



# UPDATED RECOMMENDATIONS REPORT

for the Village of Southern Victoria's  
Community GHG and Energy Action Plan  
Implementation

2023

## Acknowledgments

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QUEST Canada is a national non-profit that supports communities in Canada on their pathway to net-zero. Since 2007, we've been facilitating connections, empowering community champions and influencing decision-makers to implement efficient and integrated energy systems that best meet community needs and maximize local opportunities. We develop tools and resources, convene stakeholders and rights holders and advise decision-makers — all with the goal of encouraging and enabling communities to contribute to Canada's net-zero goals. Learn more and join the network at [questcanada.org](https://questcanada.org).

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## 1.0 Executive Summary

### 1.1 Background

The Village of Perth-Andover developed a corporate and community greenhouse gas (GHG) inventory, as well as a corporate and Community Energy Plan (CEP). Council adopted these in 2018, enabling the Village of Perth-Andover to achieve the first three milestones of the Federation of Canadian Municipalities (FCM) and ICLEI's Partners for Climate Protection Program. In 2022, the Province of New Brunswick introduced a municipal reform process, which led to Perth-Andover and neighbouring communities amalgamating into the new **Village of Southern Victoria**.

The original CEP identifies ways to reduce GHG emissions, support the local economy, increase competitiveness, create jobs, improve energy efficiency, and keep energy dollars local. The CEP contains 12 initiatives whose potential reductions are estimated at 1,611.8 tons of CO<sup>2</sup> equivalent by 2025 (or a 17 percent reduction in community GHG emissions below 2015 levels). Further targets include a 34 percent reduction of community GHG emissions by 2035. There is also interest in the municipality about the potential to achieve net-zero at a future date. The Community Energy Plan includes activities such as improving energy efficiency and fuel switching (clean heat conversion) in the residential and commercial building stock, energy conservation initiatives (e.g. clothesline program), improving active transport, promoting fuel-efficient driving, implementing anti-idling initiatives, and helping advance the uptake of electric vehicles, charging stations, and LED lighting. In the municipality, there is also the potential for renewable energy production.

As per the economic impact assessment conducted by QUEST Canada — which is detailed in a separate report — the full implementation of the proposed energy saving measures in the original CEP can result in approximately \$2.9 million in annual savings, carbon savings of \$300,000 (assuming \$50 per ton), and diverting up to \$72.5 Million over 25 years into the local economy (at today's prices) once the plan is fully implemented. A good plan will also attract private sector investment to the community. Details of the assessment methodology and assumptions are available on our website, in a workbook: <https://questcanada.org/wp-content/uploads/2023/05/Economic-Impact-of-New-Brunswick-CEPs.pdf>  
NOTE: Input data for economic estimates provided by the original Community GHG & Energy Action Plan, June 2018. Following municipal reform, the enlarged territory of Southern Victoria will present additional opportunities to reduce GHG emissions, and thus lead to increased economic benefits.

In 2023, QUEST Canada worked with the Village of Southern Victoria to update the governance structure, a communications and stakeholder engagement strategy, a key performance indicator framework, and a strategy for implementing community-side actions to achieve local environmental and economic benefits. For the Community Energy Plan to be effectively implemented, the community context needs to be considered in 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 help inform the Village of Southern Victoria's submission to FCM for Milestone 4 in the Partners for Climate Protection Program.

## 1.2 What This Report Covers

The former Village of Perth-Andover, in partnership with QUEST, hosted a Community Energy Plan Implementation Workshop on Nov. 16 and 19, 2021. The workshop engaged municipal staff to help establish a governance framework for implementing the CEP, and develop strategies for implementation, awareness building, and the measuring of key performance indicators.

The workshop included an overview of the CEP and Smart Energy Community Benchmark results. QUEST Canada then shared recommended strategies for governance, implementation, communications, stakeholder engagement, data gathering, and progress monitoring. Through four break-out discussions/exercises, participants helped to inform, compare, and select strategies.

In 2023, QUEST held a review session with the new Village of Southern Victoria, 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.’

## 1.3 Who Participated in the Workshop?

Representatives of the Village of Southern Victoria (formerly Perth-Andover), the Power and Light Commission, NB Power, and QUEST Canada. Further stakeholders were engaged as part of the original CEP development process. See Annex 7 for a list of workshop participants.

## 1.4 Key Recommendations / Outcomes

### 1.4.1 Governance

(See Section 2 for details from the workshop)

As a default, the CEP is overseen by the chief administrative officer (CAO). In the future, it will be the new Assistant Clerk Communications. There could also be the fall-back option of hiring a new staff member (if funding is available, or by using savings from efficiency actions).

Originally, participants expressed support for a regional approach in partnership with one or two other municipalities who could share a regional CEP coordinator. However, due to amalgamations, a regional approach was determined to no longer be needed. It was recommended that the Village of Southern Victoria could work with neighbouring communities **to advance specific projects.**

Participants also recommended **delegating the CEP to the Utility Board (internal committee)**. A template for a **terms of reference** for the internal committee is included in Annex 1.

In brief, the Internal committee (Utility Board) 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 and council representation (if possible), as well as community stakeholders as needed.

Participants indicated that the committee should focus on climate mitigation/GHG reduction efforts.

### 1.4.2 Data / Key Performance Indicators

(See Section 3 for details from the workshop)

Participants recommended updating the GHG inventory by 2025 (including data for the newly amalgamated municipal area), and benchmarking CEP progress annually. The data required is described in Section 3. This would be led by the CAO as a default, or the Assistant Clerk Communications and Treasurer, with support from both internal staff and key data providers.

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

- An annual request for data from key data providers
- Meetings between internal and external committees (annual reporting)
- The PCP Milestone Tool, and/or spreadsheet, for updating the GHG inventory
- QUEST Canada's Smart Energy Communities Benchmark tool
- Surveys and requests for information as needed
- FCM PCP Hub

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 3 for a full list of KPIs and data sources. Some of the most important KPIs include:

- Total energy usage (residential, commercial, institutional, transport) for all fuels
- Amount spent on energy vs. saved through efficiency programs
- Number of households and businesses undertaking efficiency improvements and clean energy conversion measures (e.g. heat pumps), and receiving incentives
- Change in water consumption and total water use
- Number of fuel efficient vehicles and EVs purchased
- Total MW of clean energy produced
- Amount of GHG emissions reduced
- Local success stories
- And several others.

### 1.4.3 Communication

(See Section 4 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 regional/CEP coordinator with support from municipal communications staff and the regional advisory committee.

Some of the top methods for **public communication** include:

- Webpage (on the Village of Southern Victoria's website) — see sample content in the Annexes
- Social media (update weekly) — see sample content in the Annexes
- Bill inserts (monthly/quarterly)
- Fact sheets (update annually)
- Annual contests and events

- Annual progress report

Some of the top methods for **stakeholder engagement** include:

- Stakeholder advisory committee meetings
- Attending stakeholder events when requested
- Partnering with QUEST Canada and the Union of New Brunswick Municipalities (UMNB) whenever possible
- Others as needed, e.g. workshops, networking events

### 1.4.4 CEP Action Strategies

(See Section 5 for details from the workshop)

QUEST Canada prepared a list of strategies for implementing each of the CEP actions. For each action, participants determined a priority, cost level, lead responsible, partner actions, and preliminary strategy for implementation, and identified whether it needs a study, funding, or supporting policy. See Section 5, for a full list of prioritized actions, and see [Action Planning Spreadsheet](#) for details. Cells highlighted in yellow were updated post-municipal reform. In summary, the **high priority actions** are (to start by 2022/23):

- Promote clean energy conversion (space heating) and energy efficiency through public education and incentives.
- Optimize electric utility operations — including targets for annual load, clean generation, and operational efficiency.
- Use the renewable energy mapping assessment completed with support from QUEST, to identify and study individual sites.
- Build and expand a Solar PV farm with gas tax funding
- Consider land use or zoning amendments to encourage densification, active transportation networks, energy efficient / high performance buildings, and to enable clean energy production
- Use the completed engineering study to inform development of pedestrian-friendly sidewalks and multi-use trails.
- Optimize water and wastewater systems.
- Review waste collection policy and plastic bag ban (to be reviewed by council).
- Continue to expand the EV charging network.
- Continue to provide Council's Green Incentives program to encourage uptake in electric vehicles, bikes and scooters, as well as composters.
- Continue to use fleet monitoring system to reduce idling and optimize routes

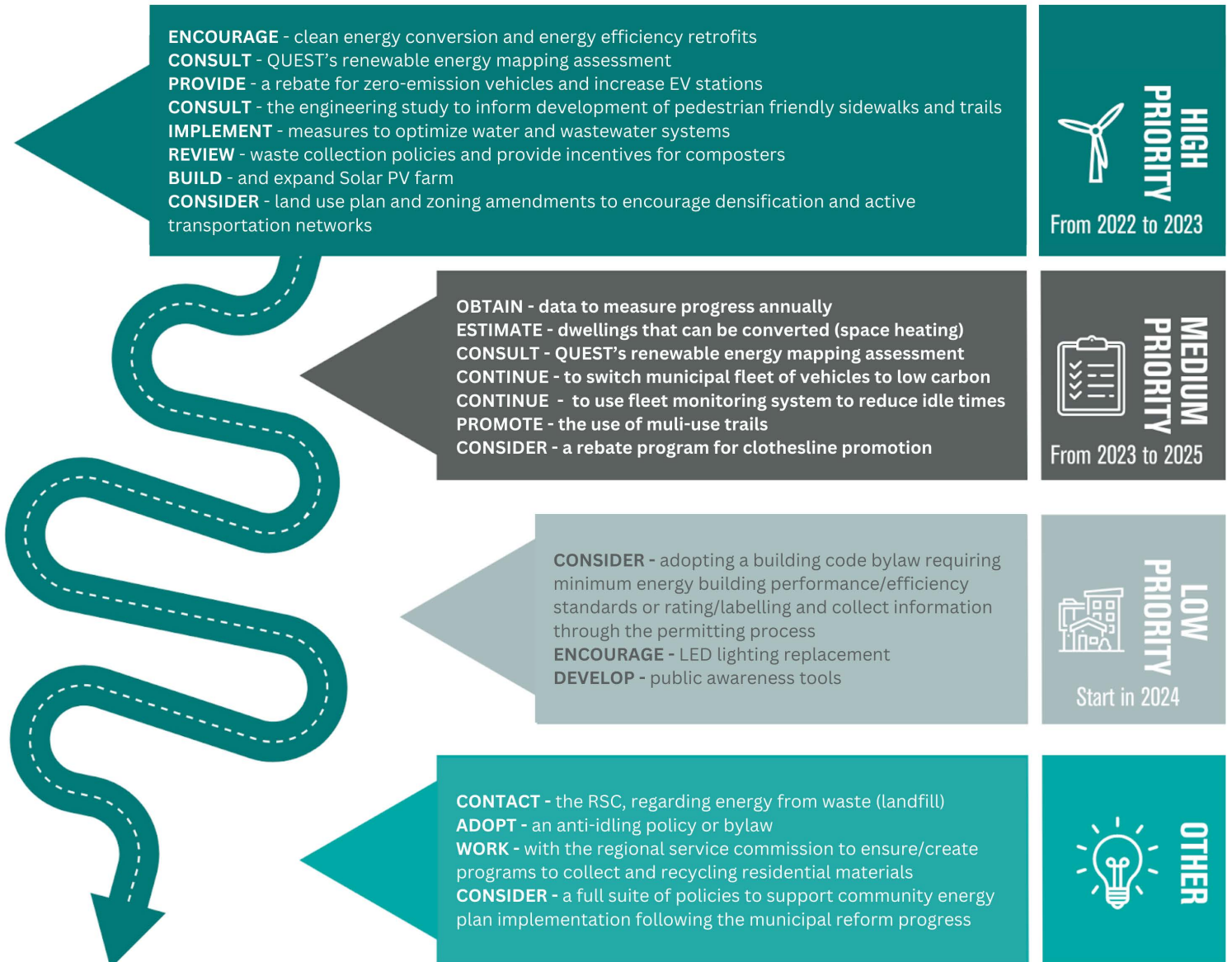
Participants recommended the **study and/or pilot of certain measures first** and gaining **access to funding** (e.g. via the FCM Green Municipal Fund, NB Environmental Trust Fund) to implement certain actions and to support stakeholder engagement and communications activities. Participants identified the following **policies** that may be needed to support CEP actions:

- It is recommended that the internal committee (utility board) review and present policy options to council. There are many other ways to embed the CEP in municipal processes, policies, and plan reviews. See Annex 3 for details on how to embed the CEP.

- After municipal reform, consider land use or zoning amendments to encourage densification, active transportation networks, energy efficient / high performance buildings, and to enable clean energy production.

Based on the selection and prioritization of CEP actions, the following graph illustrates a possible roadmap for implementation:

**Figure 2: Preliminary Roadmap for Implementation**





## 1.5 Potential Next Steps

- Council will need to review and approve governance structure recommendations, and next steps.
- Update the GHG inventory to integrate the wider territory (post municipal reform / amalgamation)
- Delegate the CEP to the new Assistant Clerk Communications or examine the potential to hire a dedicated staff member. As a default, assign the CEP to the CAO.
- Obtain funding (e.g. NB ETF, FCM GMF, NB Power), for the coordinator position, convening committees, advancing CEP actions, and for communications/public education projects.
- The Utility Board will be responsible for coordinating and advancing CEP actions, reporting on KPIs, applying for funding, and supporting community outreach.
- A budget can be developed based on annual priorities/studies. Include requests into annual budgets and prepare funding proposals (e.g. to NB ETF or FCM GMF), where needed. Some actions require no capital investments, only small amounts of labor time (e.g. communications support), or outsourcing (e.g. design, marketing, studies, etc.).
- Launch studies or pilots according to the implementation timeline. Analyze outcomes, develop full-scale community-side projects or capital projects, based on financial/technical feasibility, where needed. Each of the action strategies (for each CEP action) identifies whether a study or pilot is needed.
- Bring related policy decisions to council, as recommended by municipal staff (e.g. CAO, or CEP coordinator), as proposed by the internal staff committee, or as identified within each action strategy of your CEP. Policy decisions rest with council.
- Align with programs offered by NB Power, FCM, federal and/or provincial governments, whenever possible. These programs provide incentives for successful implementation of CEP related actions, including: energy efficiency, clean energy conversion, renewable energy, transportation, public education, and other related initiatives.
- Request stakeholders to provide data for measuring KPIs on an annual basis. See Section 2 for more details on collection methods and selected KPIs.
- Report to FCM for Partners for Climate Protection (PCP) Milestone 4 — include schedule of implementation, results of early actions, description of stakeholder engagement. **You can use the content of this report to help inform your submission to FCM for PCP Milestone 4.**
- Report to FCM for PCP Milestone 5 — once most actions in the CEP are implemented and/or GHG reduction targets are achieved, you can update and submit GHG inventories (corporate and community).
- Report successes, impacts, and benefits to the community through an annual report card. Conduct further outreach throughout the year, as needed in alignment with CEP actions.

## 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 elected officials 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 regularly monitor and report on the implementation of the CEP.

Community context needed to be incorporated into the development of a governance structure for the implementation of the Village of Southern Victoria's CEP. **Key governance options are presented below, and include considerations for oversight, coordination, stakeholder engagement, communications, and data/monitoring key performance indicators. Following this is a summary of the discussion and options selected by participants during the workshop/webinar on Nov. 16, 2021, as well as the updated decisions post-municipal reform in 2023.**

### 2.2 Oversight and Coordination

**The options discussed during the first tabletop session on Nov. 16, 2021, include:**

- A. **Option 1:** The Village of Southern Victoria (former Perth-Andover) can **assign an existing staff member** e.g. CAO or corporate energy manager) to oversee *corporate* energy actions, and ensure that the *community* is leading by example by engaging stakeholders, coordinating task forces, gathering data, reporting progress, ensuring good communication, and finding ways to ensure that energy and emissions are considered in all decisions. However, it may be challenging for one person to manage implementation of both the corporate and community energy plans.
- B. **Option 2:** The Village of Southern Victoria (former Perth-Andover) can **assign the role to another existing staff member** or **hire a new staff member** to oversee *community* energy actions, engaging stakeholders/coordinating task forces, gathering data, reporting progress, ensuring good communication, and finding ways to ensure that energy and emissions are considered in all decisions. Embedding the CEP into job descriptions helps to keep focus on implementation, and it 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 and village council as it does to the staff and stakeholders working to implement the plan on the ground.
- C. **Option 3: An approach using a regional/cost-shared resource** would rely on collaboration with nearby communities such as the Town of Florenceville-Bristol (now Carleton North) and the Town of Woodstock on the possibility of establishing a shared staff person. This position could also be partly funded by FCM. A sample job description and skills and credentials needed are included in Annex 2.
- D. **Option 4:** Another option would be engaging a **student or part-time worker** using funding from the NB Environmental Trust Fund, FCM Green Municipal Fund, or municipal budget. This position would work 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 (2021):	Decision (2021):	2023 Update:
<p>Participants reviewed the four options presented, and discussed the pros and cons for each prior to making a decision.</p> <p>Participants felt that assigning the coordinator role to an existing staff member (e.g. the CAO) would ensure accountability. However, the reality is that they have limited staff resources and the work would compete for time with other tasks. Other existing staff may not have the needed skill set.</p> <p>Participants expressed support for a regional or cost-shared approach, but did not think the regional service commission would be the correct home — since it has too broad a mandate, and it would be over too broad a geographic area. Instead, participants felt it would be advantageous to partner with one or two other municipalities.</p> <p>It was noted that municipal reform may have an impact on the capacity and/or geography of the area to be covered by a regional approach.</p> <p>While engaging a student would give them experience, it was noted that funding would need to be secured, and it was felt that a student might not have the right skill set to coordinate implementation of a CEP. Instead, they would be better placed to support individual projects.</p>	<p><b>Decision 1:</b> Establish a regional coordinator in partnership with one or two other municipalities.</p> <p><b>Decision 2:</b> If a regional approach proves unfeasible, assign an existing staff member (other than the CAO) or hire a new staff member with funding.</p> <p><b>Decision 3:</b> As a default, if the above two approaches are unfeasible, assign the tasks to the CAO and assistant CAO.</p>	<p><b>Decision 1:</b> The CEP will be coordinated by the new Assistant Clerk Communications, with the CAO as a fallback.</p> <p><b>Decision 2:</b> Consider hiring a new staff member, with funding.</p>

## 2.3 Committee Structure

A committee would oversee the community-wide implementation of the CEP, identify issue-based and short-term actions, enable coordination and communication, support 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 if they should be done by separate committees. **Presented below** are the options for committee structure. Following this is a summary of the discussion and options selected by participants during the workshops on Nov. 16, 2021, **as well as the updated decisions post-municipal reform in 2023**

### 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 the senior management and junior/intermediate staff levels. Embedding the CEP into job descriptions helps 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 on which to report.

- A. **Option 1: Create a task force, council committee, or assign tasks to an existing committee**  
Consider creating a Committee of Council, Mayor’s Task Force, or assigning 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 ensure adequate staffing and other resources are available. Community stakeholders may be on the committee, Staff would attend meetings as a resource. Minutes would be reported to the Village of Southern Victoria’s 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 KPIs, and providing technical support for the implementation of actions in the CEP, including analysis, feasibility studies, data, stakeholder support, etc. It can include meetings for department managers/leads, inter-departmental staff, and members of council. The committee would be chaired by the lead coordinator/oversight person.
  
- C. **Option 3: Assign to existing committee such as the finance or growth committees**

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

Discussion Notes (2021):	Decision (2021):	2023 Update:
<p>Participants reviewed the three options presented, and discussed the pros and cons of each prior to making a decision.</p> <p>Participants indicated that council members might not have the time to participate in a council-level committee.</p> <p>Participants indicated a preference to form an internal committee (or team of three people) to meet quarterly and oversee the implementation of the CEP. The committee could include external key participants when needed. The committee would focus on GHG mitigation efforts</p> <p>Finally, the existing management team could take on the responsibility.</p>	<p><b>Decision 1:</b> Form an internal committee (or team of three) to meet quarterly.</p> <p><b>Decision 2:</b> Defer to the management team as an alternative.</p> <p><b>Next Steps:</b> Establish quarterly meetings, starting in the first quarter of 2022 to advance CEP actions.</p>	<p><b>Decision 1:</b> Assign to the Utility Board (internal committee, with community stakeholder participation as needed)</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 options discussed during the first tabletop session on Nov. 16, 2021, **as well as the review session post-municipal reform in 2023**, include:

- 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 chamber of commerce, and others. The committee could have informal participation of council members or staff. The committee should meet on an ongoing basis, and schedule annual, bi-annual, or quarterly meetings (which would be open to the public). Partner organizations could commit annually to actions from a list of options, provide progress reports, contribute to key performance indicators, integrate with municipal communications, and collaborate on innovative projects. This strategy was used by the

[Oakville Energy Task Force](#). The stakeholder meeting frequency would be quarterly or bi-annually, TBD.

- B. **Option 2: Assign the roles to an existing non-profit or establish an external non-profit** — perhaps co-funded by utility providers, the province, and neighbouring municipalities — and seek additional funds for advancing key measures in the CEP. It can also provide an interface between the city and external stakeholders, ensure sustainability of CEP implementation over the long term, and report to non-profit governance committees. This strategy was used by [Our Energy Guelph](#), and [Sustainable Waterloo Region](#).

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

Discussion Notes (2021):	Decision (2021):	2023 Update:
<p>Participants reviewed and discussed the two options presented, prior to making a decision.</p> <p>While no specific pros and cons were identified, participants reached a consensus on preferred options.</p> <p>Participants indicated a preference not to form an additional (external) committee, unless a regional coordinator/partnership is established. For example, if a regional coordinator was established with the Town of Woodstock and the Town of Florenceville, then a regional advisory body could be established. Participants indicated a willingness to discuss this with the other two municipalities.</p>	<p><b>1st choice:</b> Invite key stakeholders to internal committee meetings when needed.</p> <p><b>2nd choice:</b> If a regional coordinator or partnership is established, then a regional advisory body could be established. The Village will discuss this option with the other two municipalities.</p> <p><b>Who should chair?</b> It would be the regional coordinator, if one is established, or it could have rotating chairs between the municipalities.</p> <p><b>Should the committee address both mitigation and adaptation?</b> To be determined later.</p> <p><b>Next steps:</b> Reach out to the Town of Woodstock and the Town of Florenceville-Bristol to discuss creating a regional coordinator and advisory body, and identify specific CEP actions that could be done together.</p>	<p><b>Decision:</b> Assign to the Utility Board, which can include community stakeholders as needed</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 related to the CEP. The options discussed during the first tabletop session on Nov. 16, 2021, **as well as the review session post-municipal reform in 2023**, include:

- A. **Option 1:** Communications department (note: limited resources, would need funding)
- B. **Option 2:** Communications department with support from the 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)

A related decision is where the webpage/online information will be housed. The options identified were:

- A. The village website
- B. A new webpage (regional microsite linked by each municipal webpage)

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

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

Discussion Notes (2021):	Decision (2021):	2023 Update:
<p>Participants reviewed and discussed the six options presented, prior to making a decision.</p> <p>The village does not have a communications department, but does have communications/administrative staff.</p> <p>While it is most likely going to be undertaken by communications staff, participants expressed interest to share communications with two other municipalities, if a regional coordinator can be established.</p>	<p><b>Most preferred:</b> A regional coordinator/shared communications tasks with two other municipalities</p> <p><b>As an alternative/default:</b> As a default, internal/communications staff will support public education and outreach</p> <p><b>Where should a webpage be housed?</b> The village website</p>	<p><b>Decision:</b> Assign to Assistant Clerk Communications</p> <p>Webpage should be housed on the Village website</p>

Discussion Notes (2021):	Decision (2021):	2023 Update:
<p>In addition, participants saw value in partnering with other organizations, including: Perth-Andover Electric Light Commission, NB Power, local schools, and some companies (e.g. suppliers).</p> <p>Participants indicated that the village could host a webpage, providing information and tips.</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. The options discussed during the first tabletop session on Nov. 16, 2021 **as well as the review session post-municipal reform in 2023**, include:

- 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 from the communications department (data requests)

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

Discussion Notes (2021):	Decision (2021):	2023 Update:
<p>Participants reviewed and discussed the five options presented, prior to making a decision.</p> <p>Participants arrived at consensus on taking a regional approach (if a regional coordinator and/or committee is established), including collecting and reporting data.</p>	<p><b>Decision 1:</b> Take a regional approach to collecting data and reporting — including GHG inventory, SEC Benchmark, and annual report cards, for example.</p> <p><b>Decision 2:</b> As a default, the designated CEP coordinator (e.g. CAO) and the internal committee would oversee data collection and reporting.</p>	<p><b>Decision:</b> Assign to Assistant Clerk Communications and Treasurer</p>



Discussion Notes (2021):	Decision (2021):	2023 Update:
As a default, participants indicated the designated CEP coordinator (e.g. CAO) and the internal committee would oversee data collection and reporting.		

## 3.0 Data and Key Performance Indicators

### 3.1 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 overall confidence and support of senior decision makers. When the CEP is monitored on an annual basis, successes can be celebrated. This 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 Village of Southern Victoria 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 options for tools that can be used, data sources, and KPIs discussed during the third tabletop session on Nov. 19, 2021, **as well as the review session post-municipal reform in 2023**, include:

### 3.2 Key Tools

The options for tools discussed during the workshop, are listed below:

- A. **Meetings of the committee, reports from stakeholders and department heads.**
- B. The [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 your progress across all CEP actions and advance implementation.
- D. The [PCP Hub](#) for connecting with the national PCP network, accessing information and resources, and asking questions of peers.
- E. **Conduct surveys** for community-side actions: e.g. to determine how many households participate in anti-idling and clothesline programs, energy efficiency and heat conversion programs, and purchasing EVs. Student work is another option: e.g. anti-idling surveys at schools.
- F. **Request data/information from partners** i.e. aggregate energy use data, uptake in efficiency programs, etc.

- G. **Create a data dictionary and registry of sources.** Invite community partners to commit to updating the Village of Southern Victoria on an annual basis. This could be done via email, survey, mail (CD-rom), or via web page with simple reporting forms and the ability to upload files.
- H. **A dashboard** can be used to display progress within key activity categories, along with a description of the status for each individual activity.

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

Discussion Notes (2021):	Decision (2021):	2023 Update:
<p>Participants reviewed the eight options presented, and discussed the pros and cons to each prior to making a decision.</p> <p>Option 1 — Participants indicated it was necessary to data through meetings with department heads and key stakeholders.</p> <p>Option 2 — Participants indicated the PCP Milestone tool would be good to track results (GHG emission reductions), and support funding applications.</p> <p>Option 3 — Participants indicated the SEC Benchmark tool would be useful for consistent measuring and comparisons with other municipalities, and can easily be updated. Great for bragging rights and promoting the Village’s new brand.</p> <p>Option 4 — Participants indicated the PCP Hub is good for networking and idea generation, and gathering information.</p> <p>Option 5 — Participants indicated surveys could be useful for community engagement, and to</p>	<p>After discussing the options presented, <b>participants agreed to use the first six options:</b></p> <ul style="list-style-type: none"> <li>● Annual data requests (to department heads and other key stakeholders)</li> <li>● Meetings with department heads and key stakeholders</li> <li>● The PCP Milestone Tool for updating the GHG inventory by 2025</li> <li>● The SEC Benchmark to track progress each year</li> <li>● The PCP Hub for networking and information gathering</li> <li>● Surveys</li> </ul>	<p><b>Decision:</b> Stays the same as decision in 2021</p>

Discussion Notes (2021):	Decision (2021):	2023 Update:
<p>keep the education system involved.</p> <p>Option 6 — Participants indicated that requests for data should be conducted annually. This might leverage provincial programs/funding. There was one question about whether or not the local industry tracks data.</p> <p>Option 7 — Participants indicated that it could be a struggle getting the commitment from external partners to update a data dictionary, but it could bring cohesion and buy-in. Ultimately, participants did not see this approach as a priority.</p> <p>Option 8 — Participants indicated that a dashboard would be a cool idea, though it would depend on access to data. It would also be costly, time consuming, and the community might not use it readily.</p>		

### 3.3 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:

#### 3.3.1 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 Village of Perth-Andover’s [baseline GHG inventory](#) of 2018 (or at least the inventories should be adjusted to be consistent with each other). 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 (e.g. CEP coordinator, as well as

other municipal departments), and in the terms of reference of the internal staff committee.

**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 for your municipality using population size 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 four in the PCP's tool for calculating waste emissions. The total amount of landfilled waste can of course be provided by the municipality's waste manager/waste department or regional waste commission. Waste composition data can be obtained through waste surveys, or else default values can be used. Default values are listed in the [PCP Protocol](#).

- A. **Transportation emissions** are a bit more challenging, but there are a few ways to calculate them. Estimate 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 Village of Southern Victoria, 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. [Kent Group](#) can provide this data for a fee. Fuel data must be broken down by vehicle class (e.g. light duty, heavy duty, etc.) and fuel type (e.g. gasoline, diesel). 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.

**GHG emissions reductions from individual actions in the CEP can be measured in different ways. See KPIs listed below (section 3.4).**

### 3.3.2 For Monitoring Progress on CEP Implementation

Consider providing a formal annual opportunity for the CEP coordinator and community stakeholders to share measurable progress. For example, hold a year-end 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. Or they can be presented in the form of anecdotes (such as short case studies highlighting successes, new programs or actions, etc.). 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 Village of Southern Victoria 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 smart energy journey. The indicators describe the key components of a smart energy community. The first five identify the local capacity and resources that need to be in place, and the second 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 Village of Southern Victoria and its energy utility 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.

As part of the NB SEC Accelerator Program, QUEST Canada undertook a benchmark assessment in 2021 for the former Village of Perth-Andover, and updated the benchmark scores in 2022. The Village (of Southern Victoria) will retain access to the SEC Benchmark tool for tracking progress and continuous improvement, year over year.

### **3.3.3 for 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 vs. cars, vehicle kilometres traveled, and related emissions ratings. The Village of Southern Victoria also has access to renewable energy technical mapping assessment (focused on grid scale solar PV and wind) developed as part of QUEST's NB Smart Energy Community Accelerator program, as well as transportation and land use maps. This data can be integrated using GIS/mapping software, and/or could be published online with appropriate constraints to protect privacy (e.g. aggregating energy usage).

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 hectares or m<sup>2</sup>.

- 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, and pros and cons of each option above. Discussion points and the resulting recommendation are as follows:**

Discussion Notes (2021):	Decision (2021):	2023 Update:
<p>Participants reviewed the four options presented, and discussed the pros and cons for each prior to making a decision.</p> <p>Participants indicated the CAO (or CEP coordinator) would update the GHG inventory by 2025. This could be done using the PCP Milestone tool. The GHG inventory may need to be renewed after the upcoming amalgamations resulting from the municipal reform process.</p> <p>Participants indicated that the assistant CAO could update the SEC Benchmark annually, as it is easy to do. Eventually, this could be undertaken by a regional coordinator on behalf of each municipality. As mentioned previously, data requests could be made annually to update both the GHG inventory and the SEC Benchmark.</p> <p>Participants did not indicate interest in undertaking overly technical energy mapping.</p>	<p>Decision 1: the CAO or CEP coordinator will update the GHG inventory by 2025, or following amalgamations in 2023.</p> <p>Decision 2: the assistant CAO will update the SEC Benchmark annually, as well as issue data requests.</p>	<p>Decision: The Assistant Clerk Communications, or CAO, will update the GHG inventory by 2025, taking note that the population has increased from 1,800 to 2,600, due to municipal reform / amalgamations.</p> <p>The Village can also update the benchmark scores annually.</p>

### 3.4 Key Performance Indicators

CEPs have the potential to lead to significant economic, health, social, climate 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 to track, and should be cost-effective to track. Many of the indicators will already be reported on (corporately), but are more challenging to track for the community — and thus need community partners to assist in reporting achievements, and reductions in energy and GHG emissions.

There are a few key performance indicators that should be used (measured annually), as the Village of Southern Victoria implements its 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 (CO<sup>2</sup> 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:

- 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 report card** with the KPIs (listed below), across each sector. This could include showing people what the savings are (in dollars), which could also be included in communications and outreach strategy. Below are examples of KPIs that relate to actions in the Village of Southern Victoria’s CEP. **Participants discussed the merits, and pros and cons of each KPI.**

**Discussion points and the resulting recommendation are as follows:**

CEP Action Types	Key Performance Indicators	Yes/No	Data Sources
Energy efficiency:	Identify the amount of money spent on energy, vs. saved through	yes	Energy utilities/providers,

CEP Action Types	Key Performance Indicators	Yes/No	Data Sources
For example: residential and commercial efficiency retrofits, clean energy conversion (heating), LEDs	efficiency programs (community side).		local partners (e.g. success stories)
	Analyze where energy spending goes (e.g. local, provincial, abroad).	no	
	Calculate total savings associated with energy efficiency and conservation measures/change in energy use (total and per capita), three-year average and year to year.  Building age is also required.	no	
	Determine energy use (aggregated by sector and per capita).	yes	Energy utilities/providers
	Determine GJ (energy) and GHG reductions for each action.	no	
	Identify the number of households/businesses engaged (e.g. LED lighting, efficiency retrofits, clothesline). Number of rebates given (e.g. LEDs) for measures that qualify for incentives from NB Power.	yes	Energy utilities/providers
	Find residential, commercial, and industrial success stories.	yes	Local partners
	Roll out a clothesline program, and determine the number of participants and reductions in loads.	yes	Harder to get data — could be obtained through surveys/incentives
<b>Water conservation</b>  For example: clothesline program	Calculate water use — total and per capita — and percentage change (three-year average and year over year).	yes	Village



CEP Action Types	Key Performance Indicators	Yes/No	Data Sources
	Water metering/peak demand reduction (number of participants).	no	
	Switch to low-flow fixtures.	?	
	Extrapolate for households on wells, based on water metering.	no	
	Provincial data on groundwater.	no	Only if needed
<b>Distributed energy resources</b>  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	
	Actual KWh output of potential wind/solar farms	yes	QUEST Canada and co-mapping
	GJ or MW of clean energy produced.	yes	The village itself, or local cases
	Number of households/businesses engaged (e.g. clean energy conversion — for heating).	yes	Permit process, insurance cost, NB Power (recipients of incentives)
	Number of households installing heat-pumps — could be based on the number of upgrades to electricity entrance.	yes	Permit process, NB Power (recipients of incentives)
	Residential, commercial, and industrial success stories.	yes	Local
	Annual load of district heat subscribers, seasonal load requirements, estimated GHG reduction/offset.	no	
<b>Land use</b>  For example: green space, green energy	Development footprint: change in the area (km <sup>2</sup> ) of developable land and area zoned as non-buildable, or green space, or green energy zones (three	no	

CEP Action Types	Key Performance Indicators	Yes/No	Data Sources
zones, redeveloped brownfields	year average and year to year). Use density measure instead.		
<b>Transportation</b>  For example: anti-idling and fuel efficient driving initiatives; encouraging uptake in fuel-efficient, compact or electric vehicles; active transportation initiatives	Number of vehicle owners not idling/reduced idling time.	yes	Surveys, observational studies
	Annual average daily flow of traffic (vehicles/day). Number of vehicles from outside coming into the village.	no	
	Number of vehicle kms/trips reduced.	no	
	Number of EVs purchased/registered in the Village of Southern Victoria. This can be tracked through provincial statistics, and by offering discounts at dealers for home charging units.	yes	Track electrical permits (e.g. for upgrades for home charging), as well as discounts offered at dealerships, as well as through vehicle registrations with the province
	Number of EVs purchased/registered in the Village of Southern Victoria. This can be tracked through provincial statistics, and by offering discounts at dealers for home charging units if they agree to contribute to the data set.	yes	Track discounts offered at dealerships, as well as through vehicle registrations with the province
	Ridership on public transportation/transit ridership per capita.	no	
	Kilometres of bicycle lanes, sidewalks, walking trails constructed, number of users cycling or walking for utilitarian purposes.	yes	Village
	Pedestrian counts.	yes	Village

CEP Action Types	Key Performance Indicators	Yes/No	Data Sources
<b>Waste</b>  E.g. organic waste diversion	Quantity of waste recovered, diverted, or recycled; tonnes of organic solid waste diverted from landfill.	yes	Regional waste commission
<b>Air quality</b>	Baseline studies on air quality, number of days with poor air quality.	no	
	Ground-level ozone criteria hours exceeding 50 ppb.	no	
	Annual average sulphur dioxide concentration.	no	
	Annual average nitrogen dioxide concentration.	no	
	Annual average inhalable particulate matter concentration.	no	
	Hospitalization rate for respiratory illness per 100,000 people — and associated health care costs.	no	
<b>Economy</b>	Total savings associated with energy efficiency and conservation measures/change in energy use (total and per capita), three year average and year to year.	yes	Energy utilities/providers
	Unemployment rate/percentage change.	no	
	Number of jobs created in sectors related to energy efficiency, clean energy, clean technologies, etc.	no	

CEP Action Types	Key Performance Indicators	Yes/No	Data Sources
	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	
	Economic spin-offs (e.g. dollars kept local, new business/jobs, and new revenues).	yes	Survey, village, meetings with local businesses
<b>Satisfaction</b>	Survey citizens for feedback.	yes	Village/citizens
	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	
<b>Other actions/other notes</b>	None identified.		

### 3.5 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 the village for monitoring purposes.
- Check sample input data for errors. Clarify data questions with providers.
- Check that the assumptions for methods, data, etc., are documented.

If using internal spreadsheet software to track data:

- 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, CO<sup>2</sup> coefficients).
- Check the data processing steps (equations) in the spreadsheets.

## 4.0 Communications and Engagement

### 4.1 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, catalyze action, and communicate results and benefits to the community. Below are some options to be considered as part of a communication strategy.

Communications will be coordinated by the CAO and Assistant Clerk Communications, with support of communications staff. Participants recommended the communications strategy be coordinated by communications staff, and also in partnership with key community stakeholders. Funding may need to be secured for certain communications related initiatives.

### 4.2 Public Engagement and Communications

There are several channels the Village of Southern Victoria can use to educate, inform, and engage the public. Consider an approach of going to the community with engagement. **Participants discussed the merits, and pros and cons of the following methods. Discussion points and the resulting recommendation are as follows:**

			Priority	High	Medium	Low
Priority	Method	Description	Frequency			
High	Webpage	Content should include visual depiction and simple explanation of the GHG emissions in the	As required			

Priority	Method	Description	Frequency
	(hosted by the Village of Southern Victoria)	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. <b>See Annex 6 for sample content.</b>	
High	Social media	<b>Use Facebook, Twitter, LinkedIn, and Instagram.</b> Content should include CEP details, progress on actions/impacts, success stories, calls to action, and contests. <b>See Annex 6 for sample content.</b> Social media should link to fact sheets, success stories, and progress reports, and should link back to the webpage. All neighbouring municipalities' social media accounts can also be used.	Weekly or biweekly tips or factoids — as needed
Low	Media	Newspaper, radio, TV.	Send the occasional press release
High	Bill inserts	Content should encourage residents and businesses to improve efficiency, promote programs/incentives, share facts, etc. This could be done <b>online (e.g. pop-up) instead</b> of on paper.	Monthly or quarterly
Low	Open houses	Content should focus on updating the public on CEP progress and opportunities to participate.	
High	Fact sheets	Show progress achieved and/or the impacts of CEP measures, tips/guidance, etc. Use as bill inserts, <b>or</b> use social media and the website instead.	Annually
Low	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 media, the public, and investors.	

Priority	Method	Description	Frequency
Low	Simulator tool	A simulation or model could be used to engage citizens in helping the village decide how to reach its GHG reduction targets. This could be coupled with annual energy savings.	
Low	Events	Hold networking events and award galas, and attend markets, festivals, provincial holidays/events, with a table display or speaker. Also join other community events.	When festivals occur
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), highlights of success stories, partner achievements, areas of need, and opportunities.	Annually
Medium	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).	Annually or when possible
Low	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. Kids can help change their grandparents' views	Must figure out capacity and the right approach

### 4.3 Stakeholder Engagement

All capacity holders and stakeholders should be engaged in a regional advisory committee and be invited to register (annually) for newsfeed/updates. Participants discussed the merits, and pros and cons of the following approaches. **Discussion points and the resulting recommendation are as follows:**

Priority **High** **Medium** **Low**

Priority	Method	Description	Frequency
Low	Ongoing teleconference and email	Engage and inform stakeholders through regular updates (e.g. email listserv) including calls to action, meeting announcements, celebrating successes, requests for information, and discussion threads related to CEP implementation. Also use webpage and social media.  CEP coordinator is to build engagement/partnerships plans.	As needed
High	Stakeholder committee	Provide updates, monitor and report on implementation, identify opportunities, integrate initiatives, gain commitments, etc. (see Governance section).	
Low	One-on-one meetings	Identify CEP objectives, stakeholder objectives — and where there is alignment between the two — pursue collaborative opportunities, gain commitments to action.  Early on, set up meetings amongst the Village of Southern Victoria, energy utilities, and other key stakeholders. Over time, this will happen at the regional committee level.	As needed
Low	Workshops and focus groups	Obtain targeted feedback on concepts and approaches to implementing CEP measures. This can be done in person, by teleconference or online through services	As needed — occasionally, when there is key things to



Priority	Method	Description	Frequency
		like Survey Monkey (this also builds ownership and feedback loop).	explore, to get community input
Medium	Attend stakeholder meetings	The village staff participate in meetings hosted by stakeholders to present information about CEP and obtain support (e.g. associations).	As requested by stakeholders
N/a	Networking events and charrettes	Host networking events for stakeholders; host charrettes to engage in dialogue for implementing new actions.  Optional exercises if there is a need.	
N/a	Open houses	Highlight CEP measures, impacts, and opportunities for participation.	
N/a	Ambassador program	Recognize business leaders and encourage local stakeholders to be leaders for advancing CEP measures and communicating benefits.	
N/a	Declaration	Invite partners to sign a declaration to generate awareness. Enable new partners to join each year. Put on annual awards.	
High	Other	Partner with QUEST Canada and UMN	Whenever possible

### 4.3.1 Why and How to engage Key Stakeholders

Key stakeholders should be engaged in a regional advisory committee 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	The provincial government and respective agencies are placing a growing emphasis on energy and emissions. The Village of Southern	Engage manager-level staff in ministries including but not limited to energy, land

Stakeholder Type	Why Engage This Stakeholder?	How to Engage
	<p>Victoria’s CEP is a platform to achieve energy and GHG reductions while facilitating economic growth, and it can directly help achieve provincial goals.</p> <p>Health care costs represent a large and growing portion of provincial budgets and community energy planning can help to reduce these costs.</p> <p>The provincial government oversees policies and programs that may impact or be impacted by community energy planning. They may also have technical expertise needed for CEP implementation. They may also have some energy end use data and key performance indicator data needed to monitor implementation progress and report on outcomes.</p>	<p>use/municipal affairs, and environmental 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>
<b>Energy utilities</b>	<p>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.</p> <p>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, and to measure reductions.</p> <p>The Village of Southern Victoria has access to development data that may not be available to energy distributors, but could provide insights</p>	<p>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 engage in a regional committee.</p> <p>Energy distributors often have strong relationships with facility departments. This may be a good entry point for communication if your utilities do not yet have a community energy planning contact person.</p>

Stakeholder Type	Why Engage This Stakeholder?	How to Engage
<p><b>NGOs and associations</b></p>	<p>with respect to future land use and energy needs.</p> <p>NGOs can help implement CEP measures, and engage with community stakeholders and the public to advance the implementation of actions.</p> <p>NGOs may be well positioned to measure and communicate the measurable impacts of CEP implementation, as well as communicate the need for CEP support with the provincial government.</p>	<p>Engage with executives and staff through one-on-one meetings to determine partnership potential, and get involved in the stakeholder committee. Support and promote local initiatives and help promote community co-benefits/impacts. Participate in local events.</p>
<p><b>Real estate</b> (e.g. developers, homebuilders, building owners and operators, architecture firms, real estate agents)</p>	<p>There is a growing mismatch between the high demand for energy efficiency buildings and homes and the supply. Similarly, there is a growing demand for compact, mixed-use neighbourhoods 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.</p> <p>There is an increasing concern among 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.</p> <p>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.</p> <p>Implement demonstration projects.</p>	<p>Reach out (e.g. via the chamber of commerce, real estate association, etc.) to request expressions of interest.</p> <p>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 a regional committee.</p> <p>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</p>

Stakeholder Type	Why Engage This Stakeholder?	How to Engage
		<p>technologies into developments.</p> <p>Engage in discussions about updating building codes, policies, or bylaws; new developments; harnessing distributed energy resources, efficiency programs, and district heat.</p>
<p><b>Local business and industry</b></p>	<p>There are increasing concerns from building owners and operators about the growing cost of energy as a proportion of overall building operating costs.</p> <p>Businesses have unique opportunities to reduce peak demand, improve efficiency, and 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.</p> <p>They may also be able to provide incentives at the point of purchase, and help promote to the public.</p> <p>Businesses may also offer energy services, incentives, or technologies that can help the community achieve CEP targets, and contribute to economic growth.</p> <p>Industry may have opportunities for process improvements, peak demand reduction.</p>	<p>Reach out (e.g. via the chamber of commerce) to request expressions of interest, or to identify businesses with an interest in community energy and efficiency.</p> <p>Engage with business executives or staff through an invitation for a one-on-one meeting to align on projects, and engage with them through the stakeholder committee.</p> <p>Identify opportunities to collaborate. Recognize business leadership through a digital button, green award, or ambassador program.</p>
<p><b>Academia</b></p>	<p>Schools have opportunities to reduce peak demand, improve energy efficiency, fuel switch, integrate small-scale renewable resources, and engage students through their curricula.</p>	<p>Engage with the dean and faculty members through an invitation to a one-on-one meeting, and engage them on the stakeholder committee.</p>

Stakeholder Type	Why Engage This Stakeholder?	How to Engage
	Community colleges and universities provide opportunities to engage faculty/students in research, studies, engineering projects, etc., related to implementing the CEP.	Invite faculty members and students to participate in studies, pilots, or projects, related to implementing the CEP.
<b>Neighbouring municipalities</b>	In some cases, it makes sense to partner with neighboring municipalities on CEP measures (e.g. promoting anti-idling, active and public transportation improvements, doing community retrofit programs, procuring charging stations etc.). This can help to minimize cost and eliminate risk of duplication, while ensuring citizens and businesses have equal and consistent access to programs, incentives, and opportunities to participate. It can also help establish consistent messaging in the region.	Engage the CAO/town clerk, or CEP coordinator, in each neighbouring municipality, with an invitation for a teleconference, and to participate on a regional advisory committee.  Explore the potential to share a human resource (e.g. regional coordinator)

## 5.0 CEP Actions — Implementation Strategies

**Note:** All CEP action strategies are included as 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.

In summary, the high priority actions are (to start by 2023-24):

- **Encourage clean energy conversion** (e.g. off of oil heat) **and energy efficiency retrofits** through public education and incentives. Public education can be led by the CAO and Communications Director. The original community targets for clean energy conversion and energy efficiency are: 93 mini-split rentals installed, with a target to install 160 more units; all homes/businesses with oil should convert to electricity; 50 percent of commercial buildings retrofitted, and ~360 or 50 percent of households should achieve at least 10 percent efficiency improvement. Following municipal reform, the number of households in the Village of Southern Victoria has increased, and therefore there is an opportunity to increase the number of mini-split rentals installed and homes retrofitted.
- **Conduct a study for retrofitting municipal facilities** to improve energy efficiency, led by CAO

- **Southern Victoria Electric Light Commission** should consider the following measures (rated medium to high priority) — this will be led by the CAO:
  - Establish a target to Improve Annual Load Factor. The reduction of peak power demand during peak times will ensure more smooth energy usage throughout the day, improve total system operations, reduce stress on electricity delivery assets, and displace high-cost emitting generation during peak times. **The utility is currently studying energy management systems for municipal facilities.**
  - Establish a target to increase system operational efficiency. The modernization of the grid/distribution system can result in operational efficiencies utilizing more efficient transformers, and upgrading the electrical infrastructure. This will result in more streamlined power flow and lower distribution losses. **The utility is buying high efficiency transformers.**
  - Pilot installation of residential EV chargers. Pilot installations can be part of an overall community program, which consist of the provision of several public EV charging stations as well as the introduction of a residential home charger rental program. The use of electric vehicles will reduce combustion emissions and GHGs. **The utility installed 5 charging stations with a total of nine heads, to date.**
- **Consult the renewable [energy mapping assessment](#) conducted by QUEST Canada, to help identify legally accessible land within the municipal boundary that has good solar potential or wind regime, existing substation, appropriate setbacks, and social acceptance. **Currently in discussion with Tobique First Nation around potential sites for wind farm or solar farm. Once a site is selected, further technical and financial feasibility study will be required, including to determine potential GHG reductions and ROI based on size of a system, performance of the units, and local wind regime, as well as infrastructure costs. Considerations for wildlife, ice, and wind variability must also be taken into account. Being led by CAO.****
- **A pilot solar installation (129kw) is being implemented starting in 2023, using Gas Tax funding.** This installation could be expanded in the future.
- **Provide a rebate** (in addition to the federal and provincial rebates) for the purchase of zero-emission vehicles. To be led by CAO, with the management team. The village now has a green incentives program: a 15% rebate on the electrification - e.g. Electric vehicles, e-bikes, e-scooters.
- **The Village has implemented a fleet monitoring system** — review stats monthly and follow up with staff and produce annual summary. To be led by Assistant CAO
- **The Village completed an engineering study** focused on pedestrian-friendly sidewalks (expansion, streetscaping, shade tree planting). This will guide future development of active transportation network. To be led by CAO.
- **Implement measures to optimize water and wastewater systems** to reduce energy consumed in pumping and treatment of water. This includes evaluation of linear infrastructure to prevent and repair water leaks, and improving efficiency of water and wastewater treatment equipment. Measures could include: annual leak detection and repair programs, and efficiency upgrades to wastewater treatment equipment. To be led by CAO.
- **Council should review waste collection policy and operations.** Consider programs to reduce non-recyclable, inorganic residential landfill waste as a means to reduce the total embedded energy in discarded products. This may include garbage bag tags, plastic bag bans, re-use programs (ex. community swap days), etc. To be led by CAO.
- **As part of the Council's Green Incentives Program, the village provides incentives for composters**, or could ensure diversion to municipal use (e.g. soil for flower beds). The community target is 70 composters to be distributed. To be led by CAO, starting in 2023.

- Starting in 2024, the Village will undertake a **review of the Municipal Plan and zoning / bylaws**. As part of this, the village should consider updating zoning to encourage tiny-homes, workforce housing, identifying areas for intensification / mixed use development (build 25-30 new units), as well as consider permit system incentives / rebates, secondary suite bylaws, and that any subdivision will reserve space for active transportation.
- **Present Plan amendments to Council in 2024**. To be led by CAO.
- **Develop an educational component** to help the community understand why the community is moving in this direction for future development, and what the benefits exist (e.g. community wellbeing, energy affordability, GHG reduction, etc) for people considering purchasing a home. To be led by Communications Director.

The medium priority (to start by 2023-24) actions are:

- **Obtain data to measure progress annually** (e.g. clean energy conversions, efficiency retrofits, etc.). This could be led by the treasurer, assistant treasurer and/or CAO.
- **Conduct a campaign to educate citizens**, promote benefits of switching to fuel efficient vehicles, (e.g. energy cost savings, GHG reduction, etc), highlight available rebates/programs, and address barriers (e.g. range anxiety). To be led by Communications Director.
- **The Village is already looking at replacing municipal fleet of vehicles to electric / hybrid / low-carbon vehicles**. Council is also looking at the possibility for municipal EVs to be used by staff, community groups, and citizens on patrol program, when not in use.
- **The Village could establish a bike share program, or bike rental program**, with community e-bikes, rebates for e-bikes. To be led by Assistant CAO.
- **Promote use of multi-use trails**. Assigned to Communications Director.
- Implement measures to **promote water conservation** (public awareness campaign, via newsletter), to be led by Communications Director.
- **The Council's Green Incentives Programs now provides a 15% rebate for clotheslines**, to help decrease energy consumption from the use of dryers throughout the year. To be led by CAO. The program's target is 165 households using clotheslines.

The low priority actions are:

- **Estimate the number of dwellings that could be converted (space heating)** based on data from energy providers, COHA, heating oil distributors, natural gas distributors, etc., if data is available at the aggregate level for residential, commercial, and light industrial zones. In particular, try to identify which buildings have oil heat in the flood zone. This can be led by the assistant CAO.
- **The village could adopt a building code bylaw** requiring minimum energy performance / efficiency standards or rating/labelling for different types of buildings (e.g. Energy Star, net zero), and collect information through the permitting process (e.g. energy/GHG saved through high-efficiency or net-zero development). This would need a bit of study, and to be reviewed by council. Currently, the official plan states LEED for new corporate buildings; and efficiency is encouraged for new commercial developments but is not required. No incentives currently through the permit process. This is a low priority measure, with a start date of 2027.
- **Encourage LED lighting replacement**. Identify potential partners for a campaign (i.e. incentive program or buy-back program). This could be led by the Communications Director. The target is: 60 percent of all incandescent bulbs. **Council could consider adding LEDs to the Green incentives program**.

- **Develop public awareness tools** including printed materials, webinars and free presentations, social media campaigns, media engagement, editorials, etc., to promote fuel efficient driving and anti-idling, as well as clean vehicle conversion. This can be led by the Communications Director, starting in 2023.
- The Village has implemented **bike parking facilities / bike racks**, and could consider adding more bike racks at key destination points. To be led by the Assistant CAO.
- **Conduct a study about undertaking retrofit program or establishing a community efficiency financing program**, with funding from the FCM. This would be led by the CAO or assistant CAO, with the earliest start date of 2026. It should also be noted that two studies are currently being done in New Brunswick to determine whether a province wide efficiency financing program is feasible - it would be good to wait for the results of those studies.

Other actions, with no priority assigned:

- CAO is to contact the Regional Service Commission, regarding **energy from waste** (landfill).
- CAO is to contact FCM to determine if flood zones can be treated as **Brownfields**. If so, FCM Green Municipal Funding can be used for remediation as well as installation of renewable energy systems.
- Awaiting the Province's adoption of the most recent national building code, which will eventually require **solar ready buildings**.
- **Adopt an anti-idling policy or bylaw:** Adopting a policy for staff that clearly states unnecessary idling is unacceptable to a municipality sends a strong message. To be led by CAO.
- **Work with the regional service commission** to ensure/create programs to collect and recycle residential materials such as glass, plastic, metals, and electronic waste as a means to reduce the embedded energy in products that use recycled materials.
- As part of **updating the municipal plan and zoning bylaws in 2024-25**, the village should consider:
  - Adopting policies to encourage compact, mixed-use developments with a diversity of building types. This may include:
    - Updating the official community plan (and secondary plans where applicable).
    - Updating zoning bylaws to identify built-up areas for intensification. These can be zoned for mixed-uses and increased height and density. Defining and enforcing an urban boundary and settlement area boundaries for undeveloped areas to be protected if applicable could also be useful.
    - Diversifying land use mix in established, single-use areas.
    - Using the development permit systems, to encourage infill/densification and mixed-use development. This could include property tax adjustments, deferrals (increment financing) or assistance, development charges adjustments or deferrals, and creating bonuses for density.
    - Creating secondary suite bylaws.
    - Reserving space for active transportation, prioritizing access and circulation for pedestrians and cyclists.
  - Updating existing policies or processes to support energy efficiency in new developments across the community. This may include:
    - Expedited building/development permitting process for energy efficient/high performance developments.
    - Creating energy efficiency design guidelines (including promotion of guidelines created by upper levels of government or third parties).



- Creating climate risk adaptation design guidelines (including promotion of guidelines created by upper levels of government or third parties).
  - Creating development standards, or codes in applicable jurisdictions.
  - Creating requirements for developers to submit an analysis of energy efficiency/performance opportunities at the development application stage; at the site plan control stage; or, at the plan of subdivision stage.
- Embedding local energy supply options into land-use plans, policies, tools, and processes. This could include through:
  - Updating the official community plan (and secondary plans where applicable) to include local and/or renewable energy options and to encourage energy efficiency in new developments.
  - Listing renewable energy supply options as permitted land uses in the community's zoning bylaws where applicable (ideally informed by energy mapping). This could include provisions for wind, solar PV, energy storage, or a green zoning bylaw.
  - Promoting the use of local energy supply options or energy efficiency through community improvement plans, site plan control, or subdivision requirements.
  - Using the development permit system to support renewable energy integration, through development charges adjustments or deferrals.

Utilities (e.g. NB Power) already offer programs/incentives, and are piloting smart grid (e.g. storage), renewables, and smart metering programs. The Power and Light Commission offers mini-split heat pump rentals, and is interested in promoting electrification (e.g. vehicles, lawnmowers) and considering additional methods of renewable energy generation (e.g. Solar PV farm). It will be important to align CEP actions with utility programs and incentives that may become available. It was noted there is a good opportunity to reduce GHG emissions from transportation, offset remaining emissions with clean energy generation, and deploy clean energy conversion (heating) among residences/businesses in the Village of Southern Victoria.

## 6.0 Energy Mapping Exercise Results

### Goal

Provide participants with a hands-on energy mapping experience to enable them to share knowledge, discuss local opportunities and apply basic techniques for identifying opportunities in a spatial context, including planning local efficiency, clean energy, transportation, and land use actions.

### Overview

Participants used a map to identify opportunities for their CEEP and initiatives. The exercise enabled participants to denote these opportunities, and discuss various aspects and viewpoints. Here is a summary of the exercise:

## Summary of Results

### 1. Energy Efficiency

Using green stars and circles, the participants identified potential buildings and neighborhoods for energy efficiency improvements. **These are listed here:**

- High School, Elementary School, and Pool
- Industrial Park
- Main Street Aroostook
- Gulch Road
- Hospital
- Lower Perth
- Downtown - commercial and secondary apartments
- Hillcrest drive

### 2. Waste and Renewable Heat

Using red stickers and stars, the participants identified potential waste and renewable heat opportunities. **These are listed here:**

- High school (conversion from oil)
- Various residential buildings (mini-splits)

### 3. Renewable Power

Using green stickers and stars, the participants identified opportunities to integrate renewable power. **These are listed here:**

- Potential Solar PV installation in Industrial Park
- Potential Solar PV installation in new development in Lower Perth (west side)
- Potential site for wind farm development, near Aroostook

### 4. Land Use

Using various colors of shading, participants identified zones for densification, mixed use, and restricted development. **These are listed here:**

- New multi-Unit development near Route 109
- Area for densification / development near Hillcrest Drive
- Area for densification / development near McLaughlin Street
- Rotary and Veterans Park expansion
- Zoning bylaws protect natural areas and agricultural land

## 5. Transportation

Using yellow stickers, purple lines, and blue stars participants identified opportunities for transit amenities, EV charging, trail connectivity and inter-modal hubs. **These are listed here:**

### Key Destinations:

- Commercial area (liquor store, bank, pharmacies, fast food, gas, CNB, Tim Hortons, Shops)
- Commercial area (grocery store, hardware, car parts)
- Park
- Civic Centre
- Downtown

### EV Charging Locations:

- Existing 2 charging stations in the school area
- Existing charging station by the library
- Existing charging station downtown
- Existing charging station downtown
- Existing fast charge station, NB Power, in commercial area near highway
- Existing town owned new charging station in industrial park

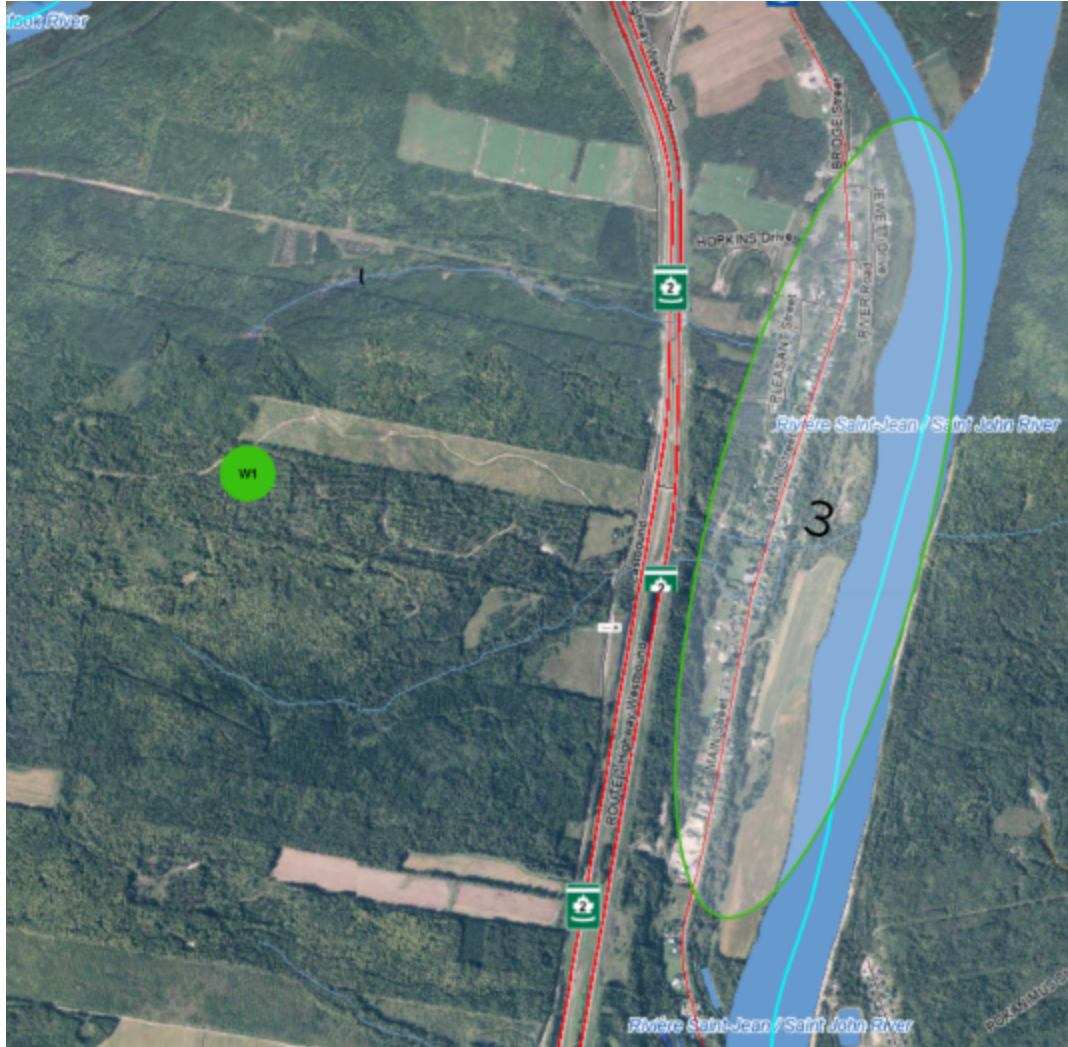
## 6. Smart Energy Networks

- None identified

**Table 1: Description of strengths and areas for improvement and opportunities**

Areas	Key Areas for Improvement and Opportunities
<b>Energy Efficiency</b>	Efficiency retrofit potential in schools, industrial and commercial areas, municipal facilities, and some residential neighborhoods.
<b>Waste and renewable heat</b>	No waste heat opportunities, however, any buildings currently heating with Oil could be converted to mini-splits and other clean heating sources.
<b>Renewable power</b>	Three sites identified for potential Solar PV farm, and Wind farm.
<b>Land use</b>	A few areas identified for densification / multi-unit developments. Identified park expansion, and protection of rural areas.
<b>Transportation</b>	Key destinations identified, and location of existing charging stations identified.
<b>Energy networks</b>	None identified

7. Map Images (photos of marked-up maps, and of the exercise)





# Legend

List of icons and their meanings

## 1 Energy Efficiency

- Efficiency Retrofit Opportunities
- Net-Zero / Carbon Neutral Building

## 2 Waste & Renewable Heat

- Building Clean Heat Conversion
- Waste Heat Sources
- Renewable Heat Sources

### Waste Heat:

- Paper Mill
- Brewery
- Arena/Rink
- Food processing plant (refrigeration)
- Sewage treatment plant
- Sewage pump stations
- Hospital Laundry center
- Industrial/Commercial source

### Renewable Heat Feedstocks/ Fuels:

- Solar Thermal
- Geothermal
- Pulp/Paper Mill (waste wood)
- Log Sort Yard (waste wood)
- Landfill, sewer pipes, etc.

## 3 Renewable Power

- Building Clean Power Conversion
- Renewable Electricity Site (e.g. S = Solar)
- Combined Heat and Power (e.g. B = Biomass)
- Utility Infrastructure (e.g. substation, storage)
- Power Line (connecting power to grid)

### Renewable electricity generation

- W=Wind
- S=Solar PV
- MH=Micro-hydro
- B=Biomass (or combined heat and power)
- M=Mill (waste wood)
- LY=Log Sort Yard (waste wood)
- L=Landfill (methane capture)

## 4 Land Use

- High Density
- New Mixed Use Development
- Green Infrastructure
- Job Creation Area

## 5 Transportation

- Key Destinations
- EV Charging Station or destination
- Transit Network and Transit Stop / Stations
- Active Transit and Connectivity

## 6 Smart Energy Networks

- District Energy Plant
- District Energy Anchor Load
- Other Nearby Buildings (Mixed Use)
- Draw Red Circle around the System
- Microgrid areas (with Renewables, Storage); Solar Neighborhood (<100kW per building); Smart Grid/City Pilot or Development Site; Waste to Energy System; Geothermal / District Heat; Biogas or Fleet, etc.

## 7.0 Conclusion

QUEST Canada appreciates the opportunity to work with the Village of Southern Victoria 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 Nov. 16 and 19, 2021, as well as during the review session in 2023 (following municipal reform / amalgamations). It also provides useful information and templates that can be used to advance the CEP actions, communicate with the public, engage stakeholders, and report on key performance indicators, on an ongoing basis.

## 8.0 ANNEXES

### ANNEX 1 — Template Terms of Reference for Internal and External Committees

#### Internal/Staff Committee Terms of Reference

**Co-Chairs:** TBD

**Objective:** The objective of the Community Energy Plan staff committee is to bring together municipal professionals (across departments) to ensure the advancement of the CEP. This committee would include municipal staff and council representation. The committee chair will interact with the CEP coordinator and report to council.

**Scope and issues to be addressed** — The staff committee will:

- Stay current on urban and rural energy matters pertaining to community energy planning, specifically in a municipal context.
- Exchange knowledge, identify and address issues, and facilitate the advancement of actions in the Community Energy Plan.
- Support community outreach and communications efforts (e.g. via municipal communication 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 CEP progress and GHG reductions.

**Expectations:** This committee recognizes 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:

- Attending quarterly or monthly teleconferences or meetings; compiling minutes.
- Working with sub-committees (e.g. action/policy specific).
- Performing consultations as needed (e.g. with community stakeholders and funders).
- Assist with policy recommendations and new project/funding applications.

**Participation:** Led by the chair, the staff committee will have representation from: departments (TBD); as well as representation from council.

**Objectives** — Priorities identified by the working group include:

1. Advancing priority actions as part of the implementation of Community Energy Plans and emissions reduction plans.
2. Supporting internal activities, such as planning and policy efforts and communications.
3. Launching studies and pilots where needed.
4. Gathering and reporting data/KPIs.
5. Attending other business — e.g. announcements, new funding, etc. — as it arises.

**Meeting Schedule in 2022:** Quarterly, starting in the 1st quarter of 2022

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## **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**

- Communication, 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, sustainability practices
- Quantitative data analyses (spreadsheet software)
- Mapping experience (geographical information system software)
- Business case development, feasibility/financial analysis

#### **Academic Credentials and Certifications**

- Degree in planning, public policy, engineering, sustainability, environmental science, resource management, business, and/or 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, promotion 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/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, and private sector, not-for-profit, 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 (e.g. industry sector trends, development strategies, funding sources and programs). Synthesize information to support and inform CEIS. Determine/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 (e.g. engineering, environment science/studies, business administration), graduate degree in same, or a 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, transportation fuels, etc.) and greenhouse gas emissions
  - Community energy 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/fuel consumption
  - Energy conservation and demand side management principles, programs and incentives
- Successful track record of program management/implementation and partnership development, including experience leading initiatives with multiple stakeholders and competing interests
- Demonstrated ability to facilitate multi-stakeholder committees/discussions toward 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 (e.g. 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/stakeholder meetings and site visits.

Compensation/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/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 at the time of notification of the interview process.*

## ANNEX 3 — Embed in Municipal Plans, Policies, and Processes

Although CEP measures are focused on community-side energy and GHG emissions reduction, the Village of Southern Victoria has a critical role to ensure a supportive environment. Successful implementation of the CEP requires embedding measures within other municipal plans, policies, processes, and decisions. The lead coordinator and internal committee are best positioned to ensure the CEP is embedded into:

- Updates of Plans
- Council strategic plans
- Official plans and regulations
- Secondary plans/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 (e.g. through permitting), as well as through council decisions (e.g. new policies/bylaws, budget decisions). See QUEST's [CEP Primer](#) for more details on each of these options for embedding the CEP.

## ANNEX 4 — Funding for CEP Actions

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

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

- 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 should be updated on an annual basis.
- Funding (e.g. from FCM) can be used to conduct studies, pilots, projects.

### Strategies to Secure Financial Resources

Sources:	Description:
<b>Budget</b>	Create budget item/fund for CEP measures
<b>Internal financing sources</b>	<ul style="list-style-type: none"> <li>● Property taxes, tax levies</li> <li>● Tax increment financing, local improvement charges</li> <li>● User fees (on water, power and natural gas distribution system, waste.)</li> <li>● Development cost charges (DCCs)</li> <li>● Green bonds</li> </ul>
<b>Local incentives and rebates</b>	<ul style="list-style-type: none"> <li>● DCC reductions</li> <li>● Local improvement charge financing (LIC) or property assessed clean energy (PACE) programs</li> <li>● Fee rebates/credits (on water and energy bills); local economic incentives for investing in energy efficiency for households and businesses, and new developments (e.g. tax holidays for businesses, faster permitting for developments meeting certain efficiency criteria, etc.)</li> </ul>
<b>New accounting/decision-making tools</b>	<ul style="list-style-type: none"> <li>● Consider a natural asset management approach —full cost accounting and valuation of natural assets</li> <li>● Estimate benefits from green infrastructure.</li> <li>● Combine funding with gas tax revenue.</li> <li>● Reinvest efficiency savings into low cost CEP measures, community engagement, etc.</li> </ul>
<b>Institutional grants and external sources of funding</b>	<p>Scan and submit funding applications to</p> <ul style="list-style-type: none"> <li>● Federal agencies and governments: <ul style="list-style-type: none"> <li>○ <a href="#">Natural Resources Canada</a></li> <li>○ <a href="#">Environment and Climate Change</a> (ECC)</li> <li>○ <a href="#">Infrastructure Canada</a> programs</li> </ul> </li> <li>● FCM programs, including: <ul style="list-style-type: none"> <li>○ <a href="#">Green Municipal Fund</a></li> <li>○ <a href="#">Municipalities for Climate Innovation Program</a></li> <li>○ <a href="#">Municipal Asset Management Program</a></li> </ul> </li> </ul>

Sources:	Description:
	<ul style="list-style-type: none"> <li>Provincial programs and agencies (e.g. NB Environmental Trust Fund)</li> </ul>
<b>Loans</b>	<ul style="list-style-type: none"> <li>FCM low-interest loan (GMF)</li> <li>Municipal green bonds</li> </ul>
<b>Leverage private investments</b>	<ul style="list-style-type: none"> <li>Engage the private sector to partner and financially support actions that improve community-side efficiency, clean energy, or transport modes.</li> <li>Ensure the local chamber of commerce supports efforts of small enterprises to improve energy efficiency.</li> </ul>
<b>Economies of scale and synergies at the local level</b>	<ul style="list-style-type: none"> <li>Leverage existing initiatives or projects by expanding/adapting their scope and collaborating with other departments (thinking beyond silos).</li> <li>Take a regional approach — collaborate with neighbouring municipalities.</li> <li>When a measure involves several communities, cost-share (e.g. in the procurement process).</li> </ul>

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 CEP

There are significant economic benefits for the Village of Southern Victoria, from implementing the full range of measures identified in the CEP. It is important to quantify the economic impact of CEP measures, to gain support from senior decision-makers and elected officials as well as the community at large (public, businesses, energy stakeholders, service providers, etc.). As part of the NB Smart Energy Communities Accelerator, your community is benefiting from an economic impact assessment which will be shared in a separate report.

Different methods of economic analysis serve different purposes and provide different information. All are relevant to assessing the economic, environmental, and social benefits of CEPs, and to increasing knowledge of 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 CEP should only go as deep as is needed. This analysis can accompany annual updates on CEP progress, making requests for funding or new policies/bylaws, engaging partners to advance key measures, and demonstrating economic, environmental, and social benefits in the community.

Method:	Purpose:
<b>Community energy cost</b>	Discuss total community energy use in a metric everyone understands, in order to generate different conversations with elected officials and stakeholders (e.g. amount of money spent on energy compared to the amount leaving the community).
<b>Financial feasibility</b>	Screen and prioritize measures, programs, or portfolios to identify if, and when, the investment will break even.
<b>Levelized unit energy cost</b>	Compare the per kWh or per GJ costs of different energy generating technologies across the expected lifetime of the asset.
<b>Marginal abatement cost curve</b>	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.
<b>Community socio-economic benefits</b>	Inform the decision-making process, and stakeholders, on the total value to the local community and economy of a CEP, considering how expenditures recirculate through local businesses, households, and governments.
<b>Cost benefits</b>	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.

## ANNEX 6 — Sample Webpage and Social Media Content

<p><b>Webpage</b></p>	<p><b>Content should include visual depiction and simple explanation of:</b></p> <ul style="list-style-type: none"> <li>● Energy spending, energy use and GHG emissions in the community, as a pie chart (e.g. tons of CO<sub>2</sub> by sector)</li> <li>● The GHG emissions reduction target (total tons of CO<sub>2</sub>)</li> <li>● A short list of objectives and measures identified within the CEP</li> <li>● Annual achievements: actions taken, impacts (e.g. energy/GHG reduced, energy costs reduced, energy dollars staying in community)</li> <li>● Easy button/link to get engaged, or subscribe to updates</li> <li>● Hyperlinks to documents, programs/incentives, policies, news, and contests</li> <li>● Downloadable tips and guidance for improving energy efficiency at home and for business, as well as any information about incentives</li> <li>● Description of governance structure: lead coordinator, committee and its members, etc.</li> <li>● Contact information</li> <li>● Testimonials</li> </ul>
<p><b>Social media</b></p>	<p><b>Use the Village of Southern Victoria’s Facebook, Twitter, LinkedIn, Instagram, or create a new social media account for the purpose of promoting CEP progress. Content should include:</b></p> <ul style="list-style-type: none"> <li>● Did you know? E.g. community spends X on energy, emits X GHGs?</li> <li>● Descriptions of specific measures identified in the CEP, benefits to the community, and updates on progress on actions/impacts</li> <li>● Tips and guidance for improving energy efficiency at home and for business, as well as any incentives. Promote anti-idling, clothesline programs, etc.</li> </ul>

- The sharing of highlights and success stories
- Calls to action
- Promotions and local contests
- Responses to requests for information

## ANNEX 7 — List of Participants

### List of Participants

Name:	Organization:
Marianne Bell, former Mayor	Village of Perth-Andover
Justine Waldeck, Assistant CAO	Village of Southern Victoria
Dan Dionne, CAO	Village of Southern Victoriar
Sara Mudge	NB Power
Eddie Oldfield, Senior Lead, Projects & Advisory Services	QUEST Canada
Anna Volc, Lead, Stakeholder Relations	QUEST Canada
Helda Renyaan, Lead	QUEST Canada