



Net-Zero Communities
Accelerator Program



RECOMMENDATIONS REPORT FOR MUNICIPAL DISTRICT OF ST. STEPHEN

COMMUNITY GHG AND ENERGY ACTION PLAN IMPLEMENTATION AND MONITORING

February 2024



MUNICIPAL DISTRICT OF ST. STEPHEN

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About QUEST Canada

QUEST Canada is a registered Canadian charity that supports communities in Canada on their pathway to net-zero. Since 2007, QUEST has been facilitating connections, empowering community champions and advising decision-makers to implement efficient and integrated energy systems that best meet community needs and maximize local opportunities. QUEST develops [tools and resources](#), convene stakeholders and rights holders, and advise decision-makers — all with the goal of encouraging, assisting and enabling communities to contribute to Canada's net-zero goals.

QUEST Canada recognizes communities that have embraced these principles by referring to them as Smart Energy Communities.

Learn more and join the network at questcanada.org.

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1.0 EXECUTIVE SUMMARY

1.1 Background

The Municipal District of St. Stephen developed a corporate and community GHG inventory. These were adopted by the Council in 2015, enabling the Municipal District of St. Stephen to achieve the first two milestones of the Federation of Canadian Municipalities (FCM) and ICLEI's Partners for Climate Protection Program.

As a result of the CEP Development workshop, the community is currently developing a Community Energy Plan (CEP) to achieve Milestone 3 of the FCM and ICLEI's Partners for Climate Protection Program. It identified ways to reduce GHG emissions, support the local economy, increase competitiveness, create jobs, improve energy efficiency, and keep energy dollars local. The proposed Community Energy Plan would contain 38 action strategies or projects with potential reductions contributing to the overall community target recommended in the GHG Inventory of a 30 per cent reduction in community GHG emissions below 2015 baseline levels. More specific potential ways of participating and emission reduction targets are included for each action strategy.

QUEST Canada engaged municipal staff, councilors, and community stakeholders to help develop a governance strategy for implementing community-side actions to achieve local environmental and economic benefits. For the CEP to be effectively implemented, the community context needed to be incorporated into the development of a governance structure, communications and stakeholder engagement strategy, key performance indicator framework, and the prioritization and implementation of actions within the plan. This report summarizes recommendations and workshop results, and can be used to inform the Municipal District of St. Stephen submission to FCM for PCP Milestones.

1.2 What this Report Covers

The former Town of St. Stephen, in partnership with QUEST Canada, hosted Community Energy Plan Implementation workshops on April 20 and May 3, 2022. The workshops engaged local stakeholders and municipal staff to help establish a governance framework for implementing the Community Energy Plan (CEP) and strengthened collaboration between community partners for implementation, building awareness and contributing to key performance indicators.

The workshop included an overview of the results of the CEP Development workshop and Action Strategies Planning. QUEST Canada then shared recommended strategies for governance, implementation, communications and stakeholder engagement, data gathering and monitoring progress (KPIs). Through three group exercises, local stakeholders helped inform, compare and select the strategies presented below.

In February 2024, QUEST held a review session with the new Municipal District of St. Stephen, to review the strategies selected and make updates as needed. This report contains a summary of the strategies

selected. Preferred strategies are highlighted directly below, in ‘Key Recommendations /Outcomes.’ This report contains a summary of the workshop and break-out discussions, with preferred strategies highlighted directly below in the ‘Key Recommendations / Outcomes’ section.

1.3 Who Participated in the Workshop?

Participants included municipal staff and councilors from the Town of St. Stephen, Future St. Stephen staff, and QUEST Canada. The original CEP development process engaged additional stakeholders. A total number of four participants took part in the review session with the Municipal District of St. Stephen

See Annex 7 for a list of workshop participants.

1.4 Key Recommendations and Outcomes

1.4.1 Governance

(See Section 2 for details from the workshop)

Regarding the coordination of the overall Community Action Plan, participants expressed support for **designating an existing staff member or shared amongst a group of existing staff members**. However, a concern arose due to the workload of the current staff members. Therefore, an alternative option is to expand the role of an existing staff member or engage a new staff member.

Participants indicated there is a need to **maximize limited resources** and that such a position might need funding. This can include: cost-sharing between member municipalities, local energy utilities (e.g. NB Power), and funding from the NB Environmental Trust Fund and the Federation of Canadian Municipalities (e.g. staff grant, project funding). As a fall-back option, the Town of St. Stephen could assign or hire a full-time staff person and use savings from efficiency action, to help cover costs. Possible funding options are included in Annex 4.

Participants also recommended **assigning CEP implementation to the existing Senior Management Committee** (to meet weekly and add it to the current agenda). The recommendation included the participation of **adjoint staff and stakeholders** as well as others from the community/other regions (meeting monthly). A template for **Terms of Reference** for internal (staff) and external (stakeholder) committees are included in Annex 1. Participants indicated that mitigation and adaptation initiatives would be looked at after the municipal reform process.

In brief, the senior management committee would focus on municipally-led actions (which can support both corporate and community-side GHG reduction initiatives), including bringing forward studies, pilots, projects, policies, and funding proposals, as well as collecting data for measuring key performance indicators. It would involve municipal staff, neighbouring municipal representatives, and council

representation (if possible). The staff and stakeholder committees would focus on community-side actions and involve a diverse range of stakeholders. The regional coordinator and co-chairs would interface between the committees, stakeholders, and member municipalities.

1.4.2 Communication

(See Section 3 for details from the workshop)

Participants selected and prioritized methods for communicating with the public, and for engaging stakeholders in the community. These activities would be led by the CEP Coordinator, with the support of the stakeholder advisory committee.

Some of the selected and prioritized methods for **public communication** are detailed below:

- Town webpage including the annual progress report (see sample content in Annex 6)
- Social Media (see sample content in Annex 6)
- Engage schools/youth groups
- Bill Inserts or Online could reach almost everyone in the town

Some of the selected and prioritized methods for **stakeholder engagement** are detailed below:

- One-on-one meetings – would need to identify key stakeholders
- Stakeholder Advisory Committee meetings – has been successful in the past
- Ambassador Program – an opportunity for industry and businesses

1.4.3 Data and Key Performance Indicators

(See Section 4 for details from the workshop)

Participants recommended updating the GHG inventory (following CEP completion in 2023), and updating energy maps to support planning and education (when funding is secured). The data required is detailed in Section 2. Data gathering initiatives would be led by the Director of Community Services or the Facilities and Maintenance Coordinator, with the support of both internal (staff) and external (stakeholder) committees, and key data providers.

Participants selected the following preferred **tools/methods** to be used, including:

- Meetings of Internal (weekly) and External Committees
- QUEST Canada’s Smart Energy Communities Benchmark tool
- Partners for Climate Protection (PCP) Milestone Tool and/or a spreadsheet for updating GHG inventory
- Surveys and requests for information as needed
- Requesting data/information from partners
- And others.

Participants also identified/selected **Key Performance Indicators** across several categories that should be collected annually in order to measure the impact and benefits of implementing the Community Energy Plan. See Section 2 for a full list of KPIs and data sources. The KPIs of interest are listed below:

- Total energy usage (GJ) reduction across all sectors (residential, commercial, institutional, transport) for all fuel types
- Amount of GHG emissions reduced - change in total (year over year)
- Peak water demand reduction - number of participants
- Number of EVs purchased and registered in the community
- Number of jobs created in sectors related to energy efficiency, clean energy, clean technologies
- The sharing and promoting of local success stories

2.0 GOVERNANCE

2.1 Introduction

Communities that have introduced new governance models to oversee and implement their plans have consistently proven that doing so will ensure that the CEP remains top-of-mind for elected officials, local government staff and community stakeholders. New governance models provide a platform for political, staff and community stakeholders to convene regularly. In some cases, they provide the legal framework needed to implement projects. This can ensure that a process is in place to monitor and report regularly on the implementation of the CEP.

It was necessary to incorporate the community context into the development of a governance structure for the implementation of the Town of St. Stephen's CEP, as well as the CEPs of neighboring municipalities. Below are the town's key governance options, including oversight and coordination, stakeholder engagement and communications, and data/monitoring key performance indicators. Following this, is a summary of the discussion and options selected by participants during the workshop on April 20, 2022.

2.2 Oversight and Coordination

The options discussed during the first tabletop session on April 20, 2022 are detailed below:

- A. **Option 1:** The Municipal District of St. Stephen can **assign an existing staff member** (e.g. the corporate energy manager), to oversee *corporate* energy actions, as well as ensure that the *community* is leading by example by engaging stakeholders/coordinating the taskforce, gathering data, reporting progress, ensuring good communications, and finding ways to ensure that energy and emissions are considered in all decisions. However, it may be challenging for one person to manage the implementation of both the corporate and community energy plans.
- B. **Option 2:** The Municipal District of St. Stephen can **assign oversight and coordination to an existing staff member** or **hire a new staff member** to oversee *community* energy actions, engage

stakeholders/coordinate the task force, gather data, report progress, ensure good communications, and find ways to ensure that energy and emissions are considered in all decisions. Embedding the CEP into job descriptions helps to keep a focus on implementation and makes sure it does not get overlooked. A staff person that sits at a management level is often well-suited to oversee CEP development and implementation. A manager remains equally as close to senior management/council as it does to staff and stakeholders working on direct implementation.

- C. **Option 3: Regional / cost-shared resource:** collaborate with nearby communities such as the Town of Saint Andrews, and the regional service commission, about the possibilities of a shared staff person, which could also be partly funded by FCM. A sample job description, including skills and credentials needed is included in Annex 2.
- D. **Option 4: Engage student / PT:** use funding from the NB Environmental Trust Fund, FCM Green Municipal Fund, or municipal budget, to advance studies, surveys, and projects within the CEP on an annual basis or as needed.

Participants discussed the merits, and pros and cons of each option above. Discussion points and the resulting recommendation are as follows:

Discussion Notes:	Decision:
<p><i>Participants reviewed the four options presented and discussed the pros and cons of each prior to making a decision.</i></p> <p>Participants reviewed the four options presented and discussed the pros and cons of each prior to making a decision.</p> <p>Participants favoured assigning an existing staff member as the CEP coordinator, who would already have knowledge of the community and how the organization works (minimal training needed), have full access to the facilities and resources and have the structure and communications channels in place. Currently have weekly management meetings with SNBSC. However, current workloads of the existing staff and the funding available were listed as current barriers.</p> <p>Participants indicated that a second option would be to continue expanding roles for existing staff.</p> <p>Regional/cost-shared resources (option 3) mechanisms currently exist and have seen other practices from different places. However, this approach may lose some local focus.</p>	<p>Decision 1: Assign an existing staff member</p> <p>Decision 2: Assign another existing staff member as team support.</p>

Finally, participants considered engaging students, but noted the significant effort needed to train and onboard. It is also not a long-term position and may lose some long-term focus

2.3 Committee Structure

Based on QUEST Canada’s research, it is recommended to have separate internal and external (community-wide) governance committees. A committee would oversee the community-wide implementation of the CEP, identify issue-based short-term actions, enable coordination and communication, support with data gathering, and monitor/report on progress.

Participants discussed whether CEP objectives can be accomplished within existing committee structures or if a new structure should be introduced, and whether the committees should address both climate mitigation and adaptation (or form separate committees for these tasks). Detailed below are options for committee structure. Following these options is a summary of the discussion and the options selected by participants during the workshop on April 20, 2022.

2.3.1 Internal Committee(s)

CEPs cross many departmental boundaries and consequently require early and ongoing inter-departmental coordination and collaboration. Engagement should take place at both the senior management and junior/intermediate staff level. Embedding the CEP into job descriptions helps to keep a focus on implementation and makes sure it does not get overlooked. An internal committee should have a Terms of Reference stating objectives, roles, responsibilities and key performance indicators that require reporting.

A. Option 1: Create a task force, council committee, or assign to an existing committee

Consider creating a Committee of Council, Mayor’s Task Force, or assigning tasks and initiatives to an existing committee to oversee CEP implementation. A council-level committee or task force can be responsible for policy and structural decisions, and participants can act as community leaders for the CEP. Council members on the committee could act as a liaison between the committee and council by advocating for council adoption of recommendations, policies or bylaws, and ensuring adequate staffing and other resources are available. Community stakeholders may be on the committee, but staff would attend meetings as a resource. Minutes would be reported to the Town of St. Stephen Council.

B. Option 2: And/Or establish a Staff Committee:

Consider establishing a staff committee, including staff involved in the implementation of cross-sectoral actions in the CEP and/or liaising with the appropriate community stakeholders to manage implementation. These staff members should be responsible for gathering data, monitoring Key Performance Indicators (KPIs), and providing technical support for the implementation of actions in the CEP including analysis, feasibility studies, data, stakeholder support, etc. The committee could include meetings of department managers/leads and/or inter-departmental staff meetings. The committee would be chaired by the lead coordinator/oversight person.

C. Option 3: Assign responsibilities to an existing Committee (for example the Finance Committee or Growth Committee)

Participants discussed the merits as well as the pros and cons of each option above. Summarized discussion points and the resulting recommendation are detailed below:

Discussion Notes:	Decision:
<p><i>Participants reviewed the three options presented and discussed the pros and cons of each, prior to making a decision.</i></p> <p>Participants felt it would be best to continue the work with the Environmental Advisory Committee. This option appears to make the most sense. The task force would make the recommendation to the council (high priority).</p>	<p>To continue the work with the Environmental Advisory Committee (EAC).</p>

2.3.2 External Stakeholder Advisory Committee

Below are some options for an external committee. An external committee should have a Terms of Reference, stating objectives, roles, responsibilities, and key performance indicators to report on etc. The following options were discussed during the first tabletop session on April 20, 2022:

- A. **Option 1: Create a community-wide stakeholder committee or advisory group** to maintain ongoing support for CEP implementation activities, with participation from energy utilities, the real estate sector (e.g. developers, builders), local non-profits, school boards, academic institutions, large energy users, fuel suppliers, the local chamber of commerce, and others. The committee could invite informal participation of council members or staff. The committee should meet on an ongoing basis, scheduling annual, bi-annual, or quarterly meetings (open to the public). Partner organizations could commit to annual actions from a list of options, providing progress reports, contributing to Key Performance Indicators, integrating municipal communications, as well as collaborating on innovative projects. This strategy was used by the [Oakville Energy Task Force](#). **Stakeholder meeting frequency:** quarterly or bi-annually (TBD).
- B. **Option 2: Assign responsibilities to an existing non-profit or establish an external non-profit** that could be potentially co-funded by utility, province, and neighbouring municipalities, seeking additional funds for advancing key measures in the CEP. It can also provide an interface between the City and external stakeholders, ensure the sustainability of CEP implementation over the long term, and report to a non-profit governance committee. This strategy was used by [Our Energy Guelph](#) and [Sustainable Waterloo Region](#).

Participants discussed the merits as well as the pros and cons of each option above. Discussion points and the resulting recommendation are detailed below:

Discussion Notes:	Decision:
<p><i>Participants reviewed the options presented and discussed the pros and cons of each prior to making a decision.</i></p> <p>Participants indicated that an adjoint staff and stakeholders committee would be the best option. This has happened in the past with other initiatives. It allows for more community engagement and communication, as well as increased transparency of the process. It also provides opportunities for various stakeholders to be heard.</p>	<p>1st Choice: Expand the existing working group to other communities or regions and meet monthly.</p> <p>Next Steps: Review the options after the municipal reform process.</p>

2.4 Communications Governance

In addition to identifying a lead coordinator and committee structure, the community should determine who is responsible for effective communications relating to the CEP. The following options were discussed during the first tabletop session on April 20, 2022:

- A. **Option 1:** Communications Department (note: limited resources, would need funding)
- B. **Option 2:** Communications Department with support of Coordinator or Committee
- C. **Option 3:** Coordinator or Committee with support of Communications Department
- D. **Option 4:** Collaborating with nearby communities about the possibilities of a shared staff person and communications budget.
- E. **Option 5:** Collaborating with community partners to conduct outreach
- F. **Option 6:** External body (e.g. if a non-profit was created/mandated)

In relation to the above options, a decision must also be made regarding where the webpage/online information will be housed:

- A. **Option 1:** Town website

Responsibilities could include the following: Design of messaging / material, preparing annual public updates; maintaining webpage, maintaining the dashboard, managing social media, promoting partner activities, offerings, successes, issuing news releases, or bill inserts, with energy efficiency tips and calls to action. See Communication and Awareness Strategy in Section 3.

Participants discussed the merits as well as the pros and cons of each option above. Discussion points and the resulting recommendation are detailed below:

Discussion Notes:	Decision:
<p><i>Participants reviewed the options presented prior to making a decision.</i></p> <p>The current mechanism is through the Community Services Department since currently there is no dedicated communications officer.</p> <p>The other option discussed among participants was the option to collaborate with community partners on outreach (option number 5). This could happen if an external committee is formed.</p>	<p>Most Preferred: Through the existing committee/group (the Community Services Department)</p> <p>As an alternative: Option 5: One of the options listed in the Mural (collaborating with community partners on outreach)</p> <p>Where should the webpage be housed? The town’s website</p>

2.5 Data Governance

In addition to identifying a lead coordinator and committee structure, the community should determine who is responsible for effective data gathering and monitoring. The process of gathering data and monitoring KPIs should be embedded into the work plans of key staff, and in Terms of Reference for the stakeholder committee. The following options were discussed during the first tabletop session on April 20, 2022:

- A. **Option 1:** Designated staff lead / coordinator
- B. **Option 2:** Internal Committee (staff level committee or committee of council)
- C. **Option 3:** External Committee and Stakeholders
- D. **Option 4:** External body (e.g. if a non-profit was created/mandated)
- E. **Option 5:** Combination of the above, with support of Communications (data requests)

Participants discussed the merits as well as the pros and cons of each option above. Discussion points and the resulting recommendation are detailed below:

Discussion Notes:	Decision:
<p><i>Participants reviewed the options presented prior to making a decision</i></p> <p>The town currently has an existing structure with the internal committee (staff) gathering</p>	<p>Preferred Options: Internal staff - as the collection and oversight mechanism already exists</p>

the data. The town also has a great relationship with NB Power to provide the data needed.

Participants also discussed the option for an external committee and stakeholders. Through the Chambers of Commerce (COC), they can directly interact with community groups and key community stakeholders

3.0 COMMUNICATIONS AND ENGAGEMENT

3.1 Introduction

To ensure the successful implementation of the CEP, a communications strategy needs to be developed to best inform and inspire the public, engage stakeholders, promote programs and incentives, catalyse action, and communicate results and benefits to the community. Below are some options to be considered as part of a communications strategy.

Participants recommended the communications strategy be coordinated and implemented by the current municipal communications departments and stakeholder committee. In addition, the Municipal District of St. Stephen communications department should be involved in both the internal and external committees. Funding may need to be secured for certain communications-related initiatives.

3.2 Public Engagement and Communications

There are several channels the Municipal District of St. Stephen can use to educate, inform, and engage the public. Consider an approach of going **to** the community with engagement.

Participants discussed the merits as well as the pros and cons of the following methods. Summarized discussion points and the resulting recommendation are detailed below:

Priority: High Medium Low

Priority	Method	Description	Frequency
High to Medium	Webpage (hosted by the Municipal District of St. Stephen or new external site?)	Content should include visual depiction and simple explanation of the GHG emissions in the community, the GHG emissions reduction target, high level objectives and measures within the CEP, links to programs/incentives, policies, tips and guidance, contact information, and annual achievements. See Annex 6 for sample content.	Annually and ad-hoc
Medium	Social Media	Facebook , Twitter, LinkedIn, Instagram. Content should include CEP details on progress on actions/impacts, highlights of success stories, calls to action, and contests. See Annex 6 for sample content. Social media should link to fact sheets, success stories, and progress reports, and should link back to the webpage.	Ad-hoc
Medium to Low	Media	Newspaper, Radio, and TV.	Ad-hoc
Medium	Bill Inserts	Content should encourage residents and businesses to improve efficiency, promote programs/incentives, share facts, etc. Could be done online (e.g. webpage pop-up) instead of a paper insert.	Depends on the municipal reform process
Low	Open Houses	Content should focus on updating the public on CEP progress and opportunities to participate.	
Medium	Fact Sheets	Show progress achieved / impact of CEP measures, tips/guidance, etc. by using bill inserts or social media and websites.	Annually (could be part of webpage update)
Medium	Online Dashboard	Display progress within key activity categories, plus a description of the status for each individual activity. It is a good visual tool for the media, the public, and investors.	
Low	Events	Hold networking events, awards galas, attend markets, festivals, provincial holidays/events, with a table display or speaker. Also join other community events.	

Priority	Method	Description	Frequency
Medium	Annual Progress Report	An annual progress report should be sent to elected officials, staff and community stakeholders. It should also be made publicly available. An annual report can be used to communicate successes at council, staff and stakeholder meetings, as well as public events. If possible, develop visually compelling materials to communicate implementation progress, impacts (e.g. reducing GHGs and energy costs), highlight success stories, partner achievements, areas of need, and opportunities. Holds us accountable.	Part of dashboard/w ebsite update
Low	Contests	Promote seasonal opportunities/contests to reduce energy use, increase active transport and transit ridership, etc. Could include contests between homeowners for energy savings, or between residents of each municipality. Community recognition could be made for good GHG reductions (e.g. Star Program).	
High to Medium	Engage Schools / Youth groups	Promote awareness and early actions with help of community partners. Can partner with school boards, schools, and other stakeholder groups. Go to their events.	Ongoing collaboration with partners
Medium	Other	For example, create a webpage for rooftop solar pre-feasibility assessment, using Google.	
	Partner Actions / notes	It shouldn't just be the Municipal District of St. Stephen promoting awareness. Neighbouring municipalities and local stakeholders need to support raising awareness. Need good calls to action. Need to communicate benefits / value propositions for different audiences.	

3.3 Stakeholder Engagement

All capacity holders and stakeholders should be engaged in the internal/external committees and be invited to register (annually) for newsfeed/updates.

Participants discussed the merits as well as the pros and cons of the following approaches. Summarized discussion points and the resulting recommendation are detailed below:

Priority:

High

Medium

Low

Priority	Approach	Description	Frequency
Low, due to capacity issues.	Ongoing teleconference and email correspondence	Engage and inform stakeholders through regular updates (e.g. email listserve) including calls to action, meeting announcements, celebrating successes, requests for information, and discussion threads related to CEP implementation. Also utilize the webpage and social media.	Include in website updates
Medium	Stakeholder committee	Purpose: Provide updates, monitor and report on implementation, identify opportunities, integrate initiatives, gain commitments, etc. (see Governance section).	Ongoing
High. It is a critical piece. Need to identify key stakeholders	One on one meetings	Purpose: identify CEP objectives, stakeholder objectives, find alignment, pursue collaborative opportunities, gain commitments. Early days, meeting amongst the Municipal District of St. Stephen, utilities, and other key stakeholders. Over time, this will happen at the committee level.	Ongoing
Low	Workshops and focus groups	Obtain targeted feedback on concepts and approaches necessary to implement CEP measures. Can be done in person, by teleconference or online (Survey Monkey). Builds ownership and feedback loop.	As needed
Low	Attend Stakeholder meetings	The Municipal District of St. Stephen participates in meetings hosted by stakeholders to present information about CEP and obtain support (e.g. associations).	As needed
Low	Networking Events and Charrettes	Host networking events for stakeholders, or Charrettes to engage in dialogue for implementing new actions. Optional exercise if there is a topic or	As needed

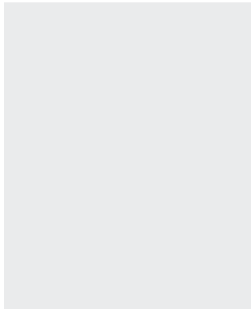
Priority	Approach	Description	Frequency
		a need.	
Low	Open Houses	Highlight CEP measures, impacts, and opportunities for participation.	As needed
Medium to Low	Ambassador Program	Recognize business leaders and encourage local stakeholders to be leaders for advancing CEP measures and communicating benefits.	Ongoing
Low	Declaration	Invite partners to sign a declaration to generate awareness. Enable new partners to join each year. Do annual Awards.	Need a perfect momentum

3.3.1 Why and How to Engage Key Stakeholders

All stakeholders should be engaged in the committees and be invited to register annually for newsfeed/updates.

Below we present why and how to engage key stakeholders:

Stakeholder Type	Why engage this stakeholder	How to engage
Provincial government	<p>The provincial government and respective agencies are placing a growing emphasis on energy and emissions. The Municipal District of St. Stephen’s CEP is a platform to achieve energy and GHG reductions while facilitating economic growth and can directly help achieve provincial goals.</p> <p>Health care costs represent a large and increasing portion of provincial budgets and community energy planning can help reduce these costs.</p> <p>The provincial government oversees policies and programs that may impact or be impacted by community energy</p>	<p>Engage Manager-level staff in ministries including but not limited to energy, land use/municipal affairs, environment and economic development.</p> <p>Ensure ongoing engagement with the manager and/or appointed staff person.</p> <p>Reach out to any contacts you may have in the provincial government and their respective agencies with a mandate related to community energy, in order to establish the appropriate liaison / points of contact.</p>



Energy Utilities

planning. They may also have technical expertise needed for CEP implementation. They may also have energy end use data and Key Performance Indicator data needed to monitor implementation progress and report on outcomes.

Electricity, natural gas and thermal energy distributors are critical partners for CEP implementation. The business models of energy distributors are evolving. The CEP aims to reduce overall energy consumption and GHG emissions and as a result can act as a direct pathway to allow energy distributors to expand DSM/CDM efforts in the community.

The CEP also calls for distributed energy resources, electric vehicle charging, etc. Energy distributors can support CEP actions that reduce community-wide energy use during peak demand, provide technical expertise in managing infrastructure and experience delivering programs and projects. They may also provide aggregated energy end use data to develop energy inventories, and if applicable, energy maps, to measure reductions.

The Municipal District of St. Stephen has access to development data that may not be available to energy distributors, but could provide insights with respect to future land use and energy needs.

Reach out to executive leaders, DSM/CDM staff or energy planning staff, with an invitation for a one-on-one meeting / recurring in-person meeting to align on projects, needs, data availability, and to engage on the stakeholder committee.

Energy distributors often have strong relationships with facilities departments. This may be a good entry point for communication if your utilities do not yet have a community energy planning contact person.

NGOs and Associations

NGOs can help implement CEP measures, and engage with community stakeholders as well as the public to advance the implementation of actions.

NGOs may be well-positioned to measure and communicate measurable impacts of CEP implementation, as well as communicate the need for CEP support with the provincial government.

Engage with Executives and staff in one on one meetings to determine partnership potential and involve them in the stakeholder committee. Support and promote local initiatives and community co-benefits/impact. Participate in local events.

Real Estate
(e.g. Developers, homebuilders, building owners and operators, architecture firms, real estate agents)

There is a growing mismatch between the high demand for energy efficient buildings and homes and the supply. Similarly, there is a growing demand for compact, mixed-use neighborhoods and communities. There is an untapped opportunity for developers and homebuilders to grow sales by enhancing the level of energy efficiency within new and existing building stocks.

There are increasing concerns from building owners and operators about the growing cost of energy as a proportion of overall building operating costs. Developers that own buildings will experience a reduction in the cost per square foot of operating a building in the long-term by incorporating energy efficiency and distributed energy measures.

Can make commitments to implement projects that align with the CEP, such as community retrofit or energy efficiency projects, distributed energy resources in building projects, and projects that encourage integrated land use and transportation.

Reach out (e.g. via Chamber of Commerce, real estate association, etc.) to request expressions of interest.

Consider reaching out to executives and senior/junior staff, including those with an engineering, architecture and/or planning designation. Hold one-on-one meetings, and engage in committee.

Provide non-prescriptive, performance-based requirements and/or incentives for building efficiency, distributed energy resources and integrated land use and transportation to enable developers to incorporate cost effective and contextually appropriate technologies into developments.

Engage in discussion about updating building codes, policies, or bylaws; new developments; harnessing distributed energy resources, efficiency programs, and district heat.

Local Business and Industry

The implementation of demonstration projects.

There are increasing concerns from building owners and operators about the growing cost of energy as a proportion of overall building operating costs. Businesses have unique opportunities to reduce peak demand, improve efficiency, integrate waste energy and renewable energy sources. Businesses can take advantage of efficiency programs to reduce energy costs, and incorporate energy distributed energy measures (e.g. rooftop solar), and can engage employees / promote conservation and fuel efficiency.

They may also be able to provide incentives at Points of Purchase, and help promote CEP implementation to the public.

Businesses may also offer energy services, incentives, or technologies that can help the community achieve CEP targets and contribute to economic growth.

Industry may have opportunities for process improvements and peak demand reduction.

Reach out (e.g. via Chamber of Commerce) to request expressions of interest or to identify businesses with an interest in community energy and efficiency.

Engage business executives or staff, with an invitation for a one-on-one meeting to align on projects, and engage on the stakeholder committee.

Identify opportunities to collaborate. Recognize business leadership through a Digital Button, green award, or ambassador program.

<p>Academia</p>	<p>Schools have opportunities to reduce peak demand, improve energy efficiency, fuel switch, integrate small scale renewable resources, and engage students through curriculum.</p> <p>Community Colleges and universities provide opportunities to engage faculty/students in research, studies, engineering projects, etc. related to implementing the CEP.</p>	<p>Engage the dean and faculty, with an invitation for a one-on-one meeting. Engage them on the stakeholder committee.</p> <p>Invite faculty and students to participate in studies, pilots, or projects, related to implementing the CEP.</p>
<p>Neighbouring Municipalities</p>	<p>The Municipal District of St. Stephen commuter-shed includes the Town of Saint Andrews. All these communities have CEPs, and are pursuing similar initiatives. In some cases, it makes sense to partner on CEP measures (e.g. promoting anti-idling, active and public transportation improvements, doing community retrofit programs, procuring charging stations, etc.). This can help minimize cost and eliminate risk of duplication, while ensuring citizens and businesses have equal and consistent access to programs, incentives, and opportunities to participate, not to mention consistent messaging throughout the region.</p>	<p>Engage the CAO/Town Clerk, or CEP coordinator, in each neighbouring municipality, with an invitation for a teleconference, and to participate on the stakeholder committee.</p> <p>Explore the potential to share a human resource.</p>

4.0 DATA AND KEY PERFORMANCE INDICATORS

4.1 Introduction

Monitoring and reporting on implementation can build ongoing support among elected officials, staff and community stakeholders. Precise, measurable and defensible data, when presented on an ongoing basis, can increase the overall confidence and support of senior decision-makers. When the CEP is monitored on an annual basis, successes can be celebrated which can in turn help build further support

for implementation. The data can also provide frequent feedback loops to identify strengths and weaknesses as well as possible course corrections, if applicable.

The Municipal District of St. Stephen needs to adopt a strategy for collecting data in order to monitor progress, measure key performance indicators, and report on energy and GHG reductions as part of the FCM-ICLEI Partners for Climate Protection Program. The following options were discussed during the third tabletop session on May 3, 2022, for tools that can be used as well as data sources, and key performance indicators:

4.2 Key Tools

Below are the tool options discussed during the workshop:

- A. **Meetings of the Committee, Reports from Stakeholders and Department Heads.**
CEP reporting is coordinated annually by the existing staff and presented to the town council.
- B. [PCP Milestone Tool](#) for creating and updating corporate and community GHG Inventories and reporting outcomes of CEP measures to FCM.
- C. **QUEST Canada’s [Smart Energy Communities Benchmark](#)** to measure progress across all CEP actions, advancing implementation.
- D. [PCP Hub](#) for connecting with the national PCP network, accessing information resources, and asking questions of your peers.
- E. **Conduct surveys** for community side actions (e.g. to determine how many households participate in anti-idling, the clothesline program, efficiency, heat conversion, purchasing EVs). Student work (e.g. anti idling surveys at schools).
- F. **Request Data/Information from partners** i.e. aggregate energy use data, uptake in efficiency programs.
- G. **Create a Data Dictionary and Registry of Sources.** Invite community partners to commit to updating the Town of St. Stephen’s data dictionary and registry of sources on an annual basis. This could be done via email, survey method, mail (CD-rom) or via the web page with a simple reporting form and ability to upload files.
- H. **A dashboard** is used to display progress within key activity categories, plus a description of the status for each individual activity.

Participants discussed the merits as well as the pros and cons of each option above. Below is a summary of the discussion points and the resulting recommendation:

Discussion Notes:	Decision:
<p><i>Participants reviewed the options presented and discussed the pros and cons of each prior to making a decision.</i></p> <p>Option 1: Participants indicated that the internal committees could be a good start since they already have department head meetings on a weekly basis. However, they will need to have more structure in regards to reporting timelines and the frequency.</p>	<p>Participants prioritized the use of the following tools:</p> <ol style="list-style-type: none"> 1. Meet with the department heads or at the senior management meetings with an improved structure

Option 2: Participants indicated that the PCP Milestone Tool seems like the base data point. However, input and updating the tools would require some HR resources. Therefore, there are a number of approaches that can be done, by hiring private consultants or requesting ETF funding for students.

Option 3: Participants indicated that the Smart Energy Communities Benchmark seems to be a recommended way to proceed to measure progress across all the CEP actions. The tool is available as an open-source option and can be used each year to measure the progress and must be updated annually. QUEST Canada will re-benchmark the town in 2022 as part of the accelerator program.

Option 4 was not discussed further.

Option 5: Participants indicated that community surveys and challenges are a good way to collect information and engage with the community. It could be a motivational tool. However, data reliance could be an issue for self-reported (non-scientific data) and there's a possibility of not getting the data that is relevant to the initiatives.

Option 6: Participants indicated that the town could request data/information from partners through online methods. There was no mention of formalizing the process.

Option 7 was not discussed further.

Option 8: Participants indicated that a dashboard is a useful tool to engage users. It can build momentum and provides a real-time pulse check to promote the town's action plan and impacts as a way to educate the public. The dashboard could be dedicated to the town's webpage to show progress and attract businesses. However, it requires large amounts of data and needs to be observed to be updated and constantly changing at regular intervals. There is a possibility it will fall out of use.

2. Discuss the use of the SEC Benchmark tool
3. Discuss the use of the PCP Milestone Tool
4. Conduct community surveys and community challenges
5. Conducting data requests from partners

4.3 Key Data

The community should determine whether to obtain data for GHG Inventories, as well as CEP Implementation Progress, and Energy Mapping. Participants discussed each of the following options:

4.3.1 For Updating GHG Inventories

A consistent methodology is particularly important for primary indicators, such as energy use and GHG emissions, as a range of methodologies can be used to create an emissions inventory. Inventories should be consistent with the methodology used for the Town of St. Stephen (2017). The GHG inventory can be compiled using the same spreadsheet as the baseline inventory or using the [PCP Milestone Tool](#). If rigorous data is difficult to obtain, try developing assumptions. Be explicit about any assumptions made in the monitoring and reporting process. The process of gathering data and monitoring KPIs should be embedded into the work plans of key staff, and in the terms of reference of any of the future stakeholder committees.

Electricity and Natural Gas: For municipal, residential and commercial emissions (and energy costs), the best sources are utility consumption data for electricity and natural gas. This data can be requested by contacting your account manager with each utility. You may also want to request information on how many households/businesses took advantage of efficiency programs and what the resulting total energy/GHG reductions are. Local stakeholders can also report on energy / GHG emissions reduction (e.g. from improving efficiency, integrating clean energy, etc.).

Propane and Heating Fuels: Consumption estimates for propane and heating fuels are nearly impossible to get from the distributor, although it's worth asking. If it's not available, you can use per capita or per household estimates and scale it down to your municipality using population or number of households. [NRCan's National Energy Use Database](#) is a good source. You can also ask the Canadian Oil & Heat Association (COHA) for input.

Waste Emissions: For waste emissions, you can use the methane commitment model using the total tonnage of waste landfilled and information on waste composition. This is option 4 in the PCP tool for calculating waste emissions. The total amount of landfilled waste can also be provided by the regional waste commission. Waste composition data can be obtained through waste surveys, otherwise default values can be used. Default values are listed in the [PCP Protocol](#).

- A. **Transportation emissions** are a bit more challenging to gather, but there are a few ways to calculate it. Estimate the annual GHG emissions based on the total kilometres travelled by vehicles within the community, taking into account vehicle fuel efficiency for each vehicle class. This is the most accurate and recommended approach. Total vehicle kilometres travelled within the community can be calculated using traffic counts and transportation modeling done by the Town of St. Stephen, or by estimating the number of vehicles in the community and the average distance travelled per vehicle. The latter sources can come from the provincial ministry of transportation and/or Statistics Canada.

- B. Estimate GHG emissions based on the amount of fuel sold at fueling stations within the community. Data on fuel sold within the municipal boundary can be obtained from fuel dispensing facilities or distributors. If fuel sale data is not available according to vehicle class, it can be estimated based on total fuel sales and vehicle registration data for each vehicle class. If data is only available at the regional scale, it can be scaled down using scaling factors such as registration or licensing data. Fuel data is more inaccurate though, since fuel could be purchased in your municipality but then burned outside the municipality, and/or fuel could be purchased elsewhere but burned within the municipality.

Resulting GHG emissions reductions from individual actions in the CEP can be measured in multiple ways. See the KPIs listed in Section 3.4.

4.3.2 For Monitoring Progress on CEP Implementation:

Consider providing an annual formal opportunity for the CEP Coordinator and community stakeholders to share measurable progress (for example hold a year-end stakeholder committee session and release a request for information). Progress reports and results can be presented in the form of ongoing Key Performance Indicators (such as the number of energy efficiency retrofits and/or the amount of kilowatt hours and gigajoules reduced), or secondary performance indicators. Alternatively, they can be presented in the form of anecdotes (such as short case studies highlighting successes, new programs or actions). Meaningful engagement such as this can unlock other opportunities and strengthen the value of the CEP.

QUEST Canada’s [Smart Energy Communities Benchmark](#) is a tool that the Municipal District of St. Stephen can use to check its progress on community energy planning. The Benchmark allows communities to assess their energy processes, policies, programs, and projects and gives them an accessible visual snapshot of their progress as compared to Canadian best practices. The Benchmark is made up of 10 indicators and a scoring framework designed to measure and track the progress of a community’s energy-smart journey. The indicators describe the key components of an energy-smart community. The first five identify the local capacity and resources that need to be in place and the last five describe the effective management and integration of infrastructure to use, move, and source energy as efficiently as possible. With this data in hand, the Town of St. Stephen and its energy utilities can show elected officials, stakeholders, and citizens the strengths of their community energy leadership and emissions reductions, and areas where ambition needs to be increased. The Benchmark assists communities in reaching their energy-smart goals and contains resources to assist communities in increasing their scores over time.

QUEST Canada enabled the Town of St. Stephen to undertake the SEC Benchmark in 2020-21. QUEST Canada re-benchmarked the community in 2022 and the Municipality will retain access to the SEC Benchmark tool for future tracking progress and continuous improvement.

4.3.3 Energy Mapping

An energy map illustrates spatial information about energy end use in a community over time. It can visually identify opportunities for reducing energy use (e.g. targeting energy efficiency programs), opportunities for shifting modes of transportation (e.g. transit projects), potential sources of energy (e.g. solar, biomass), and opportunities for distributed energy resources (e.g. district energy systems). A map

can illustrate energy end-use or energy intensity, related GHG emissions, renewable resource potential (wind, solar, biomass), and potential reductions from implementing measures.

For municipal, residential and commercial emissions (related to energy use), the best sources are utility consumption data for electricity and natural gas, which can be tied to the building stock. Transportation emissions can be modeled based on flow rates, percentage of trucks versus cars, vehicle kilometers traveled, and related emissions ratings.

Consider the following when developing an energy map:

- Before developing an energy map, consider the overall objectives of your CEP. Use the energy map as a strategic tool to illustrate opportunities to achieve those objectives.
- Many energy data providers may not provide parcel-level information due to privacy constraints, however parcel-level data is often not needed to illustrate energy opportunities in your community. Consider developing a map at a postal code scale. If possible, identify energy intensity by land use type, or building type or by hectare or m².
- Maps should include key roads and/or buildings to help viewers orient themselves, and labels for key identifiers.
- Consider developing a variety of maps to illustrate energy use in buildings and transportation
- Energy maps can be presented to stakeholders and the public, for planning and education.

Participants discussed the merits as well as the pros and cons of each option above. Discussion points and the resulting recommendation are detailed below:

Discussion Notes:	Decision:
<p><i>Participants reviewed the options presented and discussed the pros and cons for each prior to making a decision.</i></p> <p>Participants indicated that it is important to update the GHG inventory every 3 years. It would need to be pursued in 2023 during the ETF funding window. The next update could be done in 2026 with 2025 data.</p> <p>It would be coordinated by the Facilities and Maintenance Coordinator with the Director of Community Services.</p> <p>Participants indicated that there is interest in the energy mapping exercise, however, it all depends on funding.</p>	<ol style="list-style-type: none"> 1. Update the GHG inventories every 3 years, starting in 2023. 2. Create energy maps

4.4 Key Performance Indicators

CEPs have the potential to lead to significant economic, health, social, resilience, and environmental benefits. It is important to select key performance indicators to measure and report on progress implementing your CEP and reducing GHG emissions. Consider obtaining data for energy, GHG emissions

and other Key Performance Indicators for an **annual report card**. Indicators should be measurable (i.e. data is available), should require a reasonable effort, and should be cost-effective to track. Many of the indicators will already be reported on (corporately), but are more challenging to track at the community level. St. Stephen may require community partners to assist in reporting achievements, reductions in energy and GHG emissions.

There are a few key performance indicators that should be used (and measured annually), as the Municipal District of St. Stephen implements their corporate and community energy plans. These indicators can be collected by the municipality, with data from local utilities for community-wide energy use, as well as community partner data. The data can be used to create a report card of KPIs (across sectors: residential, commercial, industrial, transportation etc.). The indicators can include:

- Amount (\$) spent on energy (corporate, and community side), annually
- Amount (\$) saved through efficiency measures (corporate and community side)
- Amount of GHGs (CO² equivalent) reduced (corporate and community side)
- Change in total tonnes of GHGs (three-year average and year to year)
- MW of clean energy produced (three-year average and year to year)
- Number of partners or stakeholders engaged
- Number of actions achieved in the CEP
- Other local co-benefits (e.g. improved air quality, more active population, etc.)

There are also key performance indicators for each of the actions identified in the Community Energy Plan. These can include success stories, annual progress reports, and data from community partners. Indicators relate to the following:

- Environmental benefits (GHGs)
- Economic development and financial benefits
- Land use and development
- Transportation
- Waste reduction
- Distributed energy resources
- Water conservation
- Others

Participants recommended creating an **annual update** with the KPIs (listed below), across each sector. This could include showing people what the financial savings are, including the savings in communications and the outreach strategy. Below are examples of KPIs that relate to actions in the Town of St. Stephen's CEP.

Participants discussed the merits as well as the pros and cons of each KPI. Discussion points and the resulting recommendation are detailed below:

CEP Action Types:	Key Performance Indicators	Yes/N	Data Sources
<p>Energy efficiency:</p> <p>For example: residential and commercial efficiency retrofits, clean energy conversion (heating), LEDs</p>	Identify \$ spent on energy vs. saved through efficiency programs (community side).	NO	
	Analysis of where energy spending goes (e.g. local, provincial, abroad).	YES	Utility Partners
	Total savings associated with energy efficiency and conservation measures / change in energy use (total and per capita), three year average and year to year. Also need building age.	YES	Energy utilities/providers; Building owners
	Energy use (aggregated by sector) and per capita.	NO	
	GJ (energy) and GHG reductions for each action.	YES	
	# of households/businesses engaged (e.g. LED lighting, efficiency retrofits, clothesline).	NO	
	Residential, Commercial, and Industrial Success Stories.	YES	Local partners
	# of participants in Clothesline program and reduction in loads of laundry.	NO	
<p>Water Conservation</p>	Total water use (total and per capita) and percentage change, three year average and year to year.	NO	

For example: Clothesline program	Water Metering / Peak Demand reduction (# of participants).	YES	Water meters (Public Works)
	Switch to low-flow fixtures.	NO	
	Based on metered water, extrapolate for households on wells.	NO	
	Data on the daily usage of aquifer.	YES	Water meters (Public works)
Distributed Energy Resources For example: Rooftop solar, Community Solar Farm or Wind Farm, Clean Energy Conversion (heating), and District Heat	Spending on local distributed energy resources (e.g. solar PV, solar heating, CHP, etc.)	NO	
	GJ or MW of Clean Energy produced	NO	
	# of households/businesses engaged (e.g. clean energy conversion for heating).	NO	
	# of households installing heat-pumps. Could be based on # of upgrades to electricity entrance	NO	
	Residential, Commercial, and Industrial success stories	YES	Local partners (residential, commercial, industrial)
	Annual load of district heat subscribers, seasonal load requirements, estimated GHG reduction/offset	NO	
Land Use For example: green space, green energy zones,	Development footprint: change in the area (km squared) of developable land and area zoned as non-buildable, or green space, or green energy zone, three year	NO	

redeveloped brownfields	average and year to year. Use density measure instead.		
Transportation For example: Anti-Idling and Fuel Efficient Driving initiative, encouraging uptake in fuel efficient, compact or electric vehicles, active transportation initiatives	# of vehicle owners not idling / reduced idling time	YES	Building owners, School Districts, etc.
	Annual average daily flow of traffic (vehicles/day). # of vehicles from outside coming into the Municipal District of St. Stephen.	YES	
	# of vehicle kms/trips reduced	NO	
	# of EVs purchased/registered in the Municipal District of St. Stephen. This can be tracked through provincial statistics, and by offering discounts at dealers for home charging units.	YES	NB Power - demand for EVs/Charging; Number of uses at EV chargers
	# of fuel efficient vehicles purchased/registered in the Municipal District of St. Stephen, replacing older vehicles. This can be tracked through provincial statistics or offering a discount at dealers.	NO	
	Ridership on public transportation / transit ridership per capita.	NO	
	Kilometers of bicycle lanes constructed or dedicated, # of users cycling for utilitarian purposes.	NO	
	Pedestrian counts.	NO	
Need more benchmarks for transportation anti-idling.	NO		
Waste	Quantity of waste recovered, diverted, or recycled; tonnes of	YES	Regional Service Commission

<p>For example: organic waste diversion</p>	<p>organic solid waste diverted from landfill.</p>	
<p>Air Quality</p>	<p>Baseline studies on air quality, number of days with poor air quality.</p> <p>Ground level ozone criteria hours exceeding 50 ppb.</p> <p>Annual average sulphur dioxide concentration.</p> <p>Annual average nitrogen dioxide concentration.</p> <p>Annual average inhalable particulate matter concentration.</p> <p>Hospitalization rate for respiratory illness per 100,000 people and associated health care costs.</p> <p># of houses heating with wood (EPA certified stove), + sustainable wood source. Check with insurance companies.</p>	<p>O N</p>
<p>Economy</p>	<p>Total savings associated with energy efficiency and conservation measures / change in energy use (total and per capita), three year average and year to year.</p>	<p>NB Power, Local Partners</p> <p>YE S</p>
	<p>Unemployment rate / percentage change.</p>	<p>YES Provincial Statistics</p>
	<p># of jobs created in sectors related to energy efficiency, clean energy, clean technologies, etc.</p>	<p>YES Provincial Statistics</p>

	Number of businesses with environmental certification (e.g. LEED, CBIP).	NO
	Real median income - reveals whether purchasing power is increasing or decreasing relative to inflation.	NO
	Property values (change).	NO
	Energy affordability/costs (residential/commercial).	YES
Satisfaction	Decision Trust: surveyed feeling among residents that local decision-makers have the best interest of the community in mind most or all of the time (percentage and change).	NO
	Decision-input: surveyed satisfaction among residents with opportunities to provide input to community decision-making (percentage).	NO
	Surveyed satisfaction rate: e.g. with active transport improvements, community energy projects, etc.	NO
Other actions / Other notes	Measuring increase in value of residential property based on energy efficient updates.	NO
	Could also focus on less KPIs (environment and economic).	

4.5 Quality Control Measures

When collecting and integrating data for updating the GHG inventory, CEP implementation progress, or energy mapping, consider the following measures to ensure quality control:

- Create a Data Dictionary and Registry of Sources (MetaData). Have partners commit to provide annual updates to St. Stephen for monitoring purposes.

- Check the sample of input data for errors. Clarify data questions with providers.
- Check that the assumptions used for methods, data, etc. are well documented

If using an internal spreadsheet software to track data, consider the following measures to ensure quality control:

- Identify spreadsheet modifications that could provide additional controls or checks on quality
- Ensure that adequate version control procedures for electronic files have been implemented
- Check where emission units, conversion factors, etc. are properly labelled
- Check that conversion factors are correct (e.g. kWh to GJ, CO² coefficients)
- Check the data processing steps (equations) in the spreadsheets

5.0 CEEP ACTIONS: IMPLEMENTATION STRATEGIES

Note: All CEP Action Strategies, along with the updated status for the chosen actions in 2024, are included in a separate [spreadsheet](#). Participants reviewed all the action strategies provided by QUEST Canada, and assigned for each one: a lead, priority, timeframe, cost, and whether it needs a study, funding, or supporting policy. Participants also identified preferred strategies and partner actions. The work sheet has been updated to include a performance tracking section that can be used to track overall progress on each action item for PCP Milestone 4 submission compliance. Overall, participants felt there was a need to establish the governance structure, and then focus on conducting studies (where needed) and piloting actions first.

6.0 CONCLUSION

QUEST Canada appreciates the opportunity to work with the Municipal District of St. Stephen on this project, and engage local stakeholders in developing recommendations for CEP governance, implementation, communications and key performance indicators.

This report summarizes the proposed recommendations and feedback received during the workshops on April 20 and May 3, 2022, as well as during the review session in 2024 (following municipal Reform / amalgamations). It also provides useful information and templates that can be used to advance CEP actions, communicate with the public, engage stakeholders, and report on key performance indicators, on an ongoing basis.

As a next step, the Municipal District of St. Stephen should assign the existing staff person as the CEP coordinator along with other existing staff as support. The municipal district should also assign the Senior Management committee to maintain ongoing support for CEP implementation.

7.0 ANNEXES

ANNEX 1: Template Terms of Reference for internal and external committees

Internal and Staff Committee Terms of Reference

Co-chairs: TBD

Objective: The objective of the Community Energy and Emissions Plan (CEEP) staff committee is to bring together municipal professionals (across departments) to ensure advancement of the CEEP. This committee would involve municipal staff, council representation, representatives of neighboring communities and regional services and partners. The committee chair will interact with the regional coordinator, the external advisory committee, and report to the council.

Scope and issues to be addressed. The staff committee will:

- Stay current on urban and rural energy-related matters pertaining to community energy and climate change impacts and science and adaptation measures. Specifically in a municipal context.
- Exchange knowledge, identify and address issues, and facilitate the advancement of actions in the CEEP, and climate change adaptation plan and climate resilience.
- Support community outreach and communications efforts, such as communication with municipal staff.
- Provide support for stakeholders, make policy recommendations, and develop funding applications.
- Address issues brought up by the membership as they arise.
- Gather data to help report on CEEP progress and GHG reductions, as well as on climate change adaptation.

Expectations: This committee recognises that roles and responsibilities will vary depending on the nature of the project or topic being discussed. Time commitment will also vary, but generally involves:

- Quarterly or monthly teleconferences or meetings, minutes compiled.
- Sub-committees, such as mitigation vs. adaptation, or action and policy specific.
- Consultations as needed, through community stakeholders or fund providers, for example.
- Assist with policy recommendations and funding applications for new projects.

Participation: Led by the chair, the staff committee will have representation from : various departments as well as representation from neighboring communities, regional services and commissions.

Objectives: Priorities identified by the working group include:

1. Advancing priority actions as part of the implementation of CEEPs, climate change adaptation, and resilience plans.
2. Support internal activities such as planning and policy efforts and communications.
3. Launch studies and pilots, where needed.
4. Gather and report data and KPIs.
5. Attend other business announcements and new funding as they arise.

Meeting Schedule in 2022: Weekly

Stakeholder Advisory Committee Terms of Reference

Co-Chairs: TBD

Objective: The objective of the CEEP stakeholder committee is to bring together community stakeholders to ensure advancement of the CEEP.

Scope and issues to be addressed. The CEEP Stakeholder Committee will:

- Stay current on urban and rural matters pertaining to community energy and emissions planning, and climate change impacts and science and adaptation measures, specifically in a municipal context.
- Exchange knowledge, identify and address issues, and facilitate the advancement of actions in the CEEP, and the climate change adaptation or resilience plan.
- Act as a central resource for information gathering and sharing, and foster knowledge exchange.
- Gather data to help report on CEEP progress and GHG reductions, as well as climate change adaptation (KPIs).
- Support community outreach and communications activities.
- Make recommendations for programs, projects and policies.
- Collaborate on funding proposals and partnerships to deliver actions.
- Launch studies and pilots where needed.

Expectations: This committee recognises that roles and responsibilities will vary depending on the nature of the project or topic being discussed. Time commitment will also vary, but generally involves:

- Quarterly teleconferences or meetings, minutes compiled.
- Creating sub-committees (such as mitigation vs. adaptation, or action and policy specific).
- Consulting community stakeholders or fund providers, as needed.
- Discussing policy recommendations and new projects and funding applications.

Participation: The stakeholder committee will have representation from a diversity of organizations that are interested in engaging in activities related to the CEEP. This may include:

- Energy Utilities such as ...
- Energy service and tech providers
- Real estate developers
- Non-profit organizations such as ...
- Provincial Government
- Academic institutions

Objectives: Priorities identified by the working group include:

1. Sharing and discussing strategies for advancing actions as part of implementation of the CEEP, and emissions reduction plans along with climate change adaptation and resilience plans
2. Gathering and reporting data and KPIs
3. Engaging in peer-to-peer exchange
4. Attending other business announcements, new funding and partnership developments as they arise.

Meeting and all Schedule: Suggested quarterly, or bi-annually.

ANNEX 2: Skills Needed and Job Description Template

Skills and Credentials a Dedicated Staff Person Could Have:

Knowledge and Skills of the Designated Staff Person

- Communications, stakeholder and community engagement
- Project management and facilitation
- Leadership, change management, strategic planning
- Familiarity with local government processes and legislation
- Policy and program development
- Energy literacy, knowledge of sustainability practices
- Quantitative data analyses (spreadsheet software)
- Mapping (geographical information system software)
- Business case development, feasibility and financial analysis

Academic Credentials and Certifications

- Degree in planning, public policy, engineering, sustainability, environmental science, resource management, business, and communications
- Registered Professional Engineer or Planner, member of the Canadian Institute of Planners
- Certified Community Energy Manager (CCEM) or Certified Energy Manager (CEM)
- Registered Engineering Technologist
- LEED Professional Accreditation (LEED AP)
- Project Management Professional (PMP)

Sample Job description, *Based on Region of Waterloo, Ont.*

Full Time Temporary (three-year contract)

The Community Energy Program Manager (CEPM) is responsible for implementation of the Community Energy Investment Strategy (CEIS) for the Waterloo Region, a collaborative undertaking by the region, area municipalities, and local electric and natural gas utilities.

The ideal candidate will provide leadership and coordination for the program, and serve as a champion for community energy investment projects. Specific roles include business plan and budget development, partnership facilitation, stakeholder engagement, promotions and awareness-raising (campaign and event organization), project initiation and support, grant application coordination, program monitoring, and progress reporting.

Key Responsibilities

Program Management: Develop annual work plans, with prioritized actions and budget implications, for approval by the governance committee. Work with partners and stakeholders to implement. Monitor, evaluate progress, and provide update reports.

Support Projects: Promote, develop, and assess (from a technical and business perspective) project plans and proposals for key community energy initiatives involving multiple stakeholders. Coordinate discussions, and assist with solidifying commitments and securing resources.

Report and advise: Prepare and deliver briefing materials, data reports, and presentations for governance committee approvals. Provide strategic advice and recommendations on issues involving multiple levels of consideration, impacts, and stakeholders.

Build Relationships: Establish and maintain relationships with key stakeholders and project partners, including all levels of government, the private sector, not-for-profit groups, and industry organizations. Support the development and negotiation of agreements with federal, provincial, municipal, private, and non-government organizations.

Community Engagement and Support: Raise energy awareness through targeted outreach, education, and by providing technical and business expertise. Work proactively with partners and stakeholders to advance community energy goals, and to coordinate communication efforts.

Research: Conduct research and studies, such as industry sector trends, development strategies, funding sources and programs). Synthesize information to support and inform CEIS. Determine and recommend the best course of action in response to challenges and issues.

Desired Credentials (related knowledge, skills, and abilities)

- Minimum undergraduate degree in a relevant field such as engineering, environment science and studies, business and administration graduate degree in same or the Certified Energy Manager (CEM) qualification is considered an asset
- 5–8 years of relevant work experience
- Combined technical (energy or engineering background) and business skill sets
- Understanding of and familiarity with:
 - Systems design thinking
 - All aspects of energy (electricity, natural gas and transportation fuels) and greenhouse gas emissions
 - Community energy and emissions planning and energy management principles
 - The opportunities and challenges associated with distributed generation and renewable energy implementation
 - Facility energy efficiency projects and audits impacting energy and fuel consumption
 - Energy conservation and demand side management principles, programs and incentives
- Successful track record of program management and implementation and partnership development, including experience leading initiatives with multiple stakeholders and competing interests
- Demonstrated ability to facilitate multi-stakeholder committees and discussions towards progressive action
- Proven expertise in developing innovative ways of engaging, influencing, and working with the community
- Effective written and verbal communication skills, particularly in terms of presenting and reporting to decision-makers
- Applied research and data analysis skills using qualitative and quantitative methodologies to create and evaluate briefing materials, performance metrics, and project recommendations
- Familiarity with municipal processes including planning and development approvals, along with good business and political acuity
- Ability to exercise discretion and confidentiality regarding strategic directions, initiatives, and stakeholder interests
- Strong organizational skills, attention to detail, and the ability to work independently with minimal supervision
- Time management skills to manage multiple tasks, and to determine and achieve mandated deadlines amid shifting priorities and competing demands

Work Environment

The Community Energy Program Manager reports directly to the CEIS Governance Committee, with day-to-day oversight by Grand River Energy (GRE), a joint venture company owned by the local electric utilities created to enable the local development of distributed energy resource technologies. Work takes place within an office environment located in Kitchener, Ontario, with occasional travel for partner and stakeholder meetings and site visits.

Compensation and Benefits

Compensation is commensurate with education and experience, and includes a competitive benefits package. The position is initially for a three year term and has the potential to be extended subject to funding availability and upon review and evaluation of the CEPM meeting the identified work plan goals and objectives.

Application Process

Interested and qualified applicants are invited to submit their resume including work experience, education and references to:

Applications must be received by : _____

We sincerely thank all applicants for their interest in this position; however, only those selected for an interview will be contacted. If you are selected to participate in the recruitment process for the position to which you have applied and require a disability-related accommodation, please communicate this upon notification of the interview process.

ANNEX 3: Embed in Municipal Plans, Policies, and Processes

Although CEEP measures are focused on community-side energy and GHG emission reductions, the Municipal District of St. Stephen has a critical role to ensure a supportive environment. The successful implementation of the CEEP requires embedding measures within other municipal plans, policies, processes, and decisions. The lead coordinator and internal committee are best positioned to ensure the CEEP is embedded into:

- Plan updates
- Council strategic plans (e.g. Plan SJ)
- Official plans and regulations
- Secondary plans and plan amendments
- Community improvement plans
- Zoning and building code by-laws
- Site plan control
- Height and density bonusing
- Plan of subdivision
- Development permits
- Development cost charges
- Parking charges
- Budget

This can be accomplished through regular meetings of an internal committee or by coordinating inter-departmentally (on a case-by-case basis, or as part of plan review), through ongoing processes (through permitting), as well as through council decisions (such as new policies, bylaws and budget decisions).

ANNEX 4: Funding for CEEP Actions

It will be important for the lead coordinator, as well as internal and external committees, to identify and pursue funding in order to implement specific measures in the CEEP. Partners may fund their own efforts. Below are some potential strategies to secure additional funding for CEEP measures.

A good practice is to develop an annual budget for prioritized measures, considering the following over the expected life of the CEEP:

- Not all actions need to be implemented immediately.
- Distinguish which actions will be implemented year over year.
- Determine potential partners, resources, and additional sources of funding for each measure.
- An implementation budget should be developed for every year of the action plan, and it should be updated on an annual basis.
- Funding (e.g. from FCM) can be used to conduct studies, pilots and projects.

Strategies to secure financial resources

Sources	Description
Budget	Create budget item and fund for CEEP measures
Internal financing sources	<ul style="list-style-type: none"> ● Local improvement charges ● User fees on water, power and natural gas distribution system and waste ● Development Cost Charges (DCCs) ● Green bonds
Local incentives and rebates	<ul style="list-style-type: none"> ● Development Cost Charge reductions ● Local Improvement Charge financing (LIC) or Property Assessed Clean Energy (PACE) programs ● Fee rebates and credits on water and energy bills, local economic incentives for investing in energy efficiency for households and businesses, and new developments, such as tax holidays for businesses and faster permitting for developments meeting certain efficiency criteria.

<p>New accounting and decision-making tools</p>	<ul style="list-style-type: none"> ● Consider natural asset management approach including full cost accounting and valuation of natural assets ● Estimate benefits from green infrastructure ● Combine funding with Gas Tax revenue ● Reinvest efficiency savings into low cost CEEP measures or community engagement
<p>Institutional grants and external sources of funding</p>	<p>Scan and submit funding applications to:</p> <ul style="list-style-type: none"> ● Federal agencies and governments <ul style="list-style-type: none"> ○ Indigenous Services Canada ○ Natural Resources Canada ○ Environment and Climate Change (ECC) ○ Infrastructure Canada programs ● Provincial programs and agencies (e.g. NB Environmental Trust Fund)
<p>Leverage private investments</p>	<ul style="list-style-type: none"> ● Engage private sector to partner and financially support actions that improve community-side efficiency, clean energy or transport modes
<p>Economy of scales and synergies at the local level</p>	<ul style="list-style-type: none"> ● Leverage existing initiatives or project by expanding and adapting their scope and collaborating with other groups (thinking beyond silos) ● Take a regional approach to collaborate with neighbouring municipalities ● When a measure involves several communities, cost-share through procurement

FCM and ICLEI published a toolkit called [On the money: Financing tools for local climate action](#), that explains how your municipality can leverage private and community investors to help you take action on climate change in your community. This toolkit includes tips on how to harness people power through group purchasing and community-owned renewable power, break capital barriers with local improvements and energy performance contracts, and create a funding cycle with green revolving funds and green bonds.

The two following handbooks provide helpful, on-the-ground solutions to secure funding for energy resilient infrastructure that may be relevant to your community:

- [Bridgewater Financing Mechanism Scoping Study](#) (2019)
- [Community Energy Investment Strategy for Waterloo Region](#) (2018)

ANNEX 5: Methods for measuring the economic impact of CEEP

There are significant economic benefits from improving energy efficiency across the Municipal District of St. Stephen and implementing the full range of measures identified in the CEEP. It will be important to quantify the economic impact of CEEP measures to gain support from senior decision-makers and elected officials as well as the community at large, including public, businesses, energy stakeholders and service providers.

Different methods of economic analysis serve different purposes and provide different information. All are relevant to assess the economic, environmental, and social benefits of CEEPs, and to increase knowledge about the full economic impacts of these investments.

A thoughtful balance needs to be struck between informed decision-making and analysis paralysis. The economic analysis to support a CEEP should only go as deep as is needed. This analysis can be undertaken by either the lead coordinator or committee, and could accompany annual updates on the CEEP’s progress. It could also accompany making requests for funding or new policies and bylaws, engaging partners to advance key measures, and demonstrating economic, environmental, and social benefits in the community.

Method	Purpose
Community energy cost	To discuss total community energy use in a metric everyone understands, in order to generate different conversations with elected officials and stakeholders. For example, money spent on energy divided by money leaving the community.
Financial feasibility	To screen and prioritize measures, programs, or portfolios to identify if, and when, the investment will break even.
Levelized unit energy cost	To compare the per kWh or per GJ costs of different energy generating technologies across the expected lifetime of the asset.
Marginal abatement cost curve	To 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.
Community socio-economic benefits	To inform the decision-making process, and stakeholders, on the total value to the local community and economy of a CEEP, considering how expenditures recirculate through local businesses, households, and governments.
Cost benefits	To 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 CEEP implementation.

ANNEX 6: Sample Webpage and Social Media Content

Webpage	Content should include visual depictions and simple explanations of:
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	<ul style="list-style-type: none"> ● Energy spending, energy use and GHG emissions in the community, as a pie chart (for instance, tons of CO2 by sector) ● The GHG emissions reduction targets (total tons of CO2) ● A short list of objectives and measures identified within the CEEP ● Annual achievements: actions taken, impacts, including energy and GHGs reduced, energy costs reduced and energy dollars staying in the community. ● Easy button or link to get engaged, or subscribe to updates. ● Hyperlinks to documents, programs and incentives, policies, news, and contests. ● Downloadable tips and guidance for improving energy efficiency at home and for business, as well as any incentives. ● Description of governance structure including lead coordinator, committee and its members. ● Contact information. ● Testimonials.
<p>Social Media</p>	<p>Use the Municipal District of St. Stephen Facebook, Twitter, LinkedIn, and Instagram accounts, or create a new social media account for the purpose of promoting CEEP progress. Content should include:</p> <ul style="list-style-type: none"> ● Did you know? E.g. community spends X on energy, emits X GHGs? ● Describing specific measures identified in the CEEP, benefits to the community, and updates on progress on actions and impacts. ● Tips and guidance for improving energy efficiency at home and for business, as well as any incentives. Promote anti-idling and clothesline programs, etc. ● Highlights of success stories. ● Calls to action. ● Promoting local contests. ● Responding to requests for information.

ANNEX 7: List of Participants

List of Participants

Town of St. Stephen CEP Implementation Workshop
April 20 and May 3, 2022

Name	Organization
Jeremy McShane	Facilities and Maintenance Coordinator
Kev Sumner	Director of Community Services
Rory Pickard	Dillon Consulting
Ghislaine Wheaton	Deputy Mayor
Sean Morton	Fire Chief
Kendall Kadatz	Future St. Stephen
Rob Kerr	QUEST Canada, Senior Associate
Eric Timmins	QUEST Canada, Senior Lead of Projects
Heldagardis Renyaan	QUEST Canada, Lead of Projects

List of Participants

Municipal District of St. Stephen Review Session
February , 2024

Name	Organization
Jeremy McShane	Facility Maintenance Coordinator, Municipal District of St. Stephen
Eddie Oldfield	Senior Lead, Projects, QUEST Canada
Norma Panetta	Lead, Projects, QUEST Canada
Malsi Angekumbura	Lead, Projects, QUEST Canada