



COMMUNITY  
ENERGY PLANNING  
**GETTING TO  
IMPLEMENTATION**  
IN CANADA

# COMMUNITY ENERGY PLANNING: GETTING TO IMPLEMENTATION IN CANADA

PRE-BUDGET SUBMISSION TO THE  
HOUSE OF COMMONS STANDING  
COMMITTEE ON FINANCE

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August 5, 2016



Quality Urban Energy  
Systems of Tomorrow



Sustainable  
Prosperity

## Attachments

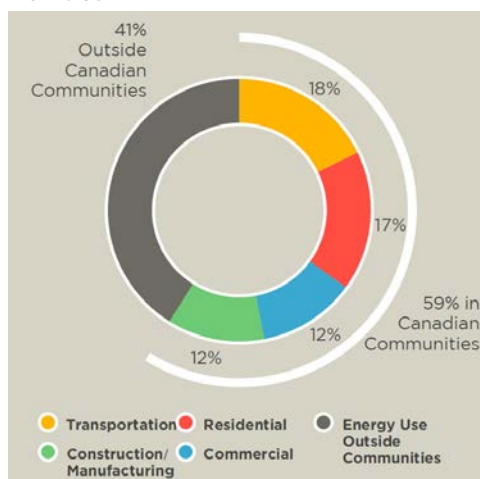
- Attachment #1: [Overview of GTI and Stakeholders Directly Engaged in GTI to Date](#)
- Attachment #2: [About the Project Partners](#)
- Attachment #3: [Additional Policy Options for Federal Support for Community Energy Planning](#)
- Attachment #4: [Community Energy Planning: The Value Proposition](#)
- Attachment #5: [The National Report on Community Energy Plan Implementation](#)
- Attachment #6: [The National Report on Policies Supporting Community Energy Plan Implementation](#)
- Attachment #7: [Policies to Accelerate Community Energy Plans: An analysis of British Columbia, Ontario and the Northwest Territories](#)
- Attachment #8: [GTI Workshop Summary Report](#)
- Attachment #9: [Community Energy Implementation Readiness Survey](#)

# Community Energy Planning: A Critical Approach for Meeting Canada’s Climate Change Commitments

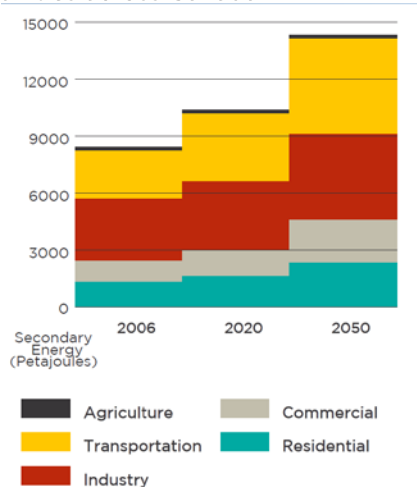
Community Energy Plans provide a pathway for federal, provincial and territorial governments to achieve deep energy and greenhouse gas emissions reductions.

Canadian communities account for 60 percent of energy use and over half of all greenhouse gas (GHG) emissions in Canada.<sup>1</sup> Transportation continues to be the fastest growing source of GHGs at the local level, while buildings continue to be the largest users of energy, especially for domestic hot water and space heating (representing 60 percent of energy end use in buildings). See Figures 1 and 2.

**Figure 1 - Energy End Use in Canadian Communities<sup>2</sup>**



**Figure 2 - Potential Growth of Energy Use in Communities across Canada<sup>3</sup>**



In 2009, the Council of Energy Ministers identified that if we continue the status quo of how we invest in, support and build our communities, energy use across all sectors is likely to continue to increase.<sup>4</sup>

Energy remains a significant cost for communities. While energy use in communities varies across Canada, all are faced with substantial energy bills, which can be an economic burden on local economies. On average, per capita spending on energy ranges from \$3,000 to \$4,000 (\$1 billion per year in total for an average-sized community). See Table 1.

**Table 1 – Energy Spending in Canadian Communities<sup>5</sup>**

Community Size	Average Spending on Energy in the Community
Small Communities (less than 20,000 people)	Up to \$80 million
Mid-sized Communities (20,000 to 100,000 people)	\$40 million to \$400 million
Large Communities (100,000 people to 2.5 million people)	\$200 million to \$10 billion

Community energy planning is a recognized best practice that can help to keep millions of dollars circulating within a local economy and contribute to addressing energy and GHG emissions objectives, all while lowering energy costs, enhancing reliability, and providing greater economic benefits for consumers, businesses and local governments.

<sup>1</sup> The term “local government” refers to a specific level of government. The term “community” refers to all infrastructure and residential commercial, industrial, institutional, transportation, utility and agriculture activities within a given geographic (or municipal) boundary.

<sup>2</sup> Natural Resources Canada (2012). Comprehensive Energy Use Database. Retrieved from [http://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/trends\\_egen\\_ca.cfm](http://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/trends_egen_ca.cfm)

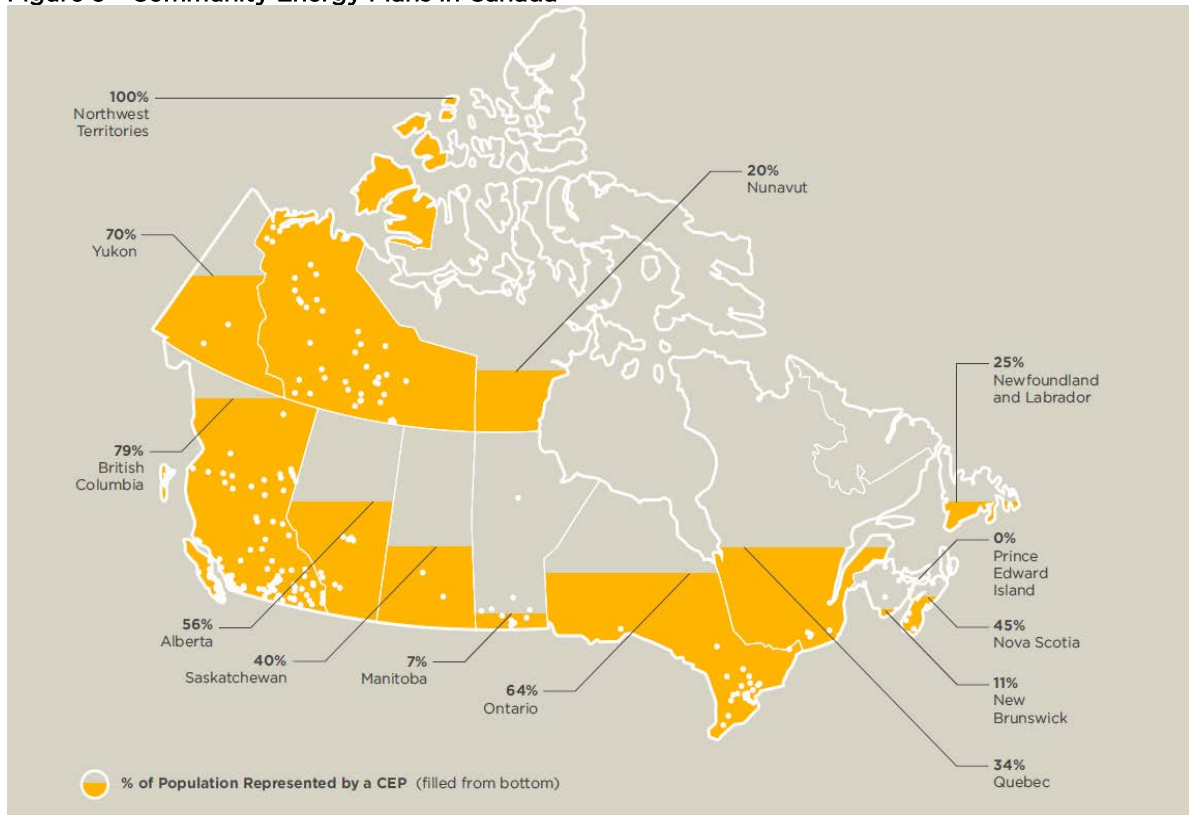
<sup>3</sup> Council of Energy Ministers (September, 2009). Integrated Community Energy Solutions: A Roadmap for Action. Retrieved from [https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/oee/pdf/publications/cem-cme/ices\\_e.pdf](https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/oee/pdf/publications/cem-cme/ices_e.pdf)

<sup>4</sup> Ibid.

<sup>5</sup> QUEST (2016). Community Energy Planning: The Value Proposition. Retrieved from [http://gettingtoimplementation.ca/wp-content/uploads/2016/02/Full-Report\\_ValueProposition\\_OnlineVersionFeb92016.pdf](http://gettingtoimplementation.ca/wp-content/uploads/2016/02/Full-Report_ValueProposition_OnlineVersionFeb92016.pdf)

Across Canada, over 200 communities, representing more than 50 percent of the population, have developed a Community Energy Plan (CEP). These communities are identified in Figure 3.

Figure 3 - Community Energy Plans in Canada<sup>6</sup>

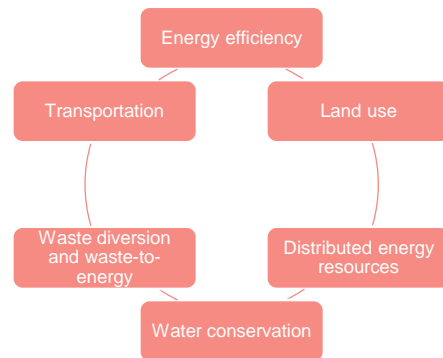


A CEP is a tool that defines community priorities around energy with a view to improving efficiency, cutting GHG emissions and driving local economic development.

A CEP typically contains:

- Energy and GHG emissions reduction targets
- Actions to achieve the target, including:
  - Energy efficiency in buildings
  - Land use and transportation actions
  - Waste management and energy-to-waste opportunities
  - Water conservation
  - Adaptation measures
- Key Performance Indicators (KPIs) to track and monitor implementation
- Evaluation of the cost of energy and for actions to achieve energy and GHG targets

Figure 4 -Actions Commonly Found in CEPs



<sup>6</sup> [www.gettingtoimplementation.ca](http://www.gettingtoimplementation.ca)

Community energy planning results in deep GHG reductions and economic growth because it provides a platform for meaningful partnerships to form and grow.

CEPs can support communities to simultaneously achieve deep GHG reductions by taking an integrated approach to energy, land use and transportation planning, while also realizing substantial economic savings, job creation opportunities, strengthened local economies, and healthier and more resilient communities (see Table 2).

**Table 2 - The Widespread Benefits of Community Energy Planning**

Environmental benefits	Health benefits	Economic benefits	Resilience and Energy Security benefits
<ul style="list-style-type: none"> <li>• Reduced GHG emissions</li> <li>• Fostered healthy ecosystems</li> <li>• Efficient use of natural resources</li> </ul>	<ul style="list-style-type: none"> <li>• Improved social connectivity</li> <li>• Improved mental health</li> <li>• Reduced cardiovascular diseases and respiratory illnesses</li> <li>• Increased physical activity</li> <li>• Improved air quality (indoor and outdoor)</li> <li>• Reduced healthcare costs</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced energy spending for households and businesses</li> <li>• Recirculate energy spending within the local economy</li> <li>• Create high-quality, local jobs</li> <li>• Increase property values</li> </ul>	<ul style="list-style-type: none"> <li>• Improved access to reliable sources of energy</li> <li>• Reduced exposure to energy price volatility</li> <li>• Solutions for areas facing energy poverty</li> <li>• Recognized local priorities</li> </ul>

Community energy planning enables a broad range of stakeholders, including local governments and First Nations communities, utilities and energy service providers, the real estate sector (owners, operators and builders) and community organizations to evaluate, collaborate and implement together (see Attachment #1).

***As a result, siloed, one-off initiatives can be brought together and impacts magnified, by connecting and integrating opportunities across a community to achieve a desired GHG or energy target.***

For example:

- In Ontario, local governments with a CEP have reported average community-wide GHG reductions of eight percent from their pre-plan baseline inventories to their most recent inventories, while, overall, Ontario communities have experienced about a two percent increase in GHGs for the same period.<sup>7</sup>
- The City of London, Ontario has found that it spends \$1.6 billion annually on energy (community wide). Of that spending, just 12 percent remains within the community. It is estimated that a one percent reduction in energy use could result in \$14 million in energy dollars circulating within the local economy.<sup>8</sup>
- The City of Edmonton’s Energy Transition Strategy examines the economic effects of a total investment of \$237 million in low carbon projects, such as renewable energy, energy efficiency, and electric transportation initiatives over the 2018-2021 period. It found a potential net present value from energy savings of \$3.4 billion by 2035 if a social cost for carbon of \$51/tonne carbon were included.<sup>9</sup>

The results of the *Community Energy Planning: Getting to Implementation in Canada* initiative confirm that communities are key to managing Canada’s energy use and GHGs and that CEPs provide a practical solution to help communities address their energy and GHG objectives.

[Community Energy Planning: Getting to Implementation in Canada](#) (GTI) is a national, collaborative initiative accelerating the implementation of CEPs across Canada that can support the GHG reduction efforts of federal, provincial and territorial governments (see Table 4 for a list of program support opportunities).

The GTI initiative is being led by Canada’s leading community energy planning organizations, including the Community Energy Association, QUEST – Quality Urban Energy Systems of Tomorrow and Sustainable Prosperity. GTI is open source and has evolved with input from over 800 organizations across Canada.

GTI has identified that over 200 communities across Canada have a CEP, yet continue to face challenges when it comes to implementation. The primary challenges limiting energy and GHG reductions include:

<sup>7</sup> QUEST (2016). Community Energy Planning in Ontario: A Competitive Advantage for your Community.

<http://www.questcanada.org/files/download/8c1da196f47f806>

<sup>8</sup> GTI (2016). Community Energy Planning: The Value Proposition. [http://gettingtoimplementation.ca/wp-content/uploads/2016/02/Full-Report\\_ValueProposition\\_OnlineVersionFeb92016.pdf](http://gettingtoimplementation.ca/wp-content/uploads/2016/02/Full-Report_ValueProposition_OnlineVersionFeb92016.pdf)

<sup>9</sup> Ibid.

- **A lack of leadership, particularly at the political level:** Communities that have an active political champion, senior staff support and stakeholder support will be more likely to gain the traction needed to move forward on implementation.
- **A lack of staff and financial capacity:** CEPs cross many departmental and organizational boundaries and as a result, require staff resources to move forward on implementation. CEPs also require new business models. Communities that have dedicated staff persons, and adopt new business models are better positioned to move forward on implementation.
- **A lack of institutionalization:** Communities that embed CEP actions into local government staff job descriptions, budgets, policies and programs, and governance models, and that track and monitor implementation are more likely to realize real energy and GHG savings as a result of implementation.

Addressing barriers to CEP implementation requires action by federal, provincial and territorial governments and support from on the ground established collaborations like GTI. GTI, a partnership of Canada’s leading community energy planning organizations (see Attachment #2 for an overview), has deep connections across Canada and a successful track record of delivering high impact initiatives with real, measurable results.

Since 2014, GTI has delivered research, engagement and program delivery activities to identify challenges, success factors and solutions to accelerate CEP development and implementation (see Table 3). Specifically, GTI has piloted critical tools to support CEP implementation in Campbell River, BC; Calgary, AB; and, the Region of Waterloo, ON.

**Table 3 – Getting to Implementation Resources**

Research <sup>10</sup>	Engagement and Program Delivery
<ul style="list-style-type: none"> <li>• The National Report on Community Energy Plan Implementation</li> <li>• The National Report on Policies Supporting Community Energy Plan Implementation</li> <li>• Provincial and Territorial Policies to Accelerate Community Energy Plans: An analysis of British Columbia, Ontario and the Northwest Territories</li> <li>• A Community Energy Implementation Framework (draft)</li> <li>• A Community Energy Implementation Readiness Survey (draft)</li> </ul>	More than 800 organizations engaged through: <ul style="list-style-type: none"> <li>• A review of 50 CEPs</li> <li>• Interviews with 33 communities across Canada with a CEP</li> <li>• 12 workshops and webinars across Canada (including a Workshop Summary Report)</li> <li>• 3 sector-specific focus groups</li> <li>• 3 GTI Pilot Community initiatives- working with Campbell River, British Columbia, Calgary, Alberta and the Region of Waterloo, Ontario</li> </ul>

With input from over 800 stakeholders across Canada (see Attachment #1), the GTI partners have identified a critical need and demand for hands-on support and coaching at the local level to address the challenges to the implementation of CEPs and the ability to accelerate innovation, replicate successful actions and drive deep GHG reductions.

<sup>10</sup> PDF copies of these resources can be downloaded from Page 1. See Attachments #4 - #9.

The GTI partners can support federal, provincial and territorial governments to support the implementation of CEPs by undertaking the actions identified in Table 4.

Table 4 - GTI Program Delivery Options

CHALLENGE	GTI SOLUTION	BUDGET SUPPORT (Over 3 years)
<b>LOCAL LEADERSHIP</b>		
Local elected officials need to lead. Without them, little implementation is likely to happen. Staff in communities across Canada have signalled a need for greater political support for CEP implementation.	<ul style="list-style-type: none"> <li>Coordinate and lead a <b>National Energy Community of Practice</b>, targeting local elected officials (e.g. Mayors and Councillors), to support CEP implementation.</li> </ul>	\$1,370,000
<b>STAFF CAPACITY</b>		
Staff capacity is needed to create policies, processes and incentives for implementation and to track and report on progress. At least 90 percent of small communities do not have a dedicated staff person assigned to oversee implementation.	<ul style="list-style-type: none"> <li>Lead a '<b>Canada Climate Corps</b>' of young professionals and senior coaches to advise small communities on implementation. Establish 2-year terms to develop and implement CEPs, write policies, manage programs and establish governance models to support ongoing implementation.</li> </ul>	\$3,504,000
<b>NEW BUSINESS MODELS</b>		
New business models are needed to support energy efficiency retrofits and the integration of transportation/land use at a rate that is needed to achieve local, provincial/territorial and national GHG reduction targets.	<ul style="list-style-type: none"> <li>Identify <b>new business models</b> to support accelerated energy efficiency retrofits as well as the improved integration of transportation/land use.</li> </ul>	\$110,700
<b>PROVINCIAL, TERRITORIAL and FEDERAL POLICY RESEARCH</b>		
Provincial/Territorial and Federal governments have a role to play on policy and program delivery	<ul style="list-style-type: none"> <li>Conduct a series of research examining the efficacy of provincial, territorial and federal policies supporting CEP implementation.</li> <li>Identify and <b>disseminate best practices</b> on effective policy and programs to support CEP development and implementation.</li> <li>Prioritizing projects/programs that reduce GHG emissions and align with CEPs when providing funding.</li> </ul>	\$81,700

GTI has also identified further policy and program options for the Federal government. These options can be found in Attachment #3.

The GTI partners would welcome the opportunity to further discuss how GTI can best support federal, provincial and territorial governments in supporting communities to achieve Canada's ambitious GHG emissions targets.

