

Community Energy and Emissions Plan Research

General Research Summary of Findings

August 2013

BChydro powersmart

Canada

Natural Resources Ressources naturelles Canada

Canada





Ministry of Environment

Contents

Abstract	1
General Research Summary	2
Appendix	4
Research Overview	4
Phase 1, CEEP Review – Discussion & observations	6
Phase 2, Interviews – Discussion & observations	7
Key conclusions & insights	8
Summary tables of key insights from each analysis section	8

Abstract

Community Energy and Emission Planning is a relatively recent activity by local governments in Canada, with most known plans having been initiated since 2008. The Community Energy Association (CEA) took the initiative to analyze and compare a significant proportion (30) of the Community Energy and Emissions Plans (CEEPs) that have been completed in Canada; using this information to better understand the critical attributes of these plans, and to inform policies and actions being contemplated by current and future CEEP processes and help ensure their successful implementation.

The project was conducted in two phases:

- Phase 1 A review of 30 CEEPs representing a broad range of communities across Canada, and in both official languages. The CEEPs reviewed include plans for urban, rural, First Nations, cities, towns and villages. The age of the CEEPs reviewed is biased towards the most recent, 50% were completed since 2009, but the range extends back to 2004.
- Phase 2 Interviews with as many of the 30 communities as possible were conducted. Ultimately key representatives from 23 of these communities were interviewed with 18 questions, in interviews that were sometimes over an hour long.

General Research Summary

Drawing from the rich data sets generated from the above research, the following is a short, condensed, summary of the results of that research.

Current State of CEEPs across Canada

- Diversity in types of CEEPs Community Energy and Emissions Planning (CEEPs) are, generally speaking, still a relatively new undertaking for communities across the country. They are diverse in many ways (size and scope of undertaking; level of involvement of council, staff and other stakeholders, including the broader public; rich with experimentation and innovation, particularly given the range of consultant support and the variable size of contracts and timeframe afforded to consultants.
 - While there is substantial consistency in the high level of sectors (residential and commercial buildings, transportation) and general approaches (energy efficiency, renewable energy, district energy), there is great variety in how the same / similar action are described in CEEPs.
 - Variety extends to the nature of target setting as well as progress accountability. Targets vary significantly across Plans (base years, BAU or % from base year, per-capita, total).
- Quantification of actions almost non-existent Very few communities have yet looked to estimate the extent to which actions will improve energy efficiency, conserve or reduce energy use and/or reduce greenhouse gas emissions if applied over a period of time.
- Widespread Local governments of all sizes in all parts of Canada are developing and applying CEEPs.
- CEEPs are not usually 1st step Of the Federation of Canadian Municipalities (FCM) Partners in Climate Protection (PCP) Program, energy and climate action planning is considered 'Milestone 3'. The most common first step for municipalities Canada-wide to undertake is a community energy and emissions inventory ('Milestone 1'). And even before inventories are undertaken, dedicated staff and political support is required.
- High level of satisfaction with CEEPs Most frequently, those involved in developing a CEEP (e.g., municipal staff, public), or those providing its approval (i.e., municipal councils) give high approval for both the process and the final Plan. However, CEEPs are all too-often left without a clear implementation strategy.
- Fewer challenges in BC BC communities reported fewer challenges in undertaking and implementing CEEPs. This appears to be largely due to the perception that there is a broad degree of support from the Province and from community members. There is also a perception that local governments in BC may have a greater level of authority than in other jurisdictions.

Emerging CEEP Trends

- Great effort, without greater results Interview responses indicate that, while more recently, CEEPs have become more complex and analytical, this has not translated into increased clarity or digestibility by those supporting or charged with implementing the Plans.
- Trend towards accuracy and accountability Monitoring and tracking, modelling, and action quantification are emerging topics that we expect to become more widespread in CEEPs over the coming years.

Correlations with Success

- Secondary indicator for success The percentage (%) of actions implemented is a common metric used to determine the level of progress, hence success, in implementing a CEEP. Given the rudimentary nature of implementation across Canada, it is not surprising the noted difficulty in measuring such success.
- The value of tracking / monitoring actions Notwithstanding the above, while few jurisdictions actively tracked the progress of Plan implementation, those that did appeared equally successful in indeed making progress; suggesting that monitoring has a strong correlation with success.
- Change management Some CEEPs can take the better part of a year to get drafted and approved before implementation can begin. Some interviewees highlighted the challenge of maintaining the necessary engagement, momentum and support from both senior municipal staff and elected officials. As well, given that such innovative planning requires understanding the interrelationships to, and making the strongest connections with, standard municipal plans and planning processes (e.g., land use and transportation plans, budget cycles), having engaged and informed senior municipal staff that can make timely decisions can be extremely important.
- Small vs large communities 100% of the communities identified through the interview process as lowest performing were the smaller communities.
- Stakeholder engagement The level of stakeholder engagement during the development of CEEPs does NOT show a strong correlation to success, however broad support in staff, local political circles, and the broader public does. This perhaps points to considering the strategic nature and the appropriate timing for achieving support from local politicians and key community stakeholders.
- The Quality of CEEPs One of the more interesting findings, is that there is not a direct relationship (strong correlation) between the quality of a CEEP and the likelihood of its successful implementation.

Recommendations

- All CEEPs should have a SMART (specific, measurable, achievable, realistic and time-bounded) implementation plan, with clear next steps
- A council's prerequisite for approving the development of a CEEP should be the requirement that one or a number of implementation actions be a part of that community's forward commitment.
- Also prerequisite to developing any CEEP should be the requirements for both a general community-wide and sector-specific targets, with the municipality's commitment to quantify actions (degree of success) as they are undertaken.
- Any business case for a CEEP should include a basic level of financial / economic analysis, including economic development potential. CEEPs can be a significant catalyst for promoting a local green economy with green jobs within a community.
- Although information was not identified as a major barrier to the development or implementation of CEEPs, barriers included funding, staff time, and local government authority. These challenges and/or barriers should be part of the CEEP development fabric.
- CEEPs are not usually the first step. Some things to have in place before a CEEP are: Dedicated staff; energy & emissions inventory; and political & staff support / alignment.

Further Research

- Explore to what extent CEEPs have been instrumental in communities achieving FCM PCP M5.
- Compare CEEP development between different provinces / territories.
- Develop short case studies of communities that have overcome barriers (staff time, funding, authority, support).
- Consider broader local government outreach based on the findings of this and related research.

Appendix

Research Overview

Project scope and scale:

- 30 CEEPs reviewed
- 12,000 data points collected regarding CEEPs and targets
- 300 data points classifying CEEP approaches
- 300 data points classifying communities reviewed
- 300 additional data points for communities not selected for in-depth review
- 23 hours of interview time
- 400 detailed responses to interview questions collected, condensed & quantified

The tables below summarize characteristics of the local governments which were selected:

Local Gov Name	Prov/Terr
Calgary	AB
Cochrane	AB *
Colwood	BC *
Dawson Creek	BC *
East Gwilllimbury	ON *
Fernie	BC *
Fredericton	NB *
Guelph	ON *
Halifax	NS *
Iqaluit	NU *
Ktunaxa First Nation	BC
Langley, City of	BC
Laval	QC
Morden-Stanley-	
Thompson- Winkler	
Planning District	MB *
North Vancouver, City of	BC *
Ottawa	ON *
Peace River RD	BC *
Prince George	BC *
Saanich, Central	BC *
Saanich, District of	BC "
Saskatoon	SK
Squamish-Lillooet RD	BC *
St. John's	Nfld
Supplier Const PD	UN "
Toronto	
Vancouver	BC *
Vanderboof	BC *
Whistler	BC *
Vellowknife	
renowkille	

Population	
< 20,000	10
Btw 20,000 & 100,000	10
>100,000	10

Provincial / Territorial distribution	
BC	15
AB	2
MB, NB, Nfld, NS, NU,	
NWT, QC, SK	1 ea
ON	5

Publication year	
2004	2
2005	1
2006	4
2007	3
2008	5
2009	6
2010	9

* = communities that were interviewed

The questions that local government staff were asked in the phase 2 interviews were as follows:

	Questions
1.	Please confirm what community milestone your local government has reached with the Federation of Canadian Municipalities' Partners for Climate Protection Program?
2.	Was the CEEP the starting point for your community's work in energy and emissions, or had your community already been engaged? If not, what would you say was the starting point for your community's engagement and action on the issue?
3.	Thinking about scheduling of the CEEP, based on your experience, what do you think needs to be in place or completed for a CEEP to be successfully implemented?
4.	Once the CEEP was completed – was it clear what the next step should be?
5.	How has your local government's internal organizational structure supported actions on energy and emissions? Is there an accountable position such as a Community Energy Manager or Sustainability Co-ordinator? What is the reporting structure for that position?
6.	Thinking about interdepartmental co-ordination, does your local government have a cross- departmental steering committee to guide actions on energy and emissions? [If yes] Who is sitting on the Steering Committee? E.g. utilities, transit, planning.
7.	Have any organizational changes been implemented or proposed as a result of the CEEP, or to facilitate the implementation of actions on energy and emissions?
8.	Do you have any observations to offer on how the internal organizational structure of your local government could be improved to enable accomplishing action items contained in its CEEP?
9.	On the subject of external stakeholder engagement: Is or was there a stakeholder engagement structure to support implementation of the CEEP, and if so can you describe it?
10.	"Decision Support refers to the tools and information provided to people during all aspects of their decision making process." What decision support tools are contributing to action on energy and emissions? (checklists, modeling tools or frameworks such as Natural Step or QUEST). Please list all of these types of tools that have been used that you can think of.
11.	Approximately what proportion of actions in the CEEP have been implemented so far?
12.	What actions listed in the CEEP are currently in the implementation process?
13.	What factors contributed to the successful implementation of these actions? [Factors: political, visionary leadership from staff or community, financial (grant funding), business case, green economic development.]
14.	What challenges were there associated with implementation of these actions?
15.	Why are some of the actions listed in the CEEP not being carried out?
16.	Are the results of the actions implemented being measured? And if so, how? Have you quantified the expected CO ₂ emissions reductions? [Info required on specific actions and impacts]
17.	What if any feedback has been received regarding the CEEP or its implementation? Were you satisfied with the CEEP or not?
18.	In hindsight, do you think there is anything that the CEEP could have done that would have made it easier to conduct actions on energy and emissions?

Phase 1, CEEP Review – Discussion & observations

- 1. The number and diversity of the initiatives identified in the CEEPs was high.
- 2. There was a general lack of quantification for the identified initiatives within the CEEPs. Only 14% of CEEPs have quantified initiatives. While, targeting is done more prevalently at the sectoral level and almost always at the overall community level.
- 3. The review found that in general CEEPs provided forecasting of future emissions and energy consumption on a Business As Usual (BAU) basis. Modelled performance scenarios of initiative implementations were less common. Targeting is not done on a consistent basis. Authors use different base years and different target amounts. These differences make comparison of targets between CEEPs a non-trivial exercise in raw data analysis.
- 4. Generally, it was found the CEEPs reviewed followed the Partners for Climate Protection (PCP) requirements and guidelines for milestone 3 (as they were in summer 2011). There were exceptions, for example, 10% of CEEPs reviewed did not contain an overall community target, 20% of CEEPs did not attempt to forecast future emissions, and 17% of CEEPs did not explicitly recommend monitoring of performance measures. These were key requirements for milestone 3.
- 5. The economic development potential is typically not considered for actions including energy efficiency, renewable energy, and smart growth. Some CEEP authors were able to convey the economic benefits of new employment opportunities and reduced energy expenditure outside their communities, but in general this opportunity was not highlighted.
- 6. The CEEPs evaluated had strengths in their scope, planning and data analysis. Their weaknesses appeared in the implementation issues of financial analysis, monitoring strategy and the challenge of action planning to be SMART specific, measurable, attainable, relevant, and time-bound. Action planning was a consistent weakness across many CEEPs.
- 7. More is not always better. Some CEEPs have many actions, but may not provide a timeframe, any prioritisation, or much direction towards the local government staff whose job it will be to implement it. It is important that the people at the local government are clear on what their next steps are in order to facilitate implementation.
- 8. Most CEEPs have some public and/or stakeholder consultation, but not all. Some CEEPs that may be quite effective actually have no public / stakeholder consultation. There appears to be a trend that the CEEPs that have the most input from public and stakeholders can suffer from having too many actions. Having too many actions can be problematic because it increases the resource requirements of implementation.
- 9. All CEEPs except one cover all three major sources of emissions: buildings, transportation, and waste.
- 10. There is a distribution of the scope and vision of the CEEPs reviewed. At one end of the spectrum, some CEEPs reviewed intend to be transformational for their communities, and at the other end of the spectrum there are CEEPs that outline an action plan of modest ambition.

Phase 2, Interviews – Discussion & observations

- 1. The two biggest challenges faced by communities are also the most expected time and money. The next greatest challenge, 'lack of authority', demonstrates how a significant number of communities, 48%, are feeling that their progress is being held back by other levels of government. A substantial number of local governments also indicated that garnering political and staff support could be a challenge, indicating that they need to be able to better sell action ideas.
- 2. A surprisingly high fraction of communities, or 39% of those interviewed, were not clear on their next steps following the CEEP. This indicates that our observation from Phase 1 that action plans in a substantial number of CEEPs seemed weak was correct.
- 3. A wide variety of decision support tools are used on an ongoing basis. A surprisingly low proportion of interviewed communities used modelling (30%), and used lifecycle costing or support from other local governments (just 4% each).
- 4. Communities are generally making fairly good progress on conducting actions. Every interviewed community had conducted at least one action from its CEEP, and 65% of communities believed they had conducted more than 25% of the actions from their plans. A broad variety of actions have been or are being conducted tackling emissions from buildings, transportation, and waste.
- 5. When is a good time to conduct a CEEP? A majority of respondees stated that once dedicated staff resources were in place (or a person had been made accountable), and once political commitment or support was in place. More than a third of respondents also believed that an energy & emissions inventory should be conducted first, that there should be staff support or a staff champion, and that stakeholders should be engaged.
- 6. What needs to be in place to successfully implement actions? A majority of respondees stated that political support / leadership, staff support / leadership, and external funding all contribute. More than a third also stated that stakeholder support, and proposing actions that have co-benefits also contribute.
- 7. Although there was a high degree of general satisfaction with CEEPs, with 91% of communities saying that they were satisfied, there were also a significant number of suggestions on how CEEPs could be improved. Corroborating our observation from Phase 1, 22% of communities stated that actions / action plans, and also quantification of expected savings from actions could be improved. Only 39% of communities did not have any suggestions as to how their CEEP could have been improved.
- 8. Monitoring or tracking results of actions is a clear weakness for communities. 35% of communities were not conducting any activities in this area. Ideally communities would be both tracking individual actions and also tracking community inventory data, but only 17% of interviewed communities were doing this.

Key conclusions & insights

Summary tables of key insights from each analysis section

$$\sqrt[4]{\sqrt{4}}$$
 = High
 $\sqrt[4]{\sqrt{4}}$ = Medium
 $\sqrt[4]{\sqrt{4}}$ = Low
 X = None

Community performance

Relationship with good community performance	Correlation strength
Good quality CEEP	$\sqrt{}$
Overall GHG target	$\sqrt{}$
Sectoral or sub-sectoral GHG targets	$\sqrt{\sqrt{\sqrt{1}}}$
Having actions in as many key action categories as possible	$\sqrt{}$
Finding that staff time is not a challenge	$\sqrt{}$
Not having any suggestions on how to improve organizational structure	$\sqrt{}$
Starting work on energy and emissions before conducting the CEEP	$\sqrt{}$
CEEP satisfaction	√
Identifying what needs to be in place for a CEEP to be successfully implemented	$\sqrt{}$
Identifying what needs to be in place to successfully conduct actions	$\sqrt{}$
Having more suggestions on how the CEEP could be improved	$\sqrt{}$
Tracking / monitoring the results of actions	$\sqrt{\sqrt{\sqrt{1}}}$

BC & non-BC communities

Relationship with being a BC community	Correlation strength
Good community performance	$\sqrt{}$
Good quality CEEP	X
Overall GHG target	X
Sectoral or sub-sectoral GHG targets	$\sqrt{\sqrt{\sqrt{1}}}$
Having actions in as many key action categories as possible	\checkmark
Having less challenges	$\sqrt{}$
Not setting up a cross-departmental steering committee	$\sqrt{\sqrt{\sqrt{1}}}$
Not starting work on energy and emissions before conducting the CEEP	$\sqrt{}$
Using modeling on an ongoing basis as a decision making tool	$\sqrt{\sqrt{\sqrt{1}}}$
To have conducted or be conducting public / stakeholder outreach	$\sqrt{\sqrt{\sqrt{1}}}$
Identifying what needs to be in place for a CEEP to be successfully	
implemented	X
Identifying what needs to be in place to successfully conduct actions	X
Having more suggestions on how the CEEP could be improved	X

Community size

Relationship with being a larger community	Correlation strength
Good community performance	\checkmark
Good quality CEEP	X
Overall GHG target	X
Sectoral or sub-sectoral GHG targets	√
Having actions in as many key action categories as possible	\checkmark
Having less challenges	X
Conducting organizational change – both establishing a cross- departmental steering committee & hiring a staff person	$\sqrt{\sqrt{2}}$
Using modeling on an ongoing basis as a decision making tool	\checkmark
Conducting actions in more action categories	\checkmark
Tracking / monitoring the results of actions	$\sqrt{\sqrt{\sqrt{1}}}$

Urban & rural communities

Relationship with being an urban community	Correlation strength
Good community performance	$\sqrt{}$
Good quality CEEP	X
Overall GHG target	\checkmark
Sectoral or sub-sectoral GHG targets	$\sqrt{\sqrt{\sqrt{1}}}$
Having actions in as many key action categories as possible	X
Having less challenges	X
<i>Not</i> having a cross-departmental steering committee (formal or informal)	$\sqrt{}$
Conducting organizational change – both establishing a cross- departmental steering committee & hiring a staff person	$\sqrt{}$
Starting work on energy and emissions before conducting the CEEP	$\sqrt{\sqrt{\sqrt{1}}}$
Being clear on the next steps following completion of the CEEP	$\sqrt{\sqrt{\sqrt{1}}}$
Using modeling on an ongoing basis as a decision making tool	X
To be using decision making tools on an ongoing basis	$\sqrt{}$
Conducting actions in more action categories	$\sqrt{}$
CEEP satisfaction	$\sqrt{}$
Having fewer suggestions on how the organizational structure could be improved	$\sqrt{}$
Identifying what needs to be in place to successfully conduct actions	\checkmark
Not having more suggestions on how the CEEP could be improved	$\sqrt{\sqrt{\sqrt{1}}}$
Tracking / monitoring the results of actions	$\sqrt{\sqrt{\sqrt{1}}}$

Pre & post 2008 CEEPs

Relationship with conducting CEEPs post 2008	Correlation strength
Good quality CEEP	√
Overall GHG target	X
Sectoral or sub-sectoral GHG targets	\checkmark
Having actions in as many key action categories as possible	$\sqrt{\sqrt{\sqrt{1}}}$
Not being clear on the next steps following completion of the CEEP	$\sqrt{\sqrt{\sqrt{1}}}$
<i>Not</i> having conducted more than 75% of the actions in the CEEP	$\sqrt{\sqrt{\sqrt{1}}}$
CEEP satisfaction	$\sqrt{}$
Having fewer suggestions on how the organizational structure could be improved	$\sqrt{}$
Having more suggestions on how the CEEP could be improved	$\sqrt{}$

Successful communities

Almost any community can be a successful community, regardless of where it is in Canada, its population, whether it is urban or rural, and almost irrespective of when it conducted its CEEP. It is however still crucial that a local government is able to dedicate some time or resources towards conducting the actions, and without being able to do this it will not be successful. With this in mind, it seems to be harder for small and rural communities to get ahead, given that all of the worst performing communities are small and most of them are rural.

If a community wishes to be a climate and energy leader then it should not have a bad CEEP, but our research does not support the idea that a top quality (and potentially more expensive) CEEP is necessary. A community should ensure that the CEEP has an overarching GHG target, and if it is a larger or a complex community then it should also have sectoral targets.

It helps a community to have an accessible and concise CEEP that has the following:

- A good action plan (that is SMART specific, measurable, attainable, relevant, and time-bound);
- Expected savings from actions quantified;
- Actions in each relevant category, but not too many actions overall.

Further tips on how a community can be successful are contained in the rest of the section.

Challenges

The two biggest challenges faced by communities are also the most expected – time and money. The next greatest challenge, 'lack of authority', demonstrates how a significant number of communities (particularly those outside of BC) are feeling that their progress is being held back by other levels of government. A substantial number of local governments also indicated that garnering political and staff support could be a challenge, indicating that they need to be able to better sell action ideas.

Non-BC communities generally seem to be facing more challenges than BC communities.

Standard of CEEP documents

By our method of rating the different CEEPs against each other, CEEPs were generally of a high standard. Fortunately also most of them followed the Partners for Climate Protection (PCP) requirements and guidelines for milestone 3 (as they were in summer 2011). Also, fortunately all of the CEEPs except one covered all three major sources of emissions: buildings, transportation, and waste.

The CEEPs evaluated had strengths in their scope, planning and data analysis. Their weaknesses appeared in the implementation issues of financial analysis, monitoring strategy and the challenge of action planning to be SMART – specific, measurable, attainable, relevant, and time-bound.

The only correlations between the standard of CEEP documents and the various ways to divide up the communities are as follows:

- The CEEPs for the worst performing communities were significantly worse than those from the medium and best performing communities;
- The CEEPs written post 2008 are significantly better than the earlier CEEPs.

There is no statistically significant difference between the standard of CEEP documents created for any of these categories:

- Medium and best performing communities;
- BC compared to non-BC communities;
- Small, medium, and large communities;
- Urban and rural communities.

Satisfaction with CEEPs

Although there was a high degree of general satisfaction with CEEPs (91% of interviewed communities said they were satisfied), there were also a significant number of suggestions on how CEEPs could be improved. A significant number of communities stated that actions / action plans, and also quantification of expected savings from actions could be improved. Only 39% of communities did not have any suggestions as to how their CEEP could have been improved.

Are rural challenges being properly accounted for in CEEPs? Urban communities are considerably more likely to be satisfied with their CEEPs than rural communities.

CEEPs also appear to be improving. 100% of the communities that conducted their CEEPs in 2009 & 2010 were satisfied, compared to 85% of communities that conducted their CEEPs in 2008 & earlier. This correlates well with how by our rating system CEEPs from 2009 & 2010 are significantly better than earlier CEEPs.

Actions & action plans

Action planning was a consistent weakness across many CEEPs. A significant number of communities stated that actions / action plans, and also quantification of expected savings from actions could be improved. Few action plans were SMART – specific, measurable, attainable, relevant, and time-bound, which can lead to lack of clarity on what next steps are. And some CEEPs had too many actions.

CEEPs for smaller communities have fewer actions than those for larger communities, even in action categories that are as applicable for them as they are for larger communities. This shows a lack of comprehensiveness for those CEEPs. This is compensated to a degree though, because communities, including rural communities, did pursue actions that were not in their CEEPs.

Over time, CEEPs are becoming better at including actions in different key action categories. The greatest increases in popularity are in active transportation and in district energy.

Process

A wide variety of decision support tools are used on an ongoing basis, but generally they are not sophisticated tools. A surprisingly low proportion of interviewed communities used modelling (30%), and this is in addition to the fact that the modelling used in the CEEPs was generally quite simplistic. BC communities are substantially more likely to be using modelling tools than non-BC communities (46% versus 10%). Urban and rural communities are approximately equally likely to be using modelling.

Some tools that seem to be commonsensical are also rarely used, such as lifecycle costing or talking to other local governments (just 4% each).

When is it a good time to conduct a CEEP? A majority of respondees stated that once dedicated staff resources were in place (or a person had been made accountable), and once political commitment or support was in place. More than a third of respondents also believed that an energy & emissions inventory should be conducted first, that there should be staff support or a staff champion, and that stakeholders should be engaged. BC communities were less likely to feel that the inventory was necessary, which is unsurprising given the Provincial Community Energy and Emissions Inventories (CEEI) initiative.

Progress

Communities are generally making fairly good progress on conducting actions. Every interviewed community had conducted at least one action from its CEEP, and 65% of communities believed they had conducted more than 25% of the actions from their plans. This clearly shows the value of the CEEP process towards getting real action on the ground. A broad variety of actions have been or are being conducted tackling emissions from buildings, transportation, and waste.

What needs to be in place to successfully implement actions and make progress? A majority of respondees stated that political support / leadership, staff support / leadership, and external funding all contribute. More than a third also stated that stakeholder support, and proposing actions that have co-benefits also contribute. One respondee emphasised that in order to obtain political and staff support that they thought it was important to focus on the co-benefits of actions, such as economic benefits, and then add health and environmental benefits as ancillary.

Time is as not as great a factor as some might consider. A substantial fraction of communities that conducted their CEEPs in 2009 and 2010 were still able to conduct or start more than 75% of the actions in their CEEPs. Similarly, a substantial fraction of the communities that conducted their CEEPs in 2008 and earlier had conducted less than 25% of their actions. This demonstrates the variety of factors that can affect how quickly a community makes progress with their CEEP, and that some communities are able to make substantial progress in a short period of time.

It is very interesting to note which actions the 2009 & 2010 CEEP communities are able to start implementing first. The high priority actions include: energy efficiency in buildings, public /stakeholder outreach, and making some progress towards implementing district energy. Actions that appear to be lower priority include planning & policy measures, active transportation, and leading by example.

Local government organisation

Unsurprisingly, the larger the community the more likely it is to have conducted organisational change, and the larger the community the more change they are likely to have conducted. Interestingly, every large community interviewed had hired a dedicated staff person, giving them more staff resources to conduct actions than smaller communities.

Both rural & urban communities are equally likely to have taken some action at organisational change. Lacking financial resources, rural communities are less likely to have hired somebody but instead will have created a cross-departmental steering committee.

Rural communities have considerably more suggestions than urban communities on how their organisational structure could be improved. Rural communities are particularly more focussed on getting more staff resources, getting more staff and senior staff support, and political support.

Tracking

Monitoring or tracking results of actions is a clear weakness for communities. A large fraction of interviewed communities were not conducting any activities in this area. This makes sense as the monitoring sections in the majority of CEEPs were either non-existent or poor. Implementation of actions was rarely modelled in CEEPs, which would make tracking the impacts of those initiatives more difficult.

The smaller or more rural the community, the less likely it is to conduct tracking & monitoring activities. However, all large communities conduct at least some tracking & monitoring activities. Ideally communities would be both tracking individual actions and also tracking community inventory data, but only 17% of interviewed communities were doing this.

Co-benefits

In CEEPs, the economic development potential of actions is typically not considered, even for energy efficiency, renewable energy, and smart growth. Some CEEP authors were able to convey the economic benefits of new employment opportunities and reduced energy expenditure, but in general this opportunity was not highlighted. Given the importance of establishing political and staff support, and how challenging many communities find this to be, this appears to be a clear missed opportunity.

Next Steps

A surprisingly high fraction of communities, or 39% of those interviewed, were not clear on their next steps following the CEEP. Breaking this down by when communities completed their CEEPs is extremely revealing. 15% of the communities that had their CEEPs completed in 2008 or earlier said that the next steps were not clear, compared to 70% of the communities that had their CEEPs done in 2009 and 2010. The most likely explanation is that either hindsight or forgetfulness is helping 2008 & earlier communities believe that the next steps were clear when their CEEPs were completed. The other explanation is that CEEPs have become less clear over time with respect to next steps. In either case the solution is the same – CEEPs must become better at explaining next steps to communities.