

Status Report on Community Energy Plan Implementation: A Follow up to the National Report on Community Energy Plan Implementation SEPTEMBER 2017

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Table of Contents

Executive Summary	4
Section 1 Introduction	6
Section 2 Level of CEP Implementation	8
Section 3 Type of Implementation Activities	10
Section 4 Factors Influencing Successful Implementation of CEPs	12
Section 5 Role of Stakeholders	16
Section 6 Accelerating CEP Implementation	20

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Executive Summary

This report compares the present level of Community Energy Plan (CEP) implementation in Canada to the degree of implementation when the National Report on Community Energy Plan Implementation was released in 2015. It also reviews how activities and factors that contribute to the success of instituting actions have changed over two years. In short, modest improvements occurred with 26% of communities achieving medium CEP implementation scores, a 4% increase from 2015, and 48% still attaining high scores. However, a new interview question in the present study shows that only 17% of communities expect to meet their short term community emission reduction target, while 13% anticipate achieving their corporate but not their community target.

A wide range of actions continue to be used to improve energy efficiency and reduce greenhouse gas (GHG) emissions across communities. While some measures have been increasingly utilized (e.g. energy efficiency measures in buildings, renewable and district energy, low carbon vehicles), others have declined in use (e.g. public transit) based on interviews with municipal staff. In 2015, planning and policy measures and solid waste diversion initiatives were instituted the most among all participating communities.¹ In 2017, energy efficiency measures earned the highest ranking.

Specific factors have supported CEP implementation over time. Priorities in other planning documents and co-benefits of actions were high support factors in both studies. In addition, political leadership ranked much higher for communities with high implementation scores than those with low and medium scores. In 2017, staff capacity and funding through capital projects and operations superseded staff leadership as other support factors achieving strong ratings in communities with high scores. In contrast, the limits to local government authority has been one of the greatest challenges over time. For lower scoring municipalities, staff capacity was an even greater impediment than authority in the 2017 study.

When asked whether certain factors are required to successfully implement a CEP in the current study, all respondents noted that political commitment from local elected officials, a strong provincial/territorial policy framework on climate change and a dedicated budget were very important. Communities with medium and high implementation scores thought a dedicated staff person to lead action was also valuable.

Certain stakeholders have played a significant role in CEP implementation. Planning (2015 study) and engineering departments (2017 study) in local governments and external entities such as the Federation of Canadian Municipalities (FCM), post-secondary institutions and non-profit organizations provided the most support. For both studies, communities with high implementation scores received more support from other municipal departments like finance compared to medium and low scoring communities. In 2015, they also experienced greater endorsement from certain external stakeholders. For 2017, there was less significant differences with external actors due to a decline in these rankings in communities with high scores. The federal government and the real estate/development sector have been viewed as the least supportive entities.

¹The term community or communities refers to all infrastructure and residential, commercial, institutional, transportation, utility, and agricultural activities within a given geographic (or municipal or indigenous community) boundary. The term local government refers to a specific level of government (e.g. municipal, regional or First Nation).

While some progress has been made over the past two years, further work is still needed to accelerate CEP implementation and achieve short term GHG emission reduction targets in the near future. The following actions are recommended to achieve these goals and address existing challenges:

1) Improve staff capacity

- Expand peer to peer learning to share best practices in climate change mitigation among communities. Learning should be tailored to communities of varying sizes. Workshops, webinars, online resources, and other communication vehicles can be used to disseminate information. One on one coaching between municipalities at different levels of implementation could also be adopted.
- Lobby for access to better data and additional research to improve planning, implementation and monitoring efforts.
 Examples include detailed community energy and emissions inventories in all provinces/territories, cost/benefit research, summaries of new senior government legislation related to climate change and energy, and municipal authority on these subjects based on Local Government Acts across Canada.

2) Enhance political leadership

- Extend mentoring initiatives such as the BC Municipal Climate Leadership Council to other provinces/territories to facilitate stronger leadership among mayors and councillors.

3) Increase funding for capital projects and operational programs

 Lobby senior levels of governments, utility companies and other entities that fund climate change and energy initiatives to allocate additional funding to these projects.

4) Reduce limits to local government authority

 Lobby provincial/territorial governments for more control in areas that would facilitate further action on climate change. Municipal associations are best positioned to lead this advocacy work.

5) Align federal and provincial government climate change strategies with local government initiatives

 Institute municipal initiatives that align with the Pan Canadian Framework on Clean Growth & Climate Change as well as provincial/territorial climate action plans. Municipal associations in provinces/territories are advised to work closely with the ministries in senior levels of government that oversee these plans avoid inconsistencies and overlap of initiatives.

6)Strengthen relationships with the real estate and development sectors

- Educate real estate and development industry associations about the importance and benefits of climate action as well as cost effective ways to reduce GHG emissions in the built environment. Work with these groups to disseminate this knowledge to members.
- Further incentivize this sector to take stronger action on climate change. Increased collaboration between provincial/ territorial governments, utility companies, industry associations, and municipal associations is recommended to achieve this outcome.

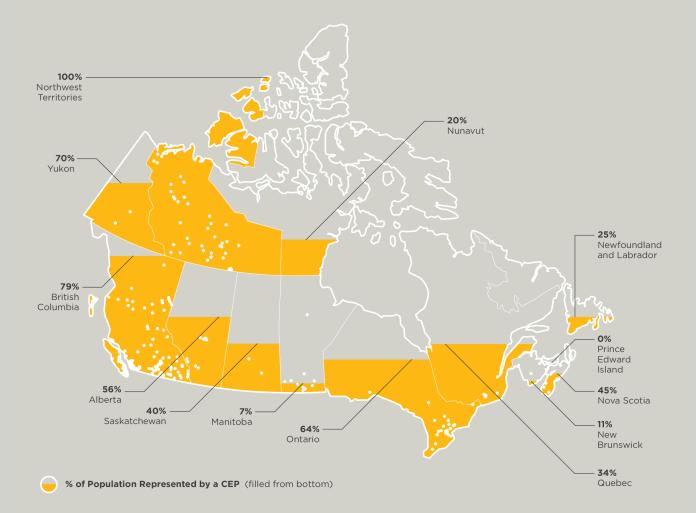
Beyond the above measures, communities that are refreshing or re-activating their CEPs would benefit from reviewing GTI's Community Energy Implementation Framework. This <u>online tool</u> features ten strategies that provide advice on political, staff and stakeholder engagement; staff and financial capacity; and embedding energy into local government plans and processes. The framework also includes an Implementation Readiness Survey, a self-evaluation tool intended to help communities identify areas of strength and weakness for implementation.

Section 1 Introduction

The purpose of this report is to understand the level of CEP implementation in Canada as well as the factors that have contributed to the success or challenge of implementing actions to reduce energy use and greenhouse gas emissions. This current research assesses how activities and factors have changed or remained the same since the original National Report on Community Energy Plan Implementation was released in February 2015 following interviews with municipal staff in fall 2014. The present report also suggests what needs to be done to accelerate implementation.

The current findings are based on interviews with local government staff in communities that participated in similar consultations for the 2015 report. To accurately compare the trends over time, only the answers from communities participating in both research studies were included and analyzed for this report.

Community Energy Plans across Canada



Section 2 Level of CEP Implementation

The percentage of communities achieving low, medium and high CEP implementation scores changed minimally between the two studies. There was a 4% increase in communities achieving medium scores and a 4% decrease in communities achieving low scores. This suggests that in the 2.5 years since the first survey, there have been modest improvements in implementation. The following graph illustrates the 2017 scoring levels. High, medium and low scores have primarily been assigned according to the number of CEP actions implemented.

High score: More than 75% of the actions in CEPs that are more than two years old or more than 25% of the initiatives in plans that are under two years have been implemented. Communities that achieved Milestone 5 of FCM's PCP program were assigned high scores.

Medium score: Between 25-75% of actions in CEPs that are more than two years old have been implemented.

Low score: Fewer than 25% of actions in CEPs that are over two years old have been implemented.

A comparison of scoring levels between the two surveys indicates that 13% of communities have moved up one or two levels since the first survey (e.g. from low to medium/high).

Communities that improved their scores appear to have been successful in implementing further actions because of strong political leadership, an increase in support from various internal departments, and a solid team of people working on climate action.

One community has also seen an increase in interest among certain stakeholder groups, including non profit organizations, schools and conservation authorities.

26%
48%
48%
26%
Communities with Low CEP implementation Scores
Communities with Medium CEP Implementation Scores
Communities with High CEP Implementation Scores

Figure 1 - CEP Implementation Scores

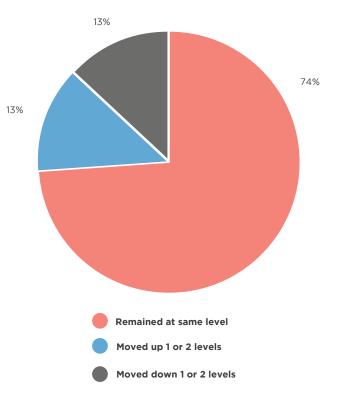


Figure 2 - Change in Scoring Level

While most communities have remained at the same level, 13% of them feel that they have declined. A couple of reasons may account for this change. For one of them, the explanation is relatively simple: political leadership and support from various departments appears to have declined over the past few years. However, for other communities with declining scores, this result may originate from survey design. Since the scoring system assesses implementation progress based on the age of the CEP, communities with CEPs under two years that received a high score in the first survey are now rated lower because their plans have been in place for four or more years, despite continuing to make progress at a good pace.

Two communities were assigned high implementation scores in both studies because they achieved Milestone 5 in FCM's Partners in Climate Protection Program. However, they reached this milestone with plans created 13-15 years ago. There has been more limited activity in recent years. One community has focused on climate change adaptation and another has updated its plan twice but with limited adoption from council and senior management so far. In contrast to the previous survey, participants in the current survey were asked about their progress in achieving their short term GHG emission reduction objectives as a result of instituting climate and energy initiatives.

As Figure 3 illustrates, only 17% of communities expect to meet their short term community GHG emission reduction target, while 13% anticipate achieving their corporate but not their community target. Some municipalities commented that population growth, an increase in transportation emissions and more industrial development in recent years were contributing factors in struggling to reach their targets.

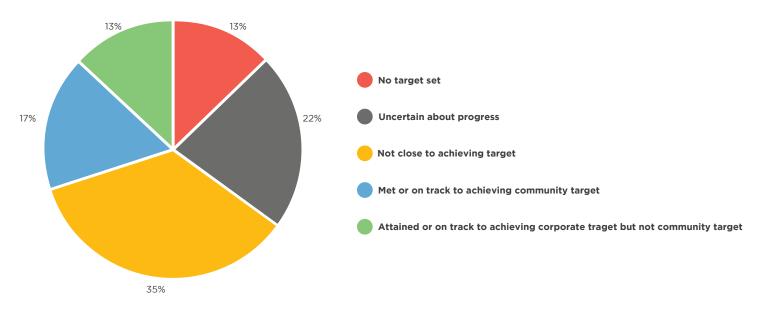
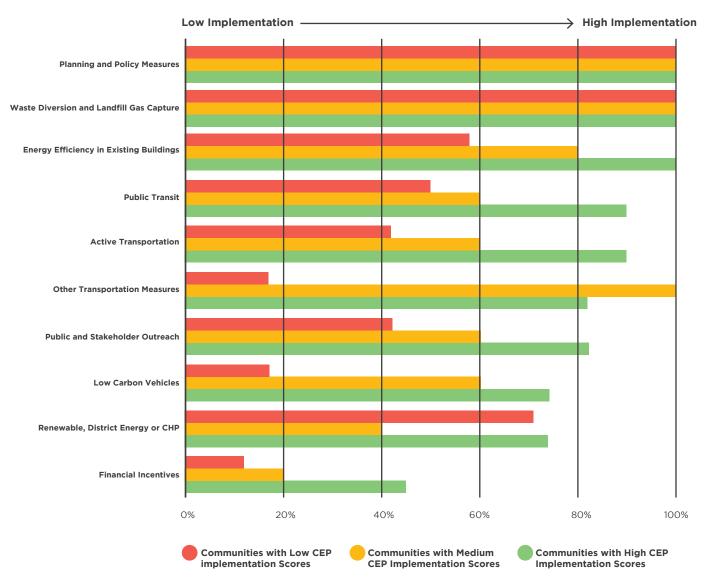


Figure 3 - Progress in Reaching Short Term Targets

Section 3 Type of Implementation Activites

In the 2015 study, planning and policy measures and solid waste diversion initiatives were the actions implemented most frequently by all communities to reduce greenhouse gas emissions and energy use. Financial incentives were used the least. For the 2017 study (next page), energy efficiency measures were the most commonly instituted actions. Financial programs continued to be utilized to a lesser degree except in high scoring municipalities.

Figure 4a - Types of Implementation Actions, 2015



As the these charts illustrate, additional trends have occurred over time:

- Energy efficiency measures in buildings, renewable and district energy systems, active transportation initiatives, and low carbon vehicles have been increasingly used by communities in two or three of the scoring categories.
- Outreach activities, public transit, and waste diversion and landfill gas capture have been used less overall.
- In 2015, high scoring communities were more successful in implementing all types of actions with two exceptions.
 - Planning and policy measures and solid waste diversion initiatives were instituted evenly by all communities.
 - Medium scoring communities exceeded the performance of the other communities in implementing other transportation measures.

- In 2017, high scoring communities continued to surpass the performance of low and medium scoring communities in implementing all activities with two exceptions.
 - Communities with high and medium scores were comparable in employing active transportation and energy efficiency measures in buildings.
 - Medium scoring communities more successfully instituted planning and policy measures as well as renewable and district energy projects.

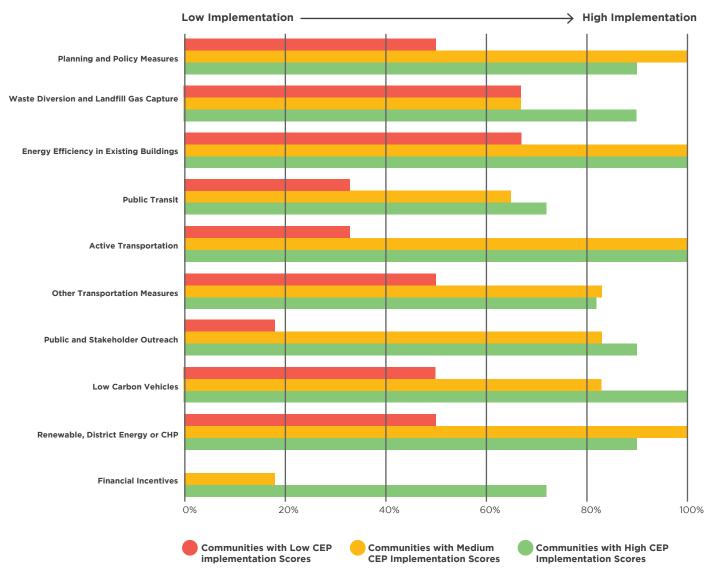


Figure 4b - Types of Implementation Actions, 2017

Section 4 Factors Influencing Successful Implementation of CEPs

In both studies, local government staff were asked to rate how supportive or unsupportive certain factors have been in implementing actions. The following charts show these results.²

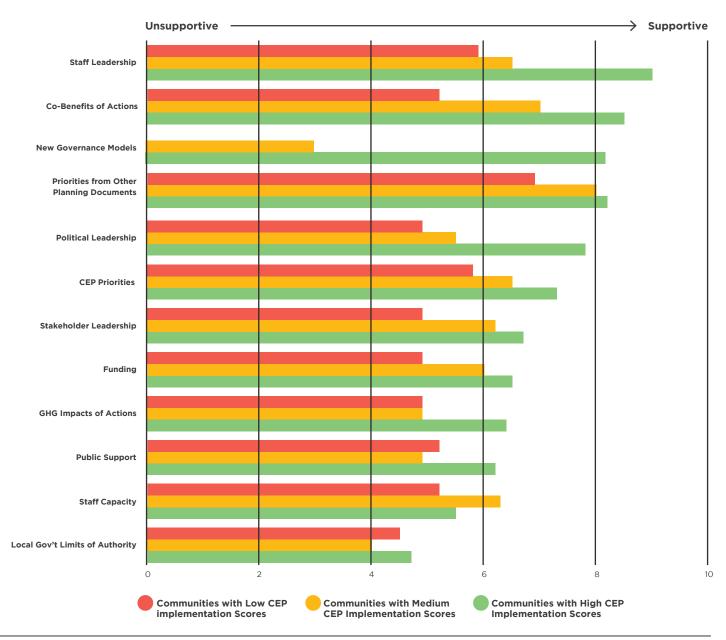


Figure 5a - Factors Supporting CEP Implementations, 2015

² For 2017, funding was separated into capital projects and operations.

Specific trends can be observed between the two studies:

- In 2015, priorities from other planning documents was the most supportive element for all communities. Co-benefits of climate change actions and staff leadership were also very supportive for communities with high scores as well as municipalities with medium and low implementation scores respectively.
- In 2017, other planning documents and co-benefits of actions continued to rank highest for communities with high and medium scores. However, staff leadership, greenhouse gas impacts and CEP priorities were considered the most important factors for low scoring communities.
- In both studies, political leadership was much higher for communities with high implementation scores than those with low and medium scores. In 2015, staff leadership was also significantly higher for high scoring communities than others. In 2017, staff capacity and funding through capital projects and operations superseded staff leadership for the greatest difference in ratings between high and lower scoring communities.

- All communities in both studies considered the limits to local government authority one of the greatest challenges in instituting actions on energy and emissions.
- Communities with low and medium scores noted that staff capacity was an even greater impediment than municipal authority in the current study.
- Despite the above, the general level of support and leadership from local politicians and staff as well as from other planning documents have declined slightly over time.
- Stakeholder leadership has improved between the two studies.
- Funding and staff capacity have experienced improvements among high scoring communities but have declined for medium and low scoring communities.

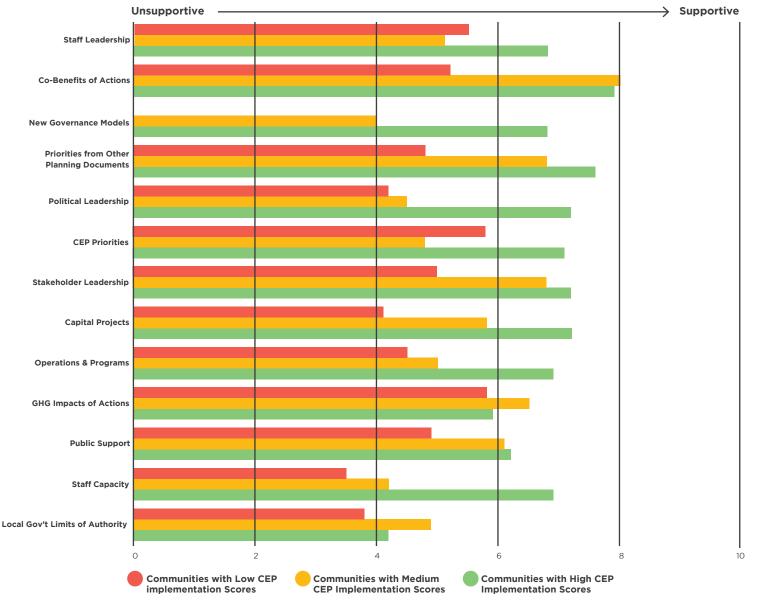


Figure 5b - Factors Supporting CEP Implementations, 2017

In addition to the previous question, interviewees in this study were asked to rank certain factors regarding whether they are required to successfully implement a CEP.

All participants noted that political commitment from local elected officials and a strong provincial/territorial policy framework on climate change are extremely important for implementing CEP. A dedicated budget was also considered essential. In contrast, an existing track record of action in the community was seen as a less important factor for most participants.

Compared to communities with low implementation scores, ones with medium to high scores indicated that having a dedicated staff person to lead action is valuable for effectively instituting a CEP. Communities with high implementation scores considered third party funding to be less vital compared to low and medium scoring municipalities.

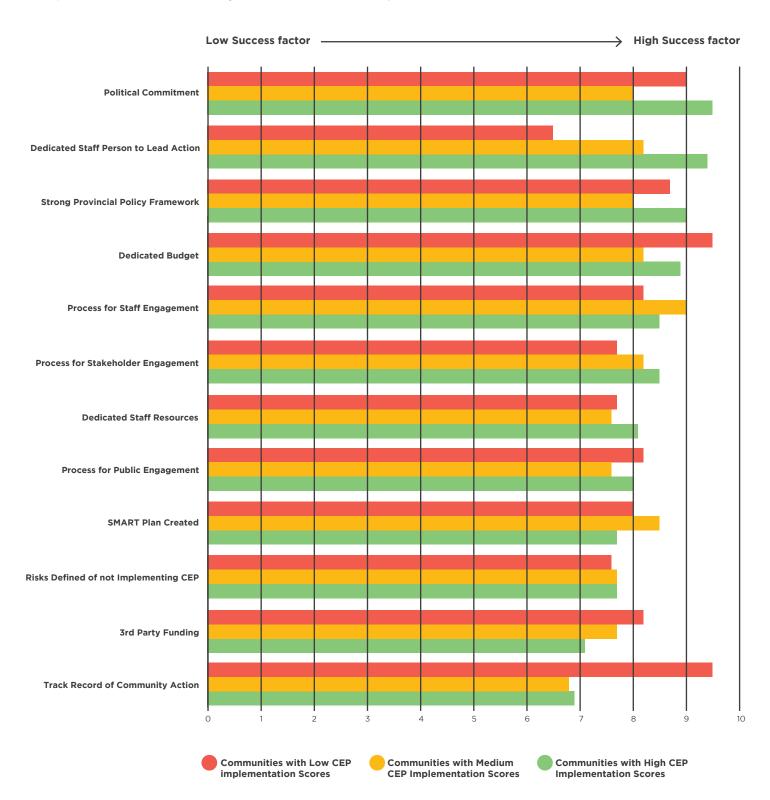


Figure 6 - Factors Necessary for Successful CEP Implementation

Section 5 Roles of Stakeholders

Stakeholders play a key role in community energy planning. They can assist with the implementation of local government actions and institute their own initiatives. In both years, local government staff were requested to rank how supportive various stakeholders (both internal and external to the organization) have been with implementing actions on energy and emissions. The charts below illustrate the changes between the two studies.

Certain trends can be noted from both studies:

- In the 2015 study, local government planning departments were considered one of the most supportive stakeholders for

all communities. Post-secondary institutions were thought to be the most supportive for municipalities in high and medium scoring categories, while non-profit organizations and electric utilities earned strong ratings in high and low scoring communities.

 For the 2017 study, local government engineering departments were considered the most supportive internal stakeholder for communities with high and low implementation scores. FCM (new category) received a very strong rating among high and low scoring communities, while non-profit groups continued

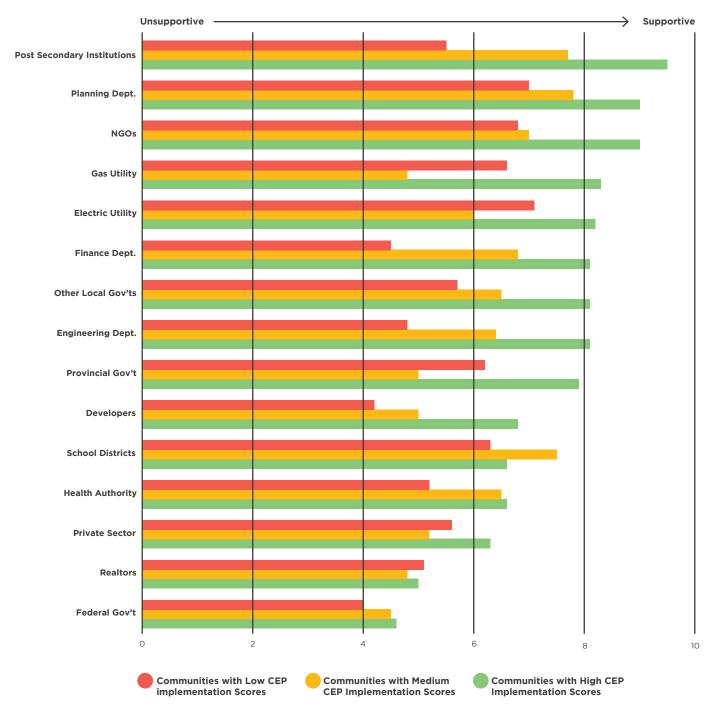


Figure 7a - Level of Stakeholder Support, 2015

to rank high for high and medium scoring communities. Post-secondary institutions still provided solid support for communities with high and low scores.

- For both studies, communities with high scores received more support from other municipal departments like finance compared to medium and low scoring communities. In 2015, they also experienced greater endorsement from external stakeholders such as higher education institutions, non-profit groups, gas utilities, other local governments, and provincial governments. In 2017, there was less significant differences for external stakeholders due to declines in rankings over time for communities with high scores.
- For all communities, the federal government was viewed as the least supportive stakeholder followed by realtors and developers in 2015. The reverse was true for the 2017 study.
- Federal government support improved over time according to all respondents. Health authorities also increased their support except in high scoring communities.
- Support from planning departments, electric utilities and developers declined between the two studies. Similarly, the following stakeholders were viewed as offering lower endorsement in two of the three municipal scoring categories: finance department, gas utilities, realtors, post-secondary institutions, other local governments, and provincial governments.

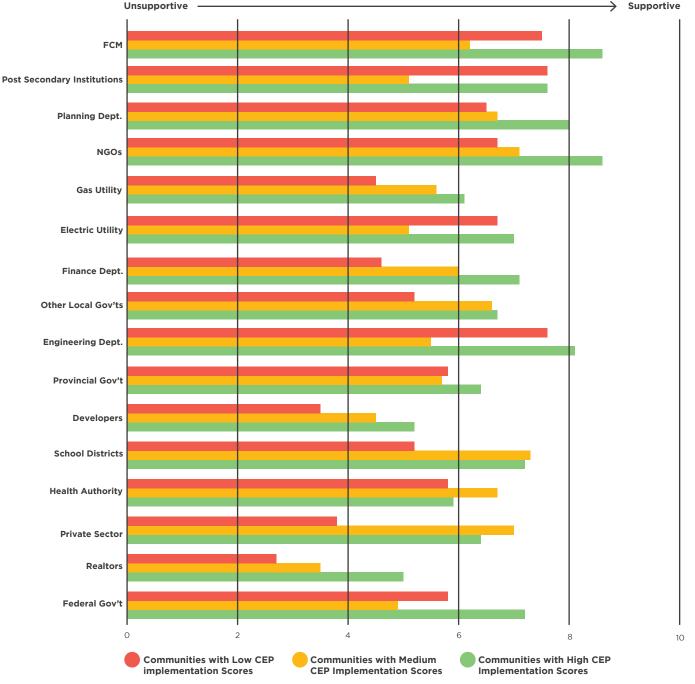


Figure 7b - Level of Stakeholder Support, 2017

In addition to the preceding question on stakeholders, interview participants for the 2017 study were asked the degree to which interest in and implementation of actions in the CEP have changed among staff, local elected officials, utility companies and the real estate sector in the past few years. A score of five reflects no change, while higher and lower scores indicate increases and decreases over time, respectively.

- Real estate sector: There has been a slight decline from this industry according to participants.
- Utilities: Interest has remained the same except in low scoring communities where it has risen.
- Elected officials: All communities have seen little change from this stakeholder group.
- Staff: Low and medium scoring communities have experienced a marginal increase in interest.
- One-third of interviewees also mentioned that environmental non-profit groups were more interested and active in CEP implementation.

In both studies, stakeholders were considered important to collaborate with despite showing varying degrees of support in CEP implementation. As there was little difference between high, medium and low scoring categories, the level of importance of stakeholder collaboration is compared on a general basis.

Municipal planning departments, electric utilities and provincial governments ranked highest in both studies. In the 2015 survey, gas utilities, developers, and municipal engineering and finance departments were also considered very important to partner with on climate action but their scores declined slightly in 2017. This year the federal government received a high rating as the current government has shown greater support for climate change programs.

Realtors received the lowest ratings in both studies. School districts and health authorities also earned low ratings in 2015. All of these stakeholders noticed slight improvements in 2017.

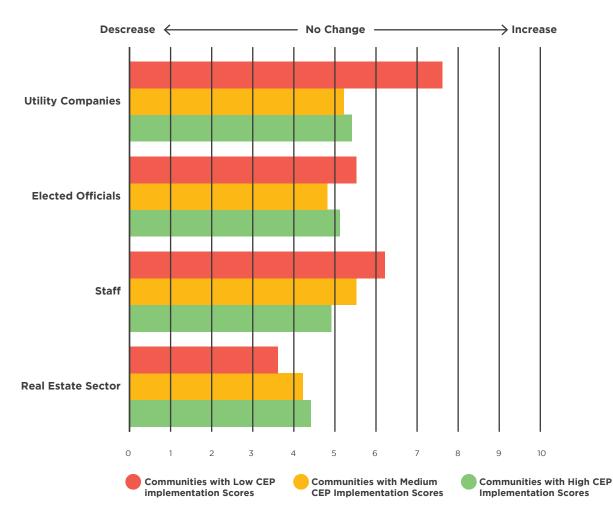
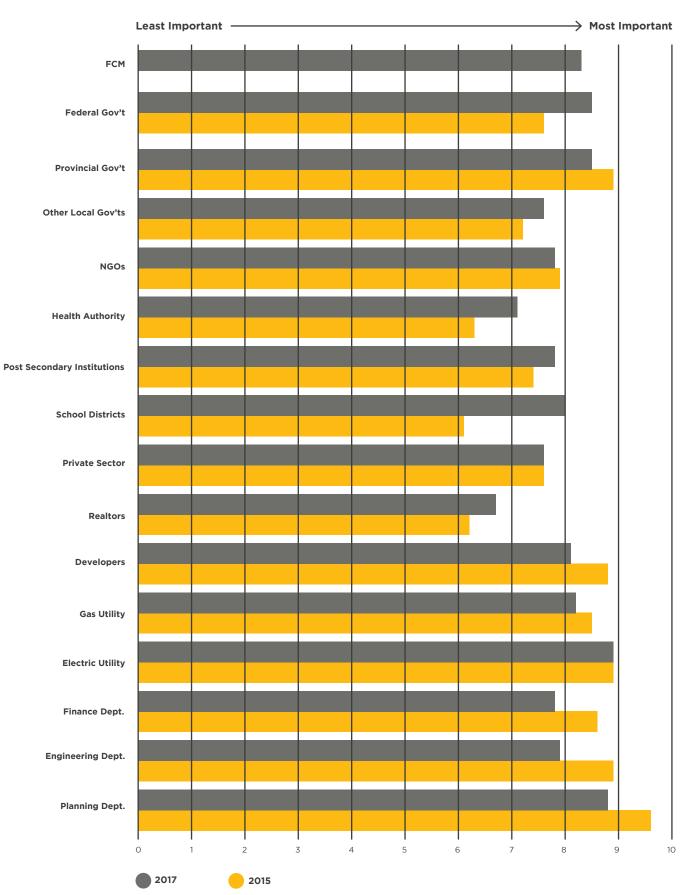


Figure 8 - Level of Stakeholder Interest & Implementation

Figure 9 - Importance of Stakeholder Collaboration



Section 6 Accelerating CEP Implementation

This research illustrates that some communities interviewed still face challenges in implementing all of the actions in their community energy plans. Some have stalled at low or medium implementation levels or moved backwards. A couple of high scoring communities have made

Table 1

minimal progress in recent years. Many communities are not on track to achieve their short term emission reduction targets.

Support is needed to help local governments reach full implementation. Participants in this study were asked what assistance would be most valuable.

Communication & Education	Research	Financial	Senior Government Alignment
Effective messaging for action for municipalities that are uncertain whether they are sending the right messages to stakeholders and the public	Standardized emission factors including an explanation of the methodology used	Financial support to municipalities plus incentives to the broader community to encourage more climate action	Alignment of federal and provincial government strategies with local government initiatives and lining up resources and effort between different jurisdictions
Stakeholder and municipal government communication templates to lobby provincial governments on various municipal climate change topics	Land use scenario modelling to demonstrate the costs and benefits of various actions. Other cost/benefit information such as \$/tonne of GHG emissions avoided		Requirement to develop strong targets and implement certain actions to make response to climate change a higher priority among municipal staff
Community and public education to support local elected official buy in and action on climate change	Climate and energy action value proposition so everyone can find a reason to respond*		Support to lobby provinces to provide detailed community energy and emissions inventories
Training for senior local government officials to inform them of the business case for a low carbon economy	Local government administration of low income loans for energy efficiency retrofits		
Peer to peer learning to share challenges and best practices on climate action - customize peer learning for communities of different sizes.	Jurisdictional scan of local government authority across Canada to learn what municipalities can and cannot do in different provinces through the Local Government Acts*		
Next steps identification for community energy planning and how to do them with limited staff	Summaries of new provincial and federal legislation related to climate and energy		

*Reports were developed on these topics for the Getting to Implementation Initiative. They are available at: http://gettingtoimplementation.ca/research/

In addition to the preceding support, further recommendations are outlined below to accelerate implementation of CEP actions. Suggestions are categorized based on the needs of all communities compared to those achieving low and medium implementation scores.

All:

1. Strengthen relationships with realtors and developers

- Provincial and sub-regional municipal associations could lobby and educate their counterparts in these sectors about the importance of climate action and cost effective ways to reduce greenhouse gas emissions in the built environment.
- Local governments could take parallel action with key organizations in their communities.
- Municipal associations could work collaboratively with utilities and provincial governments to further incentivize this sector to take stronger action on climate change.

2. Change the limits of local government authority

 Municipal associations could lobby the provinces for more control in areas that would facilitate further action on climate change and energy initiatives.

3. Enhance staff capacity

 Peer to peer learning networks should be expanded in order to share best practices and advise what does not work in mitigating climate change. Workshops, webinars, online resources, one to one coaching, and other vehicles could be used to disseminate info.

4. Refresh community energy plans that are 8 or more years of age

 Nearly 45% of all municipalities interviewed for the 2017 study are rebooting them in 2017 or 2018 or are considering doing it. Organizations that support local governments in climate and energy planning could help them to revitalize actions, including high scoring communities where action has stalled.

Low/Medium:

- Increase buy in from other municipal departments that are not traditionally involved in climate action such as Finance, Communications, Community Services, Parks and Recreation, Economic Development, and Transportation (high scoring communities noted support from these areas).
 - Staff that lead work on climate change should communicate the benefits of action in ways that are valuable and relevant to these departments.

2. Improve political leadership

- Mentoring initiatives such as the BC Municipal Climate Leadership Council could be disseminated across Canada to facilitate stronger leadership among mayors and councillors.
- 3. Increase funding for capital projects and operational programs
 - Municipal associations and other organizations that assist local governments with their climate change and energy planning should lobby senior levels of governments as well as utility companies to allocate additional funding to municipalities for these initiatives.

For additional support on CEP implementation, communities are also encouraged to review GTI's Community Energy Implementation Framework. This <u>online tool</u> contains ten strategies that provide advice on political, staff and stakeholder engagement; staff and financial capacity; and embedding energy into local government plans and processes. It also includes an Implementation Readiness Survey, a self-evaluation tool intended to help communities identify areas of strength and weakness for implementation.

In conclusion, modest improvements have been made with respect to CEP implementation in the past 2-3 years with 26% of communities achieving medium scores and 48% still attaining high scores. A broad range of actions continue to be used to lower emissions. While some measures have been increasingly utilized (e.g. energy efficiency measures in buildings, renewable and district energy systems, low carbon vehicles), others have declined in use (e.g. public transit).

Priorities in other planning documents and co-benefits of actions continued to be the highest support factors for CEP implementation. On the other hand, the limits to local government authority continued to present one of the greatest challenges. For many communities, staff capacity was an even greater impediment in the 2017 study. Certain stakeholders have also played a significant role in CEP implementation including planning and engineering departments in local governments and a variety of external entities such as FCM, post- secondary institutions and non-profit organizations.

To further accelerate implementation, the following is still needed: greater buy in from other municipal departments and the real estate sector, increased funding, improved staff capacity and political leadership, and less limits to local government authority.

