

Develop a Compelling Rationale for Undertaking the CEP

CEPs can lead to much more than GHG reductions. Community energy planning can help mitigate risks, and has the potential to lead to widespread economic, health, social, resilience and environmental benefits. While GHG reductions are an important part of community energy planning, it is critical to define what other benefits the CEP can generate. A critical success factor for CEP implementation is defining how the CEP will enable the community to meet its economic, health, social and resilience objectives.

GTI Advice

- **Focus on the widespread benefits of CEP implementation, beyond GHGs:** CEPs have the potential to lead to significant economic, health, social, resilience and environmental benefits. Be sure to describe how CEP implementation will lead to measurable benefits when describing the plan to senior management and council
- **Caution against analysis paralysis:** The analysis to support a CEP should only go as deep as is needed to gain support from senior decision makers and elected officials
- **Be precise, yet efficient:** Aim for detailed, precise and defensible data. Consider that projections beyond 30 years have inherent limits due to technology advances, fluctuating energy prices, changing business models and cultural attitudes
- **Focus on actions under the jurisdiction of local government:** When developing models, include business-as-usual assumptions as well as provincial and federal policies that have already been adopted. Avoid including provincial, territorial or federal policies that have not yet been adopted
- **Use familiar language:** Use language that resonates with the stakeholder group you are engaging

Table 5 describes the benefits of CEP implementation, and identifies a starting point for measuring and describing these benefits in your community.

Table 5 – Analyzing the Widespread Benefit

	Summary of Benefits	What you Will Need	Resources to Get Started
Environmental Benefits	<ul style="list-style-type: none"> · Reduce GHG emissions · Foster healthy ecosystems · Increase efficient use of natural resources 	<ul style="list-style-type: none"> · Baseline energy and emissions inventory, including community-wide data on electricity, natural gas and fuel consumption · Summary of the largest contributing factors to GHG emissions · Projected local climate change impacts · Summary of the largest contributing factors to GHG emissions · Projected local climate change impacts 	<ul style="list-style-type: none"> · See Appendix I for a list of resources to consider for developing a CEP
Economic Benefits²¹	<ul style="list-style-type: none"> · Reduce energy spending for households and businesses · Recirculate energy spending within the local economy · Create high-quality, local jobs · Attract and retain businesses · Increase retail sales · Increase property values · Capitalize on a growing clean technology market 	<ul style="list-style-type: none"> · Baseline energy and emissions inventory, including community-wide data on electricity, natural gas and fuel consumption · Community-wide energy spending and spending projections · Analysis of where energy spending goes (e.g. local, businesses, provincial/territorial government, other provinces/territories, federal government, or outside of Canada) · Projected savings associated with energy conservation measures · Spending on local distributed energy resources (e.g. solar photovoltaics, solar heating, Combined Heat and Power - CHP) 	<ul style="list-style-type: none"> · Community Energy Planning: The Value Proposition²² · Clean Energy for a Green Economy, Community Energy Association²³ · The Economic Benefits of Sustainable Streets, New York City Department of Transportation²⁴ · See additional examples in Appendix II
Health and Social Benefits	<ul style="list-style-type: none"> · Improve social connectivity · Improve mental health · Reduce cardiovascular diseases and respiratory illnesses · Increase physical activity · Improve air quality (indoor and outdoor) · Reduce healthcare costs · Reduce heat islanding effect 	<ul style="list-style-type: none"> · Baseline energy and emissions inventory, including community-wide data on electricity, natural gas and fuel consumption · Baseline studies on air and water quality · Records from medical officer of health 	<ul style="list-style-type: none"> · Healthy Built Environment Linkages, British Columbia Health Services Authority²⁵ · Community Energy Association Primer on the Transition to Electric Vehicles in Metro Vancouver²⁶
Resilience Benefits	<ul style="list-style-type: none"> · Improve access to reliable sources of energy · Reduce exposure to energy price volatility · Provide solutions for areas facing energy poverty · Recognize local priorities · Reducing the replacement cost of asset renewal 	<ul style="list-style-type: none"> · Baseline energy and emissions inventory, including community-wide data on electricity, natural gas and fuel consumption · Projected local climate change impacts 	

²¹ See Community Energy Planning: The Value Proposition for an in-depth review of the economic benefits of CEPs (<http://gettingtoimplementation.ca/research/>).

²² Community Energy Planning: The Value Proposition (www.gettingtoimplementation.ca/research/).

²³ Community Energy Association (May 2010). Clean Energy for a Green Economy. <http://communityenergy.bc.ca/download/313/>

²⁴ New York City Department of Transportation (December 2013). The Economic Benefits of Sustainable Streets. <http://gettingtoimplementation.ca/wp-content/uploads/2016/12/NYdot-economic-benefits-of-sustainable-streets.pdf>

²⁵ British Columbia Health Services Authority (October 2014). Healthy Built Environment Linkages. http://www.phsa.ca/Documents/linkagestoolkitrevisedoct16_2014_full.pdf

²⁶ Community Energy Association (2012). A Primer on the Transition to Electric Vehicles in Metro Vancouver. <http://pluginbc.ca/resource/transitioning-electric-vehicles-metro-vancouver-primer-workshop-notes/>

Methods for Measuring the Economics of Community Energy Plans

Table 6 illustrates a range of methods for measuring the economic impacts of CEPs.²⁷

Table 6 - Measuring the Economics of Community Energy Plans

Method	Purpose	Relevant CEP approach²⁸
Community Energy Cost	Discuss total community energy use in a metric everyone understands, in order to generate different conversations with elected officials and stakeholders.	Inventory
Financial Feasibility	Screen and prioritize measures, programs, or portfolios to identify if the investment will break even.	Get Started; Practical Tactics
Levelized cost of energy	Compare the unit costs of different energy generating technologies across the expected lifetime of the asset, in real dollars per kWh.	Get Started
Marginal Abatement Cost Curve	Compare GHG emission reduction options according to which will cost the least or deliver the most financial savings, and according to their potential impact on GHG reductions.	Get Started; Practical Tactics; Targeted Plan; Comprehensive Plan
Community economic benefits	Inform the decision-making process, and stakeholders, on the total value to the local economy of a CEP, considering the how direct expenditures recirculate through local businesses, households, and tax revenue.	Targeted Plan; Comprehensive Plan
Cost effectiveness and cost benefits	Screen and prioritize measures, programs, or portfolios to identify if benefits over time exceed initial costs, and to identify a portfolio of measures that maximize the economic, environmental, and social benefits from CEP implementation.	Targeted Plan; Comprehensive Plan

Relevant Case Studies (See Appendix III)

- Case Study 2: Measuring the Widespread Economic Benefits in the City of London, Ontario
- Case Study 3: Measuring Green Jobs in Durham Region, Ontario
- Case Study 4: Measuring the Impacts of Sustainable Communities on Local Retail Sales. New York City, New York
- Case Study 5: Framing the Value Proposition, Edmonton, Alberta

Relevant Resources

- Community Energy Planning: The Value Proposition (www.gettingtoimplementation.ca/research)
- Policies to Accelerate Community Energy Plans: An analysis of British Columbia, Ontario and the Northwest Territories (www.gettingtoimplementation.ca/research)

²⁷ Read more about these economic methods in the GTI report entitled Methods for Measuring the Economics of Community Energy Plans: An Introduction for Community Energy Managers at www.gettingtoimplementation.ca/research

²⁸ See Table 3 Approaches to Community Energy Planning.