9]

Part 9 Buildings

- **Implemented**: Five local governments (8% of local governments respondents) indicated they had implemented the BC Energy Step Code for Part 9 buildings. Four of them are located in the Lower Mainland Southwest region of the province, and one is located in the Kootenay region.
- **In Process**: Fourteen local governments (22%) indicated they were in the process of implementing the BC Energy Step Code for Part 9 buildings. The majority of them are located in the Lower Mainland Southwest, Vancouver Island and Coast, and Kootenay regions of the province.
- **Interested**: Twenty-two local governments (34%) indicated they were interested in implementing the BC Energy Step Code for Part 9 buildings in the future, and some of them were already in the process of implementing for Part 3 buildings.
- **Not Interested**: Fourteen local governments (22%) indicated they are not currently interested in implementing the BC Energy Step Code for Part 9 buildings. Most of these communities are located in the less populated North Coast and Nechako, Northeast, and Kootenay regions. Staff from 9 local governments did not answer this question for Part 9 buildings.

[9] 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.

Chart 10. Implementation Status for the BC Energy Step Code for Part 9 Buildings



	Kootenay	Lower Mainland Southwest	North Coast and Nechako	Northeast	Thompson -Okanagan	Vancouver Island and Coast
Implemented	1	4	0	0	0	0
In Process	2	4	0	0	4	4
Interested	3	6	2	2	4	5
Not Interested	3	2	4	1	2	2
No Answer	1	1	2	0	1	4

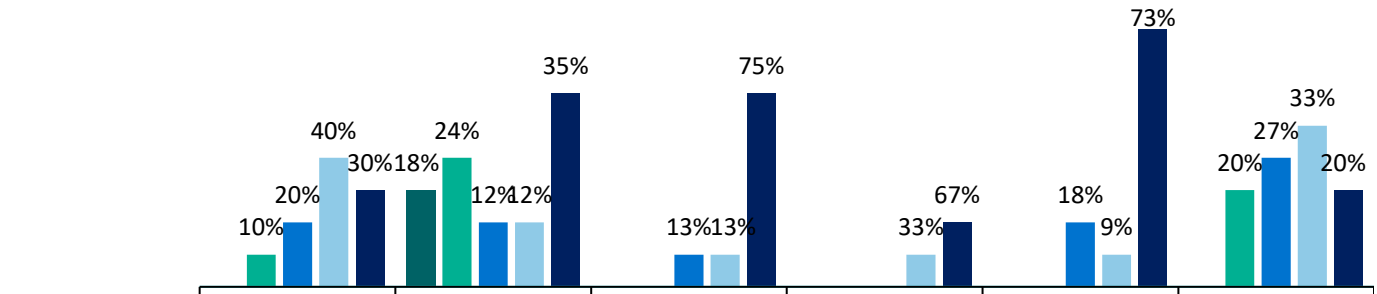
Part 3 Buildings

At the time of the 2018 survey, targets for the BC Energy Step Code had only been set for climate zone 4 for Part 3 buildings. This meant that local governments outside of the Lower Mainland-Southwest and Vancouver Island and Coast regions had not been able to begin implementation of the BC Energy Step Code in their regions.

- **Implemented**: Three local governments (5% of local governments that responded to the survey) indicated they have already implemented the BC Energy Step Code for Part 3 buildings. All three of these local governments have also implemented the BC Energy Step Code for Part 9 building and are located in the Lower Mainland-Southwest region of the province.
- **In Process:** Eight local governments (13%) indicated they are in the process of implementing the BC Energy Step Code for Part 3 buildings. Of these eight 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.[10]
- **Interested:** Eleven local governments (17%) indicated they are interested in implementing the BC Energy Step Code for Part 3 buildings in the future, and some of them are already in the process of implementing for Part 9 buildings.
- **Not Interested:** Fourteen local governments (22%) responded that they have no current interest in implementing the BC Energy Step Code for Part 3 buildings. Twenty-eight local governments did not answer this question for Part 3 buildings. Many of these local governments are small and would have little Part 3 construction in their communities.

[10] Although one community in the Kootenay region indicated that they are in process to implement the BC Energy Step Code for Part 3 Buildings, this may be an error since targets had only been established for climate zone 4 at the time of the survey.

Chart 11. Implementation Status for the BC Energy Step Code for Part 3 Buildings



	Kootenay	Lower Mainland Southwest	North Coast and Nechako	Northeast	Thompson -Okanagan	Vancouver Island and Coast
Implemented	0	3	0	0	0	0
In Process	1	4	0	0	0	3
Interested	2	2	1	0	2	4
Not Interested	4	2	1	1	1	5
No Answer	3	6	6	2	8	3

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

- "Not popular in rural B.C. due to added costs of Energy Advisors and DIYers."
- "Starting with Part 3 as most new development is in this sector; also Part 9 builders thought to require more 'hand-holding' and time to ramp up."
- "Need to discuss with neighbouring municipalities (regionally) to get on the same page in regards to which steps we want to start at."
- "Currently researching possibility and gauging interest in the Code; however, the availability of an energy advisor will be a deterrent."

POLICY TOOLS TO GUIDE ADOPTION OF THE BC ENERGY STEP CODE

Table 1 and 2 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 specific policy 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 50 local governments indicated they currently use or might use policy tool(s) to encourage, incentivize or require BC Energy Step Code adoption for Part 9 buildings. [11]

- **Incentivize/Require:** Of the policy tools to incentivize or require, the highest proportion of local governments indicated that they currently use or might use a bylaw requirement applicable to all new construction for Part 9 buildings (58%), followed by an energy audit rebate or subsidy (42%).
- **Encourage:** Of the policy tools to encourage, the highest proportion of local governments indicated that they currently use or might use builder forums and educational outreach for Part 9 buildings (59%), followed by checklists for use by building officials or the building community (58%).

[11] 14 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 1. Policy Tools to Encourage, Incentivize or Require Adoption of the BC Energy Step Code for Part 9 Buildings

	Part 9	
	# of Local Governments Respondents	% of Local Governments Respondents
Indicated currently use or might use policy tool(s) to encourage, incentivize or require B.C. Energy Step Code adoption	**50**	**78%**
Incentivize/require	43	67%
Encourage but not incentivize/require	7	11%
Did not indicate any policy tool(s) to be used for BC Energy Step Code adoption	**14**	**22%**
Total	**64**	**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	2	35	58%
Energy audit rebate or subsidy	4	23	42%
Permit fee rebate	3	19	34%
Rezoning policy or rezoning consideration	1	18	30%
Condition related to density (e.g. density bonus)	1	16	27%
Bylaw requirement applicable for specific neighbourhoods or building types	3	13	25%
Priority permitting	0	12	19%
Development cost charge reduction	1	8	14%
Tax exemption or reduction	0	8	13%
Condition for sale of local government owned land	0	5	8%

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	11	27	59%
Checklists for use by building officials or building community	4	33	58%
Leading by example - building better local government buildings	1	23	38%

Part 3 Buildings

Respondents from 37 local governments indicated they currently use or might use policy tool(s) to encourage, incentivize or require BC Energy Step Code adoption for Part 3 buildings. [12]

- **Incentivize/Require:** Of the policy tools to incentivize or require, the highest proportion of local governments indicated that they currently use or might use a bylaw requirement applicable to all new construction for Part 3 buildings (42%), followed by a rezoning policy or rezoning consideration (28%).
- **Encourage:** Of the policy tools to encourage, the highest proportion of local governments indicated that they currently use or might use builder forums and educational outreach for Part 3 buildings (42%), followed by checklists for use by building officials or the building community (38%).

Table 2. Policy Tools to Encourage, Incentivize or Require Adoption of the BC Energy Step Code for Part 3 Buildings

	Part 3	
	# of Local Governments Respondents	% of Local Governments Respondents
Indicated currently use or might use policy tool(s) to encourage, incentivize or require B.C. Energy Step Code adoption	**37**	**58%**
Incentivize/Require	33	52%
Encourage but not incentivize/require	4	6%
Did not indicate any policy tool(s) to be used for B.C. Energy Step Code adoption	**27**	**42%**
Total	**64**	**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	2	25	42%
Rezoning policy or rezoning consideration	1	17	28%
Energy audit rebate or subsidy	0	16	25%
Bylaw requirement applicable for specific neighbourhoods or building types	2	13	23%
Condition related to density (e.g. density bonus)	0	13	20%
Permit fee rebate	0	12	19%
Priority permitting	0	7	11%
Tax exemption or reduction	0	6	9%
Development cost charge reduction	1	5	9%
Condition for sale of local government owned land	0	5	8%

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	8	19	42%
Checklists for use by building officials or building community	1	23	38%
Leading by example - building better local government buildings	0	19	30%

[12] 14 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.

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

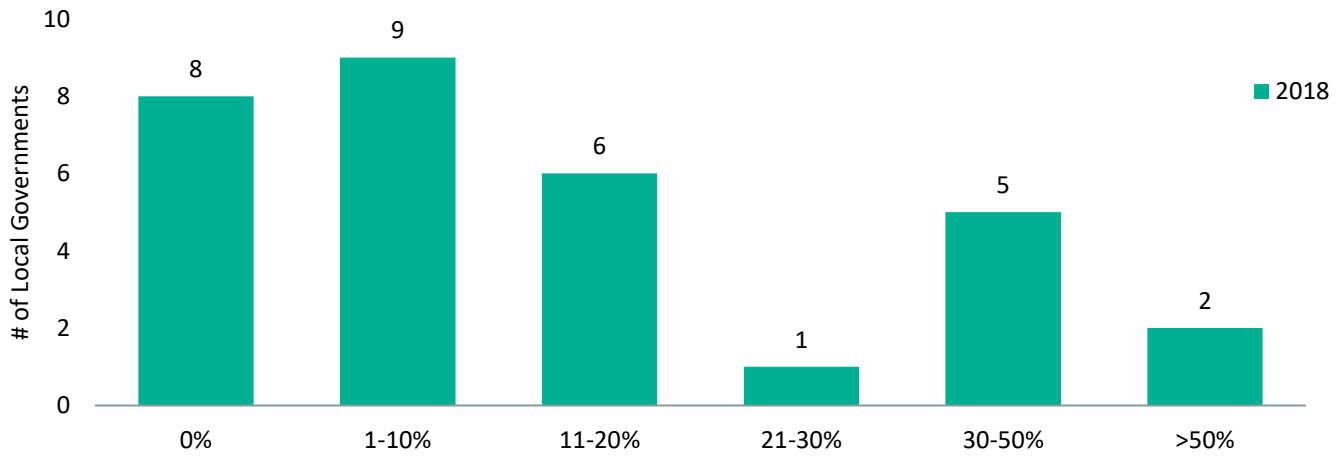
Twenty-three local governments reported that a number of builders and developers in their communities have experience working with energy advisors (73% of the local governments that answered the question). The percentage of builders and developers in each community ranged from 3% to 100%.

Eight local governments reported that none of the builders and developers in their communities had experience working with energy advisors (26%). Thirty-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 and Vancouver Island and Coast regions of the province (up to 100% in some communities) and significantly lower in other regions of the province.

Chart 12 below shows the estimated percentage of builders and developers that have experience working with energy advisors in surveyed communities.

Chart 12. Estimated Percentage of Builders and Developers in a Community that have Experience Working with an Energy Advisor



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.[13] 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

Six local governments reported that Part 9 buildings had been built in their communities in the past year that met the BC Energy Step Code (11% 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 156 units in the six communities. The majority of the units were built in the Lower Mainland Southwest and Vancouver Island and Coast regions (79%); however, the Kootenay region also saw a number of units (32 units), including units in the Upper Steps.

Table 3. 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[14]	% of Local Governments
Units Built to Step 1	104	0.1%	3	8%
Units Built to Step 2	17	0.2%	5	9%
Units Built to Step 3	29	0.3%	4	8%
Units Built to Step 4	6	0.1%	2	4%
Units Built to Step 5	0	0.0%	0	0%
Total Units Built to Any Steps	156	1.4%	6	11%
Total Units Built to BC Building Code	10,745	98.5%	53	100%
Total All Units	**10,901**	**100%**	**53**	**100%**

Part 3 Buildings

Two local governments reported that Part 3 residential units were built to a step of the BC Energy Step Code in their communities in the past year (12% of those who answered the question). Part 3 units built to the BC Energy Step Code were distributed across the Upper and Lower Steps and totaled 541 units in the two communities.[15] All units built to the BC Energy Step Code for Part 3 buildings were in the Vancouver Island and Coast region.[16]

[13] 14 local governments had multiple respondents to the survey. If there was a disparity between different respondents regarding units, the most complete answer was used.

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

[15] While two other local governments reported building units to the BC Energy Step Code for Part 3 buildings, their answers appeared to indicate a number of buildings instead of a number of units and their answers could not be used for analysis. Respondents who indicated fewer than 30 units were not included in this analysis as it was assumed that these referred to buildings instead of Part 3 units.

[16] One of the answers not used was from a community in the Northeast region.

Table 4. Units Built to the BC Energy Step Code in Surveyed Communities in the Past Year for Part 3 Buildings

	# of Units	% of Units	# of Local Governments[17]	% of Local Governments
Units Built to Step 1	0	0%	0	0%
Units Built to Step 2	507	5%	1	6%
Units Built to Step 3	34	0.3%	1	6%
Units Built to Step 4	0	0%	0	0%
Total Units Built to Any Steps	541	5.3%	2	12%
Total Units Built to BC Building Code	9,713	95%	16	94%
Total All Units	**10,254**	**100%**	**17**	**100%**

[17] 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 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".

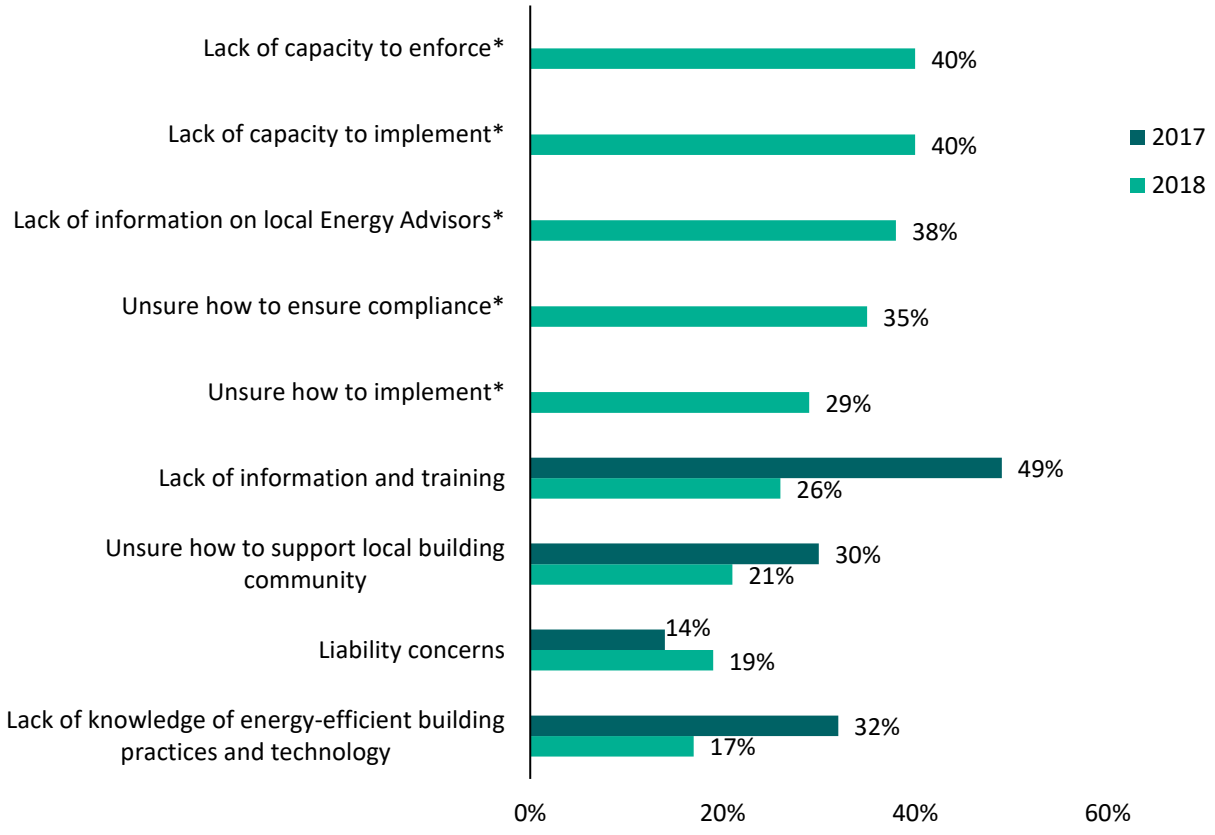
Barriers to Local Government

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 capacity to implement and enforce (40% each)
- Lack of information on local Energy Advisors (38%)
- Uncertainty around how to ensure compliance (35%)

Chart 13 shows the percentage of respondents ranking perceived barriers as "high barriers" to local governments. In 2018, 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 26% from 49% in 2017.

Chart 13. Barriers Rated as "High Barrier" to Local Governments to Adopting the BC Energy Step Code by Percentage of Respondents, 2017 and 2018



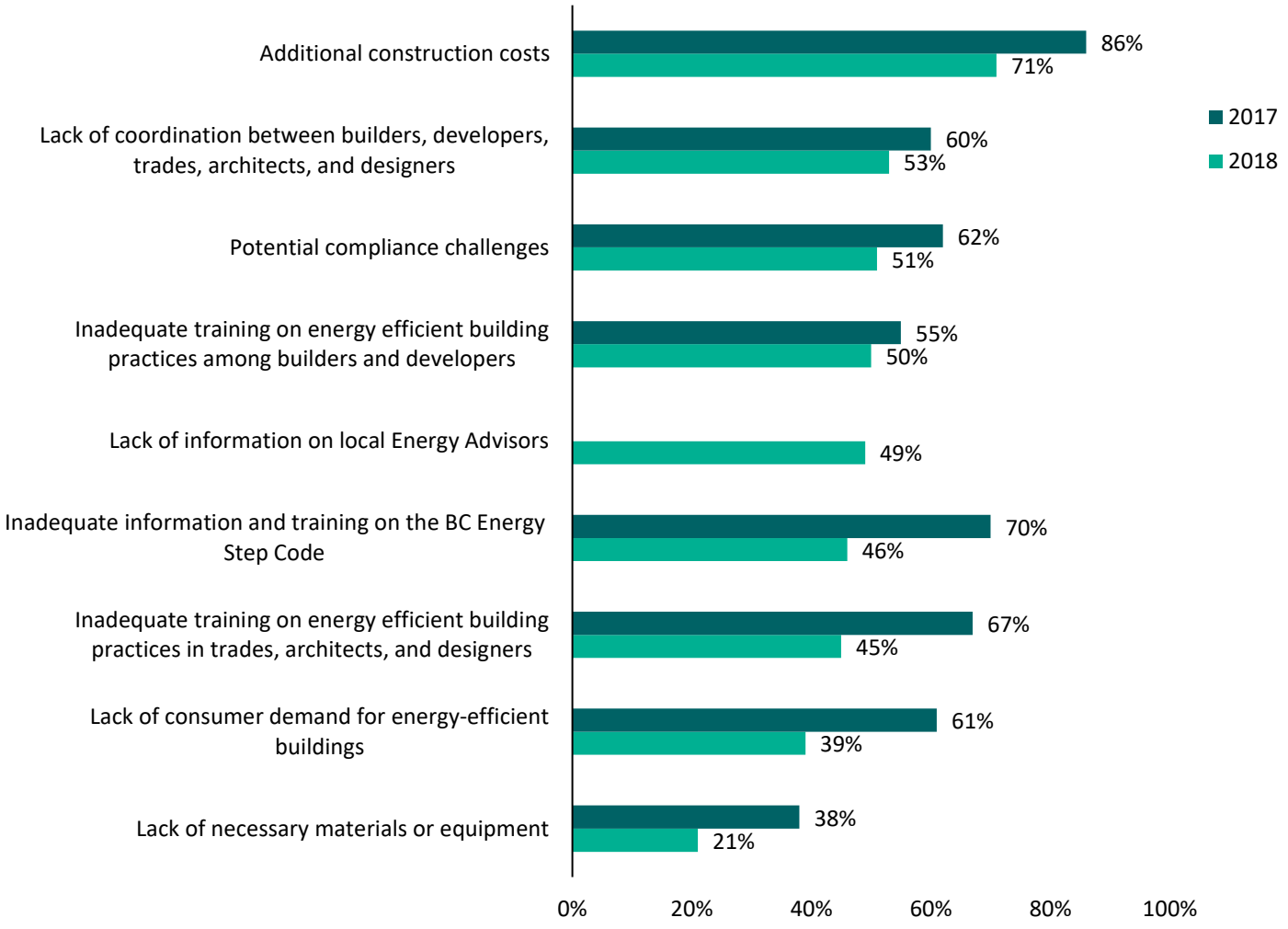
Barriers to the Building Community

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

- Additional construction costs[18] (71%)
- Lack of coordination between builders, developers, trades, architects and designers (53%)
- Potential compliance challenges (51%)
- Inadequate training on energy efficient building practices among builders and developers (50%)
- Lack of information on local Energy Advisors (49%)

Chart 14 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 2018 are similar to 2017, a higher percentage of respondents indicated that these are "no barrier" or "low barrier", instead of a "moderate" or "high barrier". "Lack of 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 46% from 70% in 2017.

Chart 14. Barriers Rated as "High Barrier" to the Building Community by Percentage of Respondents, 2017 and 2018



[18] 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

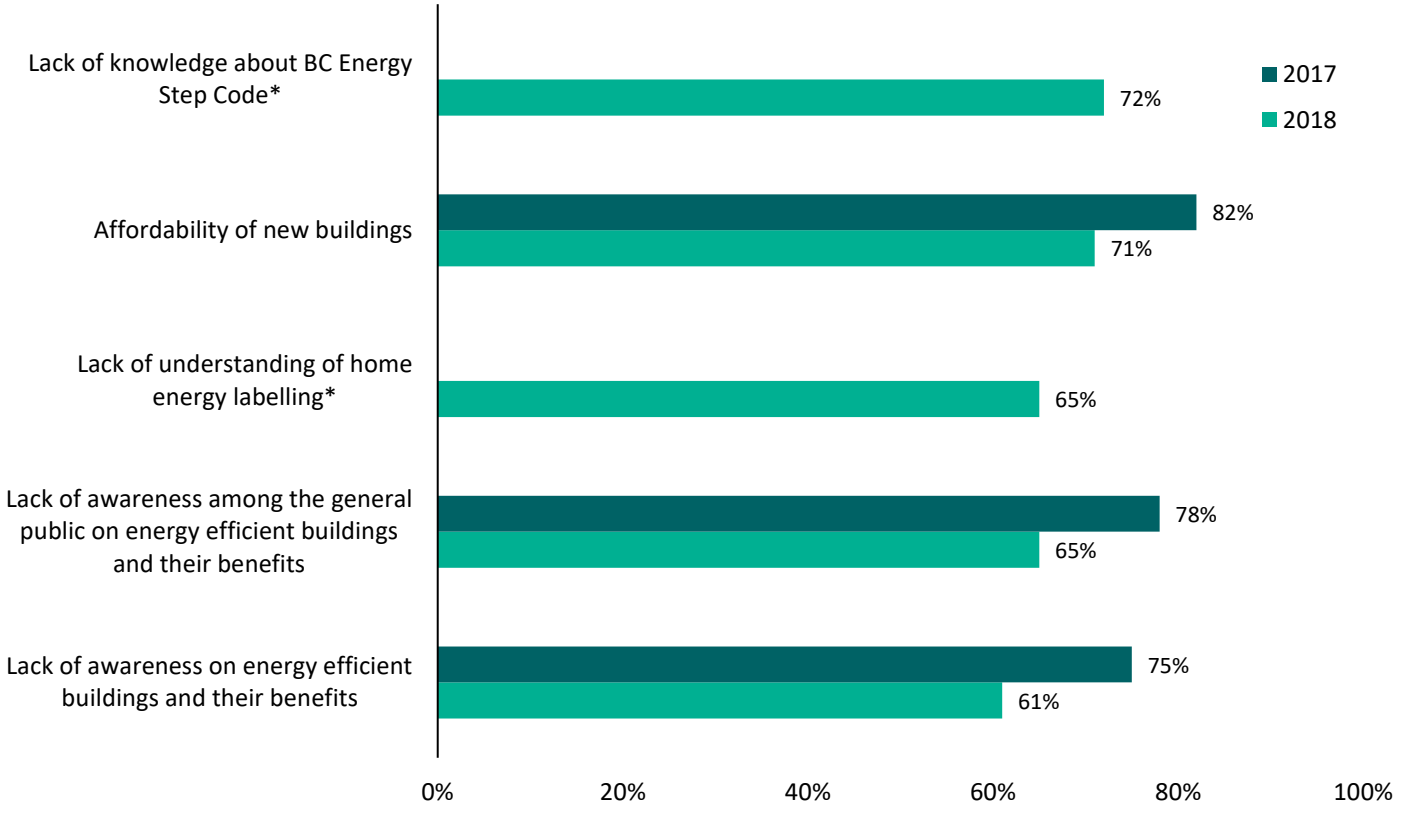
Barriers to the Real Estate Community

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

- Lack of knowledge about BC Energy Step Code (72%)
- Affordability of new buildings (71%)
- Lack of understanding of home energy labelling (65%)
- Lack of awareness among general public on energy-efficient buildings and their benefits (65%)

Chart 15 shows the percentage of survey respondents ranking perceived barriers as "high barriers" to the real estate community. As with the local government and the building community, compared to 2017, fewer respondents ranked these barriers as "high barrier" and more ranked these barriers as "moderate barrier".

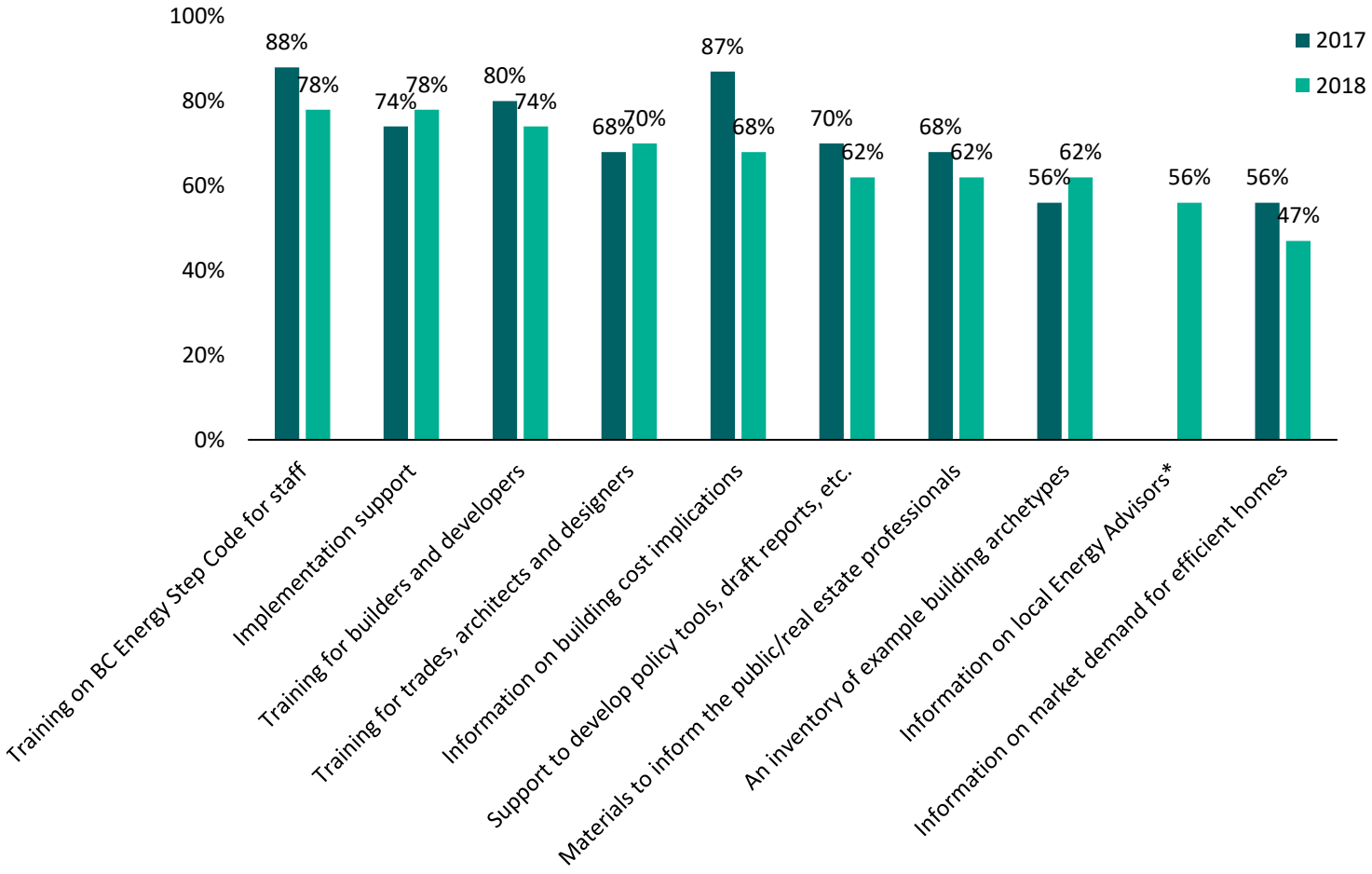
Chart 15. Barriers Rated as "High Barrier" to the Real Estate Community by Percentage of Respondents, 2017 and 2018



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 and 2018.[19] Tables 8 and 9 on the following pages show regional differences and differences by staff position.

Chart 16. Resources That Would Assist Local Governments in Adopting/Implementing the BC Energy Step Code by Percentage of Respondents, 2017 and 2018



Training and Education

- **All Respondents:**
  - Seventy-eight percent of survey respondents reported that training on the BC Energy Step Code for staff would facilitate implementation or adoption, compared to 88% in 2017.
  - Seventy-four percent of respondents indicated a desire for training on BC Energy Step Code for builders and developers, while 70% indicated they would like training for trades, architects and designers.

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

- **Regional Differences:**
  - A higher proportion of respondents from the Northeast Region (100%) indicated that they would like training opportunities for builders, developers, trades, architects and designers compared to other regions.
  - Respondents in the Kootenay and North Coast and Nechako regions were less 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 (87%) were most likely to identify a need for training for staff compared to other staff positions.
  - Senior managers were more likely to indicate that training for staff was important (79%), compared to training for builders and developers (57%), or trades, architects and designers (43%).

Addressing Information Gaps

- **All Respondents:**
  - Sixty-eight percent of survey respondents reported that they would like to see information on BC Energy Step Code building cost implications, compared to 87% in 2017.[20]
  - Sixty-two percent 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. This is an increase from 56% in 2017.
- **Regional Differences:**
  - A lower proportion of respondents from the Lower-Mainland Southwest (50%) and the Kootenay region (64%) indicated that information on building cost implications would be useful compared to other regions.
  - A higher percentage of respondents in the Lower Mainland-Southwest and Northeast regions indicated that an inventory of example building archetypes would assist their local governments adoption or implementation the BC Energy Step Code compared to other regions.
- **Differences by Staff Position:**
  - Sustainability and energy professionals saw the most value in tools to address information gaps, with 87% of respondents in this position indicating information on building cost implications would be useful.
  - Sustainability and energy professionals also saw the most need for materials to inform the public and real estate marketing professionals about high-performance buildings (73%) and information on local energy advisors (80%) compared to other staff positions.

Implementation Support

- **All Respondents:**
  - Seventy-eight percent 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. This is a slight increase compared to 74% in the 2017 survey.

[20] 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

- Most respondents (62%) also reported that policy tools, draft reports, presentations to Council, and help with regional adoption of the BC Energy Step Code would be beneficial. This is a decrease from the 2017 survey (70%) and may indicate that many communities have already developed these tools, reports, and presentations.

- **Regional Differences:**
  - A higher proportion of respondents from the Northeast (100%) indicated that implementation support would be useful than in other regions.
  - Respondents from Vancouver Island and Coast (84%) and Northeast regions (75%) 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 regions.
- **Differences by Staff Position:**
  - A higher proportion of staff in the Planning Department saw value in implementation support, such as templates and checklists, with 89% of respondents in this position indicating this support would be useful.
  - Senior Management (71%) and Sustainability/Energy professionals (73%) 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 8. Percentage of Survey Respondents Indicating Which Resources Would Assist Their Local Government in Adopting/Implementing the BC Energy Step Code, by Region[21]

	% of Survey Respondents						
Resources	All Regions	Kootenay	Lower Mainland-Southwest	North Coast and Nechako	Northeast	Thompson-Okanagan	Vancouver Island and Coast
Training on BC Energy Step Code for staff	78%	82%	82%	71%	75%	79%	74%
Implementation support, such as templates and checklists	78%	73%	77%	71%	100%	79%	79%
Training on BC Energy Step Code for builders and developers	74%	64%	86%	43%	100%	71%	74%
Training on BC Energy Step Code for trades, architects and designers	70%	64%	77%	29%	100%	71%	74%
Information on BC Energy Step Code building cost implications	68%	64%	50%	71%	75%	79%	79%
Support to develop policy tools, draft reports, presentations to Council, help regional adoption of the BC Energy Step Code, etc.	62%	64%	41%	57%	75%	64%	84%
Materials to inform the public and real estate marketing professionals about high-performance buildings	62%	73%	59%	71%	75%	57%	58%
An inventory of example building archetypes that meet the BC Energy Step Code	62%	45%	77%	43%	75%	64%	58%
Information on local Energy Advisors	56%	36%	59%	43%	100%	57%	58%
Information on market demand for energy-efficient homes	47%	45%	45%	57%	75%	21%	58%
My community is not interested in BC Energy Step Code at this time	3%	0%	0%	0%	25%	7%	0%

[21] Six 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 Staff Position[22]

Resources	All Staff Positions	Building Officials	Planning Department	Senior Management	Sustainability/ Energy Professionals
Training on BC Energy Step Code for staff	78%	79%	56%	79%	87%
Implementation support, such as templates and checklists	78%	79%	89%	71%	73%
Training on BC Energy Step Code for builders and developers	74%	74%	78%	57%	87%
Training on BC Energy Step Code for trades, architects and designers	70%	72%	78%	43%	87%
Information on BC Energy Step Code building cost implications	68%	67%	44%	64%	87%
Support to develop policy tools, draft reports, presentations to Council, help regional adoption of the BC Energy Step Code, etc.	62%	56%	56%	71%	73%
Materials to inform the public and real estate marketing professionals about high-performance buildings	62%	62%	56%	57%	73%
An inventory of example building archetypes that meet the BC Energy Step Code	62%	62%	44%	57%	80%
Information on local Energy Advisors	56%	51%	56%	43%	80%
Information on market demand for energy-efficient homes	47%	51%	33%	43%	47%
My community is not interested in BC Energy Step Code at this time	3%	3%	0%	7%	0%

[22] Six survey respondents did not answer this question and are not included in the denominator (n=77).

Table 10. Percentage of Survey Respondents Indicating Which Resources Would Assist Their Local Government in Adopting/Implementing the BC Energy Step Code, by Size of Community[23],[24]

Resources	All Sizes	Small (pop. <20,000)	Medium (pop. 20,000-75,000)	Large (pop. >75,000)
Training on BC Energy Step Code for staff	78%	76%	78%	88%
Implementation support, such as templates and checklists	78%	78%	83%	71%
Training on BC Energy Step Code for builders and developers	74%	59%	87%	88%
Training on BC Energy Step Code for trades, architects and designers	70%	51%	87%	88%
Information on BC Energy Step Code building cost implications	68%	70%	57%	76%
Support to develop policy tools, draft reports, presentations to Council, help regional adoption of the BC Energy Step Code, etc.	62%	62%	65%	59%
Materials to inform the public and real estate marketing professionals about high-performance buildings	62%	62%	65%	59%
An inventory of example building archetypes that meet the BC Energy Step Code	62%	51%	70%	76%
Information on local Energy Advisors	56%	43%	70%	65%
Information on market demand for energy-efficient homes	47%	46%	48%	47%
My community is not interested in BC Energy Step Code at this time	3%	3%	4%	0%

[23] Six survey respondents did not answer this question and are not included in the denominator (n=77).

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