

Recommendations Report for Town of Oromocto's Community Energy and Emissions Plan Implementation and Monitoring

Submitted to: Town of Oromocto

Submitted by:





Acknowledgments

Lead Authors

Eddie Oldfield, Senior Lead, Projects, QUEST Canada

Ericka Wicks, Managing Director, QUEST Canada

Copyright © QUEST, 2023. All rights reserved.

The preparation of this report was carried out with support from the Atlantic Canada Opportunities Agency, NB Environmental Trust Fund, NB Power, and Stantec. Notwithstanding this support, the views expressed are the personal views of the authors, and our supporters accept no responsibility for them.

These materials may be reproduced in whole or in part without charge or written permission, provided that appropriate source acknowledgements are made and that no changes are made to the contents. All other rights are reserved.

The analyses/views in these materials are those of QUEST Canada, but these analyses/views do not necessarily reflect those of QUEST Canada's affiliates (including supporters, funders, members, and other participants) or any endorsement by QUEST Canada's affiliates.

These materials are provided on an "as is" basis, and neither QUEST Canada nor its affiliates guarantee any parts or aspects of these materials. QUEST Canada and its affiliates are not liable (either directly or indirectly) nor accept any legal responsibility for any issues that may be related to relying on the materials (including any consequences from using/applying the materials' contents). Each user is solely responsible, at the user's own risk, for any issues arising from any use or application of the materials' contents.

About QUEST Canada

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. Visit us at <u>www.questcanada.org</u>.

TABLE OF CONTENTS

Acknowledgments	2
List of Abbreviations	4
1.0 Executive Summary	5
1.1 Background	5
1.2 What this Report Covers	6
1.3 Key Recommendations / Outcomes	6
1.4 Potential Next Steps	10
2.0 Governance	11
2.1 Introduction	11
2.2 Oversight and Coordination	11
2.3 Committee Structures	13
2.4 Communications Governance	15
2.5 Data Governance	17
3.0 CEEP Action Planning Exercise	17
3.1 Key Recommendations & Outcomes	17
3.1.1 Energy Efficiency	18
3.1.2 Distributed Energy Resources	22
3.1.3 Land Use	25
3.1.4 Transportation	28
3.1.5 Water Conservation	31
3.1.6 Waste	32
3.1.7 List of Public Outreach Activities	32
4.0 Data and Key Performance Indicators	34
4.1 Introduction	34
4.2 Key Tools	35
4.3 Key Data	36
4.4 Key Performance Indicators	39
4.5 Quality Control Measures	44
5.0 Communications and Engagement	44
5.1 Introduction	44
5.2 Public Engagement and Communications	44
5.3 Stakeholder Engagement	46
6.0 Conclusion	50
7.0 ANNEXES	51
ANNEX 1 - Template Terms of Reference for internal and external committees	51
ANNEX 2 - Skills Needed and Job Description Template	54
ANNEX 3 - Embed in Municipal Plans, Policies, and Processes	57
ANNEX 4 - Funding for CEEP Actions	58
ANNEX 5 - Methods for measuring the economic impact of CEEP	60
ANNEX 6 - Sample Webpage and Social Media Content	61
ANNEX 7 - List of Participants	62

List of Abbreviations

CAO	Chief Administrative Officer
CEEP	Community Energy and Emissions Plan
CDM	Conservation Demand Management
CFB	Canadian Forces Base
СНР	Combined Heat and Power
CO2	Carbon Dioxide
DCC	Development Cost Charge
DSM	Demand Side Management
EPA	Environmental Protection Agency
EV	Electric Vehicle
FCM	Federation of Canadian Municipalities
FSWC	Fredericton Solid Waste Commission
GHG	Greenhouse Gas
GJ	Gigajoule
GMF	Green Municipal Fund
ICLEI	Local Governments for Sustainability
KM	Kilometre
КРІ	Key Performance Indicator
kWh	Kilowatt Hour
LED	Light Emitting Diode
LEED	Leadership in Energy and Environmental Design
LIC	Local Improvement Charge
MW	Megawatt
NB ETF	New Brunswick Environmental Trust Fund
NRCan	Natural Resources Canada
PACE	Property Assessed Clean Energy
РСР	Partners for Climate Protection
PV	Photovoltaic
RSC	Regional Service Commission
SECA	Smart Energy Communities Accelerator

1.0 Executive Summary

1.1 Background

As part of QUEST Canada's Smart Energy Communities Accelerator Program, the Town of Oromocto developed a Greenhouse Gas (GHG) Emissions Inventory and Community Energy and Emissions Plan (CEEP). A CEEP identifies ways to reduce GHG emissions, support the local economy, increase competitiveness, create jobs, improve energy efficiency, and keep energy dollars local.

The Town of Oromocto attended two in-person QUEST Canada workshops in 2021 and 2022 where community stakeholders helped inform the development and implementation of a CEEP. The workshop in 2021 focused on CEEP *development*, whereas the workshop in 2022 focused on CEEP *implementation*. The implementation workshop included exercises to help establish a governance framework, identify data sources and key performance indicators (KPIs), and set priorities for CEEP actions. Through group exercises, local stakeholders assisted in informing, comparing and selecting the strategies shared in this report. In 2023, QUEST conducted a review session with the Town of Oromocto, post municipal reform, to consider opportunities in the wider amalgamated territory. The following stakeholders were included in the process:

- Representatives from Town staff
- Councilors
- NB Power
- CFB Gagetown
- Liberty Utilities
- The Climate Action / Zero Carbon Committee

It is recommended that efforts are made to increase engagement with all stakeholders listed above, in addition to Oromocto First Nation, significant employers in the area and residents of the Town. A detailed list of the stakeholders engaged in each workshop can be found in Annex 7.

Attainable short-term measures, which were identified through stakeholder engagement, have been included below:

- Improving energy efficiency and fuel switching in residential and commercial building stock
- Improving active transport networks
- Promoting uptake of electric vehicles (EV) and charging stations

Over time, the Town will consider updates to land use plans and by-laws to promote energy efficiency, explore clean energy sources (such as solar, wind, and geothermal), and more.

The measures identified for the Town of Oromocto's CEEP are similar to the actions in the CEEPs of other communities in the region (albeit different-sized communities). This means that some of the measures (e.g. promoting anti-idling, residential and commercial energy efficiency retrofits, clean energy conversions, and EV network) can be achieved more cost-effectively using a regional approach. Public outreach or communications activities can also be delivered with more consistency across the region. It is recommended that the Town of Oromocto work with neighbouring communities and/or partner organizations, such as the Regional Service Commission (RSC), to establish a Regional Coordinator position. The Regional Coordinator would be responsible for ensuring the advancement of CEEP actions,

stakeholder engagement, and project management. A sample job description, with skills and credentials needed, is included in Annex 2.

1.2 What this Report Covers

This report summarizes the results of both the development and implementation workshops, including measures selected and recommendations for a Community Energy and Emissions Plan. This report can be included as part of the Town of Oromocto's submission to the ICLEI / Federation of Canadian Municipalities' (FCM) Partners for Climate Protection Program for Milestones 1 to 3, and 4 (which is having an implementation strategy). Preferred strategies are highlighted in Section 1.3 Key Recommendations / Outcomes, and expanded details on each key recommendation can be found in Sections 2 to 5.

1.3 Key Recommendations / Outcomes

The Partners for Climate Protection (PCP) program, from ICLEI-Local Governments for Sustainability (ICLEI Canada) and the Federation of Canadian Municipalities. helps your municipality do its part. It consists of a five-step Milestone Framework that guides you as you take action against climate change by reducing emissions in your municipality. PCP receives funding from FCM's Green Municipal Fund and ICLEI Canada.

1.3.1 Governance

Oversight and Coordination

The Director of Planning and the Town Clerk coordinated efforts to develop and implement a Community Energy and Emissions Plan for the Town of Oromocto. Workshop participants agreed that implementing a CEEP requires more coordination and effort than what is currently being done, and prioritized the following actions:

- Increase input and support for the Planning Department, who will remain in charge of coordination. This includes guidance from department heads, the CAO, and the Climate Action / Zero Carbon Committee. It is highly recommended that the Town embed specific responsibilities within the job descriptions of relevant staff, and ensure the CEEP is a standing item at all staff meetings.
- 2. Explore a regional approach, such as cost sharing a staff position with other municipalities.
- 3. Hire a full-time coordinator whose salary is funded via savings from energy efficiency measures. Explore funding opportunities such as project grants, and grants designated for hiring newcomers and minorities.
- 4. Engage students through co-op placements to assist with the coordinator's duties and responsibilities.

Committee Structure

The Town of Oromocto recently established a **Climate Action / Zero Carbon Committee** which consists of quarterly meetings with the participation of council members, municipal staff, and community stakeholders. The committee acts solely in an advisory capacity by providing input, guidance, feedback, and can collectively work to advance CEEP actions. They are encouraged to bring forward recommendations for studies, pilots, projects, policies, and funding proposals, as well as collect data for measuring key performance indicators. The committee primarily focuses on mitigation (reducing GHG emissions), and may consider forming sub-working groups. The following actions have been recommended to committees:

- 1. Schedule **Climate Action / Zero Carbon Committee** meetings more frequently and update the Terms of Reference. A template for **Terms of Reference** for committees can be referred to in Annex 1.
- 2. Create a CEEP standing item on the Senior Management Team agenda in order to provide oversight, accountability, and sharing of information and/or create an internal staff committee.

1.3.2 Data / Key Performance Indicators (KPIs)

Since this was the first time the Town has deliberated on where to gather data from as well as what indicators that need to be set, there will need to be additional research to reach decisions. Participants of the workshop identified the following actions:

- Update the GHG inventory every 3 years. This would be led by the CEEP Coordinator, with support of both internal staff and input from the Climate Action / Zero Carbon committee, and key data providers.
- Benchmark CEEP progress annually using QUEST Canada's Smart Energy Communities Benchmark tool.

Participants also selected preferred **tools/methods** to be used, which include:

- A data dictionary / registry of sources
- Requests to key data providers (e.g. utilities) every 3 years
- Meetings of internal and external committees (annual reporting)
- PCP Milestone Tool and/or spreadsheet, for updating GHG inventory
- QUEST Canada's Smart Energy Communities Benchmark tool
- An online dashboard to publish and collect data
- Surveys and community challenges
- PCP Hub for networking

Participants also identified and selected **Key Performance Indicators (KPIs)** across several categories that should be collected every one to three years in order to measure the impact and benefits of Community Energy and Emissions Plan implementation. See Section 4 for a full list of KPIs and data sources. Some of the most important KPIs include:

- Amount of GHG emissions reduced, change in total year over year
- Total energy usage (residential, commercial, institutional, transport) for all fuels
- Amount spent on energy versus saved through efficiency programs
- Number of households and businesses receiving efficiency incentives
- Total MW of clean energy produced
- Water usage and peak reduction
- Local success stories
- Kilometers of trail constructed
- Change in land use over time

1.3.3 Communication

Workshop participants did not have the opportunity to participate in the Communication activity, but Town provided initial thoughts and actions in the weeks following the workshop.

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

- New Webpage see sample content in Annex
- Social Media see sample content in Annex
- Bill Inserts
- Annual Progress Report
- Engaging schools and/or youth groups

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

- Email list-serve and teleconference with stakeholders
- External Stakeholder Advisory Committee meetings
- One-on-one meetings with stakeholders
- Workshops or Focus Groups
- Attending stakeholder meetings
- Open Houses

1.3.4 CEEP Action Strategies

During the workshops, QUEST Canada prepared a list of strategies for implementing each of the CEEP action strategies. For each action, participants aimed to determine a priority level, cost, responsible lead, and required partner actions. Additionally, they identified whether each action needs a study, funding, or supporting policy. See Section 3, for prioritized actions, and the <u>Action Planning Spreadsheet</u> for more details.

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

- Update the Town's Municipal Plan and bylaws to encourage active transport networks, energy efficiency in new developments, and provisions for renewable energy installations
- Raise awareness about and advance action on undertaking energy efficiency initiatives
- Adopt the new building code standards
- Raise awareness about and advance action on undertaking clean energy conversion initiatives
- Establish a target to improve annual load factor / reduce peak demand
- Apply for FCM Funding if solar PV (rooftop) is part of the municipal building efficiency retrofit, a community retrofit project, or includes a technical study in the energy category
- Identify brownfield sites that could be used for renewable energy or green space
- Create and adopt a green procurement policy
- Switch municipal fleet of vehicles to electric/hybrid/low-carbon vehicles, enable use of municipal electric vehicles by community organizations
- Identify funding that can be accessed for all of the above, plus for future CEEP initiatives

Participants identified the following **policies and plan updates** needed to support CEEP actions:

- Adopt additional by-laws and policies to ensure buildings are net-zero energy ready, then update remaining by-laws once the Province of New Brunswick has adopted the new building code.
- Update land use by-laws to enable further development of renewable energy and distributed energy resources. This will also require builders to install EV charging stations in their parking lot developments.
- Integrate updated Town plans, by-laws and policies into the Municipal Plan. This is dependent on Town plan updates (scheduled to begin in 2024).
- Create and adopt a green procurement policy.
- Create and adopt a solar-ready building policy.

- Develop an anti-idling policy for the community.
- Have strategies reviewed by an internal team after they are created by each department to ensure alignment and roll-up to the Municipal Plan and CEEP.
- Add capital projects to business plans and capital budgets.
- Integrate CEEP outreach and communications plans into other Town plans.

There are many other ways to embed the CEEP in municipal processes, policies, and plan reviews. See Annex 3 for details on how to further embed the CEEP.

The following illustration highlights a possible roadmap for implementation, based on the selection and prioritization of CEEP actions:

Figure 1: Preliminary Roadmap for Implementation

ADOPT ENCOURAGE PROVIDE OBTAIN ESTABLISH IMPROVE OBTAIN APPLY CONSULT CONSIDER	a building code bylaw energy efficiency though education incentive programs annual data regarding commercial retrofit, heritage building and residential energy retrofit incentives. a target to improve Annual Load Factor awareness of all available programs and incentives annual data about clean energy conversion incentives for FCM Funding if solar PV is established the community on updating the land use plan adding traffic circles, and study if they will reduce congestion	To start in 2022-2025
	STUDYbrownfield sites for useENACTa solar PV and solar thermal studyAPPLYfor FCM fundingDEVELOPan educational componentCREATEa solar PV and thermal studyCONSIDERelectric car share programsCREATEan idle-free social marketing campaigna study to determine waste diversionpotential micro-hydro sites	To start in 2022-2024
	IDENTIFY PILOT CREATE ENSURE EXPLORE CONDUCT CONDUCT ENSURE EXPLORE CONDUCT 	PRIORITY To start in 2023-2024

1.4 Potential Next Steps

- Council to review and approve CEEP governance structure recommendations and next steps.
- While the Planning Department currently oversees the development and implementation of the CEEP, it is recommended the Town of Oromocto work with neighbouring municipalities. They can work to determine which projects to advance collaboratively and whether to establish a regional coordinator to support CEEP actions such as. public education, promoting energy efficiency and exploring clean energy.
- If a regional coordinator isn't feasible, examine the potential to hire a dedicated city employee through project grants and savings from energy efficiency measures.
- Review funding opportunities for CEEP-related work such as NB ETF, FCM GMF or NB Power. This could be used for a coordinator position, convening committees, advancing CEEP actions, capital projects, communications and public education.
- Change frequency of meetings of the Climate Action / Zero Carbon Committee to bi-monthly and expand on their roles and responsibilities. Consider establishing an internal staff committee which would be responsible for coordination, advancing CEEP actions, reporting on KPIs, applying for funding, and supporting community outreach.
- Create a data dictionary and ensure annual collection of data for key performance indicators (KPIs). Request stakeholders to provide data for measuring KPIs on an annual basis. See Section 3 for more details on collection methods and selected KPIs.
- Develop a budget based on CEEP priorities. 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 (such as communications support), or outsourcing (e.g. design, marketing, studies, etc.).
- Launch studies or pilots according to the implementation timeline. Analyze outcomes, develop community-scale projects or capital projects based on financial and technical feasibility, where needed. Each of the action strategies for each CEEP action identifies whether a study or pilot is needed.
- Bring related policy decisions to council, as recommended by committees, or as identified within each action strategy.
- Align with programs offered by NB Power, FCM, federal and/or provincial governments, whenever possible. These programs provide incentives for successful implementation of CEEP related actions, including:
 - Energy efficiency
 - Clean energy conversion
 - Renewable energy
 - Transportation
 - $\circ \quad \text{Water and waste} \\$
 - Public education
 - Other related initiatives

- Report to FCM for PCP Milestone 4 by 2024. Include schedule of implementation, results of early actions and a description of stakeholder engagement.
- Report to FCM for PCP Milestone 5 once most actions in the CEEP are implemented, GHG reduction targets achieved, and GHG inventories (corporate and community) have been updated.
- Report successes, impacts, and benefits to the community through an annual report card. Update SEC Benchmark scores. Conduct further outreach throughout the year, as needed in alignment with CEEP 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 CEEP remains top-of-mind for elected officials, local government staff and community stakeholders. New governance models provide a platform for political, staff and community stakeholders to convene regularly. In some cases, they provide the legal framework needed to implement projects. This can ensure that a process is in place to monitor and report regularly on the implementation of the CEEP.

Attendees of the workshop identified that community context needs to be incorporated into the development of a governance structure for the implementation of any CEEP. **Key governance options can be found below** for oversight and coordination, stakeholder engagement and communications, as well as data and monitoring of key performance indicators. **Find below a summary of the discussion and options selected by participants during the implementation workshop on November 3, 2022, and reviewed in October 2023 (post municipal reform).**

2.2 Oversight and Coordination

The **options discussed** during the first tabletop session on November 3 are detailed below:

A. **Option 1** - Assign to an existing staff member: The Town of Oromocto can **assign an existing staff member** to oversee *corporate* energy actions. They can be responsible for ensuring that the *community* is leading by example by engaging stakeholders and coordinating a taskforce, 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. Corporate energy actions address any municipally owned assets, and Community energy actions address any community-side opportunities in the residential, commercial, and industrial sectors as well as initiatives that address mobility/transportation, water conservation, waste reduction, etc.

B. Option 2 - Hire a new staff member: The Town of Oromocto can hire a new staff member to oversee *community* energy actions, engaging stakeholders and coordinating a taskforce, gathering data, reporting progress, ensuring good communication, and finding ways to ensure that energy and emissions are considered in all decisions. A staff person that sits at a management level is often well-suited to oversee CEEP development and implementation. A manager remains equally as close to senior management and council as it does to staff and stakeholders working to implement the plan on the ground.

- C. **Option 3 Regional / cost-shared resource:** Collaborate with nearby communities, and possibly the regional service commission, to explore a cost-shared model for hiring a full-time coordinator. A sample job description with skills and credentials needed is included in Annex 2.
- D. **Option 4 Engage students / interns / part-time staff:** Use funding from the NB Environmental Trust Fund, FCM Green Municipal Fund, or municipal budget to advance studies, surveys and projects within the CEEP on an annual basis or as needed. Note that students and interns should not be leading this work. CEEP responsibility should rest with someone who has decision-making ability and/or the skills and experience needed to perform the role.

Regardless of the option selected, CEEP responsibilities should be embedded into job descriptions across the organization. Embedding CEEP responsibilities into job descriptions will help maintain a focus on implementation and ensure it does not get overlooked.

Discussion Notes:	Takeaways and Decisions:
Option 1: Assign to an existing staff member. Pros: Knowledge, consistency, availability, no training required.	Participants acknowledge that the current state of the planning department leading CEEP coordination (option 1) will occur in the short-term.
Cons: Wearing many hats, limited capacity, overtime, cost, may need some training.	However, participants preferred option 3 which included a regional approach where the cost and time
Option 2: Hire a new staff member. Pros: Access more funds, more focussed. Cons: Cost and hiring is a challenge.	of a regional coordinator is shared with other municipalities.
Option 3 : Take a regional / cost shared approach.	In the future, it may be possible to hire a full-time coordinator, as outlined in option 2, with funding and
Pros: Less cost burden, more autonomy, makes sense to collaborate with the City of Fredericton, Gagetown, Cambridge-Narrows, CFB Gagetown, etc.	the savings from energy efficiency measures. There may be funding through project grants, and for hiring newcomers and minorities.
Cons: Less attention (as it would be divided among several communities). Would be difficult to control	It may also be possible to engage students, through
their priorities. Option 4: Engage Students.	co-op placements and internships, to assist the coordinator, as presented in option 4.
Pros: Assistance to coordinator, other skills and roles, data collection and analysis, innovation.	Finally, participants recommended embedding responsibilities into job descriptions of relevant Town
Cons: Demand on manager's time, more scope offloaded to student, cost.	staff.

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

Participants were interested in exploring **a regional approach**. The actions in the Town of Oromocto CEEP are similar to the actions in the CEEPs of other communities in the region (albeit different sized communities). This means that many of the Town of Oromocto CEEP actions (such as promoting

anti-idling, active transportation, residential and commercial energy efficiency retrofits, clean energy conversions, and EV network) can be achieved more cost-effectively using a regional approach. Public outreach or communications activities can also be delivered with more consistency across the region.

Participants expressed support for exploring a cost shared model with like-minded municipalities in the region, to hire a full-time coordinator, or to examine what role the RSC could play. The regional coordinator would be responsible for ensuring the advancement of CEEP actions, stakeholder engagement, data gathering for key performance indicators, support communications activities, and developing funding proposals. A sample job description, skills and credentials needed, are included in Annex 2. Creating a regional coordinator position requires developing a budget proposal (which would be cost shared), an accountability framework to the member municipalities, and the finalization of a work plan (which can be informed by this report).

Participants indicated there is a need to **maximize limited resources**, and that such a position might need funding. This can include cost sharing between member municipalities, local energy utilities (such as NB Power), and funding from the NB Environmental Trust Fund and/or the Federation of Canadian Municipalities (such as a staff grant or project funding). Possible funding options are included in Annex 4.

2.3 Committee Structures

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

Workshop participants discussed whether CEEP objectives could be accomplished within existing committee structures or if a new structure should be introduced. They also considered whether the committees should address both climate mitigation and adaptation, or if this should be done by separate committees. The committee structure options, discussion notes and decisions developed by participants in the workshop are listed below.

2.3.1 Internal Committee(s)

CEEPs cross many departmental boundaries and consequently require early and ongoing interdepartmental coordination and collaboration. Engagement should take place at the senior management *and* junior or intermediate staff levels. Embedding the CEEP into job descriptions helps maintain focus on implementation and ensures it does not get overlooked. An internal committee should have a Terms of Reference which states objectives, roles, responsibilities and key performance indicators necessary to report on.

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

Consider creating a committee of council, mayor's task force, or assigning responsibilities to an existing committee to oversee CEEP 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 CEEP. Council members on the committee could act as liaisons between the committee and council by advocating for council adoption of recommendations, policies or by-laws; and ensuring adequate staffing and other resources are available. Community stakeholders may be on the committee and staff would attend meetings as a resource. Minutes would be reported to the Town of Oromocto's Council.

B. Option 2 - Establish a staff committee:

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

C. Option 3 - Assign to existing committee:

A committee where the CEEP is well-aligned may already exist. Integration of the CEEP into existing committees may be a good fit if committee goals align, and are responsible for actions such as climate change adaptation or emergency response.

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

Discussion Notes:	Decision:
Option 2 : Participants discussed boosting oversight and accountability for the CEEP by adding it as a standing agenda item to senior staff meetings. This also included possibly forming an internal staff oversight committee composed of staff from all levels of the organization. Both sub-options would	Participants preferred option 3, which would maintain the Climate Action / Zero Carbon Committee, perhaps expanding on its role and responsibilities.
ensure CEEP is given more attention, is better integrated into all departments, and is kept on track.	Participants will action a portion of option 2 by assigning this file as a standing item on the agenda of senior management team
Option 3: The Town has already established a Climate Action / Zero Carbon Committee with representation of council, municipal staff, and community stakeholders. This committee does not provide oversight, but acts in an advisory capacity. It meets quarterly and focuses mainly on mitigation measures.	meetings. The possibility of forming an internal staff oversight committee requires further discussion.

2.3.2 External 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. The options discussed are detailed below:

A. Option 1 - Create a community-wide stakeholder committee or advisory group: This group would maintain ongoing support for CEEP implementation activities, with participation from energy utilities, the real estate sector (including developers and builders), local non-profits, school boards, academic institutions, large energy users, fuel suppliers and the chamber of commerce. The committee could include the informal participation of council members or staff. The committee should meet on an annual, bi-annual, or quarterly basis, and their scheduled meetings should be open to the public. Partner organizations could make annual commitments to actions chosen from a list of options, provide progress reports, contribute to key performance

indicators, coordinate with municipal communications, and collaborate on innovative projects. **Stakeholder meeting frequency could be** quarterly or bi-annually, and is to be determined.

B. Option 2 -Assign to an existing non-profit or establish an external non-profit. This option could be co-funded by utilities, the province, and neighbouring municipalities, and could also seek additional funds for advancing key measures in the CEEP. It could also provide an interface between city and external stakeholders, ensur the long-term sustainability of CEEP implementation, and report to a non-profit governance committee. This strategy was used by <u>Sustainable Waterloo Region</u>.

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

Discussion Notes:	Decision:	
	As discussed in section 2.3.1, the Town has already established a Climate Action / Zero Carbon Committee, with representation of community stakeholders. Participants expressed interest to maintain this committee and expand its role and responsibilities.	

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 CEEP. The options discussed during the first tabletop session during the implementation workshop on November 3, and reviewed in October 2023, include:

- A. **Option 1:** communications department. This would have limited resources and would need funding
- B. **Option 2:** communications department with the support of coordinator or committee
- C. **Option 3:** coordinator or committee with support of communications department
- D. **Option 4:** collaborate with nearby communities to explore the potential of a shared staff person and communications budget
- E. **Option 5:** collaborate with community partners to conduct outreach
- F. Option 6: external body, if a non-profit was created or mandated

A related decision discussed included determining where the online information will be housed. The following options were explored:

- A. City website
- B. New webpage (regional microsite linked by each municipal webpage)

Responsibilities could include:

- Design of messaging and materials
- Preparing annual public updates
- Maintaining webpage

- Dashboard
- Social Media
- Promoting partner activities, offerings and successes
- News releases or bill inserts, with energy efficiency tips and calls to action

See the Communication and Awareness Strategy, in Section 5, for further details.

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

Discussion Notes:	Decision:
Option 1 : Communications staff. Pros : Can do outreach and obtain information from the team. Cons : Are not subject matter experts, and is not their primary function.	Participants preferred Option 3 which included a CEEP coordinator with support of communications staff. The CEEP coordinator can provide content, and the communications staff can create a schedule for conducting
Option 2 : Communications staff lead with support of the CEEP coordinator.	outreach.
Cons: Are not subject matter experts, and will require process and structure.	Eventually, if a regional coordinator was established, communications and outreach could be shared with other municipalities
Option 3: CEEP coordinator with support of communications staff. Cons: None.	(option 4), and external partners could help expand reach.
Pros: Has subject matter expertise, can drive content.	Where should the website be housed? Participants expressed interest to create a
Option 4: Collaborate with other municipalities.	dedicated webpage for all the Community
Pros: Less cost burden, more capacity, and promotes regional collaboration. Would need to formalize a partnership.	Climate measures, hosted on the town website. The Town also regularly uses Facebook, Twitter, Instagram and water bill
Option 5: Partner with other organizations. Cons : None.	inserts, to communicate to the public.
Pros: More capacity and reach.Several organizations identified: NB Power, Rotary Club, Nature Trust, CFB Gagetown, Family Resource Centre, Watershed Association, Fredericton Solid Waste Commission.	
Option 6: An external non-profit. Cons: None identified that could lead.	

2.5 Data Governance

In addition to identifying a lead coordinator and committee structure, the community should determine who is responsible for effective data gathering and monitoring. The process of gathering data and monitoring KPIs should be embedded into the work plans of key staff, and in the Terms of Reference of committees. The options discussed include:

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

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

Discussion Notes:	Decision:
Option 1: CEEP coordinator - made most sense.	Participants preferred option 1 (CEEP coordinator) with support of option 2
Option 2: Internal committee - can get input from department heads.	(information from department heads) and option 3 (Climate Action / Zero Carbon Committee).
Option 3: External committee - can get input from Climate Action / Zero Carbon committee.	Eventually, the RSC could be tasked with tracking data for all communities in their region.
Option 4: External non-profit - none identified.	

Option 5: Combination of above.

3.0 CEEP Action Planning Exercise

3.1 Key Recommendations & Outcomes

All CEEP action strategies are included as a separate <u>Action Planning Spreadsheet</u>. Participants reviewed all the action strategies provided by QUEST Canada, and assigned 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. Overall, participants felt there was a need to first establish the governance structure, and then focus on conducting studies, where needed, and piloting actions.

Below you will find all action strategies that have priorities assigned to them.

The action strategies below are prioritized using the following legend:



On the table, cost categories are identified as High (H), Medium (M), or Low (L). In Oromocto's case, the ranges associated with these categories is as follows:

- H = >\$120,000+ (=1 cent increase to tax rate)
- M = \$50,000 120,000
- L = <\$50,000

3.1.1 Energy Efficiency

Participants expressed support for:

1. Energy Efficiency. Improving energy efficiency in the commercial, residential, and corporate (heritage and other municipal buildings) sectors can be accomplished using a combination of public education, incentives, policy, by-laws, and partner initiatives. The community and partners could also develop a community retrofit project combining energy efficiency initiatives.

Strategy for Implementation	Lead		
 a. The community could adopt a building code bylaw requiring minimum energy performance and efficiency standards or rating/labeling, for different types of buildings (e.g. Energy Star, Net Zero). The community could also collect information through the permitting process (e.g. energy/GHGs saved through high-efficiency or net-zero development). 	Planning	Implementation date depends on when the province adopts the new building codes. There is potential to adopt building codes higher than the province adopts. See <u>this</u> <u>report</u> from Efficiency Canada. For now, Oromocto provides guidelines only, and provides funding for blower-door tests.	TBD
b. The community can encourage energy efficiency through public education	Town Clerk	Oromocto held a Climate Action Conference. Could	2023
	 a. The community could adopt a building code bylaw requiring minimum energy performance and efficiency standards or rating/labeling, for different types of buildings (e.g. Energy Star, Net Zero). The community could also collect information through the permitting process (e.g. energy/GHGs saved through high-efficiency or net-zero development). b. The community can encourage energy efficiency 	a. The community could adopt a building code bylaw requiring minimum energy performance and efficiency standards or rating/labeling, for different types of buildings (e.g. Energy Star, Net Zero). The community could also collect information through the permitting process (e.g. energy/GHGs saved through high-efficiency or net-zero development).Planningb. The community can encourage energy efficiency through public educationTown Clerk	a.The community could adopt a building code bylaw requiring minimum energy performance and efficiency standards or rating/labeling, for different types of buildings (e.g. Energy Star, Net Zero). The community could also collect information through high-efficiency or net-zero development).PlanningImplementation date depends on when the province adopts the new building codes. There is potential to adopt building codes higher than the permitting process (e.g.

Priority	Strat	egy for Implementation	Lead	Additional Details	Start Date
	E a e r ii	strategy. The NB Environmental Trust Fund can also be used for public education initiatives or non-profit initiatives aimed at nstalling energy efficient products.		on Social Media. Leverage partners such as NB Power, Liberty, Schools and consider a role to coordinate community outreach and communications.	
High	ii e F S O P b b n d u u	Homeowners can apply for incentives from NB Power, for energy audit and retrofit projects. (e.g. Residential Rebates, Total Home Energy Gavings Program, Net Metering, NB Power's Community Outreach Program). Further incentive programs may be considered by the utility and the municipality, such as discounts on EV charging units and permit fee adjustments.	Planning	Leverage partners such as NB Power and real estate firms.	2023-24
High	f ii t c r c	Obtain data every three years from energy utilities and ncentive providers regarding the number of incentives provided for residential and commercial efficiency tetrofits or new builds, in order to measure GHG mpact.	Planning	Create a data directory to help keep the data collection process organized.	2023
Low	a s b	dentify potential partners for a LED light retrofit campaign, such as an incentive or ouy-back program or motion sensors.	Town Clerk	There is a <u>low-income energy</u> <u>efficiency program</u> funded by the Government of NB and administered by Energie NB	2023

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
			Power to do what is economically feasible to be done on-low income housing (LEDs, insulation, upgrades) at no cost to participants.	

2. Energy Optimization. Involves making our grids, systems and buildings more efficient, productive, and balanced. *Note: Utilities should be doing these things from a grid perspective, as well by communicating to and collaborating with clients. That being said, individual organizations can also take action.*

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
High	a. 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.	Engineering Public Works	Work with NB Power and Liberty.	2022 (has already begun)
Low	 b. Pilot installation of residential EV chargers. Pilot installations can be part of an overall community program, which consists of the provision of several public electric vehicle (EV) charging stations, as well as the introduction of a residential home charger rental program. The use of 	Engineering Public Works	As a requirement in new multi-unit developments. Could map out charging stations and publish on website.	2024

_	Priority	Strategy for Implementation	Lead	Additional Details	Start Date
		electric vehicles will reduce combustion emissions and GHGs.		Partner with NB Power and Irving (gas stations).	

3. Community Retrofit Project or Community Efficiency Financing Program (or study). A community retrofit project aims to improve energy efficiency of residential and commercial buildings in the community, to reduce GHG emissions and lower energy costs/improve affordability. A community efficiency financing program can also be created to reduce barriers to energy efficiency retrofits in the community.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Low	a. Develop a sustainable neighbourhood plan with funding from FCM.	Developers	Based on Housing Accelerator Fund work, we could use LG land for this purpose. Could look at Energize Bridgewater approach. Also, there is a plan to sell the community centre, leisure services, town hall, arena, and 1 other to build a new multi-purpose and cultural recreation facility. They hope to have this built in 5-6 years. The aim is to repurpose the buildings (\$2.2M in assessed value). Oromocto doesn't plan to invest in enhancing efficiency in the buildings, but having the buyer do so. There is an opportunity to undertake the low-hanging fruit and leverage programs from NB Power now, though.	TBD

4. Clean Energy Conversion (heating/cooling). Fuel furnaces are less efficient than electric heaters, and other alternatives also exist. Converting heating sources to more efficient methods such as natural gas, electric heaters, mini-splits, or forced heat will allow for a reduction in energy consumption which is more environmentally friendly. This can help lower energy costs, maintenance costs, peak loads, and GHG emissions. This measure should be taken along with improving the envelope of buildings.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
High	 a. Through public website development and outreach, improve awareness of all available programs and incentives to encourage clean energy conversion in the community. 	Town Clerk		2023
High	 b. Obtain data annually from energy utilities, the province, and incentive providers about the number of incentives provided for clean energy conversions, in order to measure GHG impact. 	Planning	Create a data directory to help keep the data collection process organized.	2023

3.1.2 Distributed Energy Resources

Participants were excited about the potential for distributed energy resources such as renewables and district heat in their community. There is potential with surrounding communities and CFB Gagetown to partner on initiatives such as these, and attain available funds for studies and implementation. It's paramount to contact the utility before starting any renewable energy development process in order to ensure alignment with existing programs and technical requirements.

Participants expressed support for:

1. Waste Energy and District Heat. This entails using a renewable or waste heat source, or sources such as piping the heat underground, converting homes and businesses to district heat, and monitoring and managing load, among other processes. A technical study helps the community to understand all the components required and their cost.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Low	 Conduct a technical and financial feasibility study for waste energy or district heat. 	Planning	Consider applying for study funding from NB ETF, NRCan, or FCM.	2025-26
Low	 Ensure new or existing municipal facilities consider waste heat opportunities. 	CAO / Planning	Ensure plans and policies are undated to enforce this.	2025-26
Low	c. Collaborate with community partners, such as businesses, to explore opportunities for integrating waste energy or expanding district heat.	Planning	The chamber of commerce and large businesses could be involved.	2025-26

2. Wind Energy. This entails creating opportunities to produce clean power, which would reduce greenhouse gas emissions and long-term costs. The reduction in GHG emissions depends on parameters such as: size of the system, performance of the units, and local wind regime.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Low	a. Conduct an energy technical mapping assessment and social acceptability analysis to help identify legally accessible land within the municipal boundary that has a good wind regime, existing substation, appropriate setbacks, and social acceptance. Reach out to QUEST Canada for advisory services related to renewable energy mapping assessments.	Planning	Land use by-law may need to be updated depending on results. QUEST Canada and Co-Mapping offer this service. Determine first whether it makes sense to do a study for wind, during the solar PV study below.	2024-25
Low	 b. Contact the utility before starting the process, in order to ensure alignment with 	Planning		TBD

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
	existing programs and technical requirements.			

3. Solar Photovoltaic Arrays or a Community Solar Farm. Solar photovoltaic (PV) arrays provide an opportunity for municipalities to produce power for the grid, which would reduce greenhouse gas emissions and long-term costs. Municipalities can also enable citizens to 'lease' panels for a GHG/power credit. The reduction in GHG emissions depends on parameters such as the type and size of the project, the amount of kwH generated/offset, and the province's GHG coefficients for electricity, oil, and gas and the cost of the measure.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Medium	a. Enact a solar-ready building policy for new buildings and green energy zoning. It could consider incentives, such as permit fee reimbursements, for installs of solar panels on the roofs of buildings.	Planning	May require amendment to building by-law, for enabling solar rooftop installations, and inside - for electrical and battery installation.	2024
Medium	b. Undertake a study of one option or compare several options for Solar PV and Solar Thermal in the community.	Planning	Consider applying for study funding from NB ETF, NRCan, or FCM. Consider partnering with SGIN, CFB Gagetown and Oromocto First Nation.	2024-25

4. Solar PV (Rooftop or Ground Mount). Solar photovoltaic (PV) systems provide opportunities for municipalities and citizens to produce power for use on site (i.e. net-metered), which would reduce greenhouse gas emissions and long-term costs. The reduction in GHG emissions depends on parameters such as the type and size of the project, the amount of kwH generated/offset, and the province's GHG coefficients for electricity, oil, and gas and the cost of the measure.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
High	a. Apply for FCM Funding if solar PV (rooftop) is part of a municipal building efficiency retrofit, a community retrofit project, or includes a technical study in the energy category.	Finance	Option for new multiplex. Consider partnering with CFB Gagetown and Oromocto First Nation.	2025

5. Micro-Hydro Site. Local features may present opportunities to generate electricity from hydro power. For example, there may be an existing dam or pipeline, a stream that could be dammed, or gravity-fed outfalls that could be fitted with a turbine. A municipality that wishes to pursue micro-hydro must identify and assess the feasibility of potential in-stream, outfall, or dam installation and potential to tie into the grid. A limiting factor of a micro-hydro project could be location of the turbine in relation to the existing power grid. The costs of connecting to the grid must be factored in as part of the viability assessment.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Medium - Low	 Study potential micro-hydro sites for flow, distance to grid, and potential generating capacity to determine feasibility. 	Planning / Engineering and Public Works	Involve partners such as Oromocto First Nation, Lincoln, RSC, and CFB Gagetown. Consider applying for study funding from NB ETF, NRCan, or FCM.	2025-26

3.1.3 Land Use

Participants expressed support for the following:

1. Using Brownfields. Brownfields are former industrial sites where there is, or may be, contamination that could affect future use of the site. Due to our history of industrialisation, they are numerous and vary in size, type of contamination, and location. They can range from former gas stations that may still have fuel tanks buried underground, to large industrial sites that have been

abandoned. Some brownfields can be used for renewable energy installations or community green space.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Medium - High	 a. Identify brownfield sites that could be used for renewable energy or green space. Conduct study 	Planning	Old Engineering and Public Works building site. There has been some interest from developers in purchasing the site (the Town's preferred option is to sell).	2024
Medium	 Apply for FCM funding if site requires remediation, risk management, or undertakes renewable energy production. 	Planning	FCM funding can be accessed for brownfield site studies and redevelopment.	2025-26

2. Updating the municipal plan, land use plan, and policies and by-laws. Land use decisions have a long-term impact on greenhouse gas emissions. The location of roads, services, green spaces, utilities, and how people move across the land are all determined by land use planning. The Town of Oromocto can reduce and avoid GHG emissions by updating the municipal plan, designating areas for densification, promoting mixed-use development, and avoiding sprawl. Participants identified the following implementation strategies as priority strategies.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
High	a. At the time of review of the Municipal Plan, consult the community on siting new mixed-use developments, where to densify existing built environments, where to improve active	Planning	Dalhousie University has planning students that could be engaged.	2024

	transportation networks, where to establish eco-districts or low carbon zones, and introduce concepts such as net-zero ready buildings and require connecting to district energy where available. Encourage developers to contribute to the vision as laid out in a Land Use Plan.		
High	 Update policies or processes in place to support energy efficiency in new developments across the community. This may include: Expedited building/development permitting process for energy efficient/high-performance developments Energy efficiency design guidelines (including promotion of guidelines created by upper levels of government or third parties); Climate risk adaptation design guidelines (including promotion of guidelines created by upper levels of government or third parties); Development standards or codes in applicable jurisdictions; 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. 	Planning	2024 to study, 2025 for adoption
High	 Embed 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 	Planning	2024 to study, 2025 for adoption

	 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, District Energy, CHP, 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 Plans of Subdivision requirements Using the development permit system, for example, development charges adjustments or deferrals. By-law or policy to permit right-of-ways for district energy infrastructure 		
High	Present Plan amendments to Council.	Planning	2025-26
Medium	 b. 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. 	Town Clerk with support from Planning	2024-25

3.1.4 Transportation

Participants expressed support for:

1. Fuel Efficient/Electric Vehicle (EV) Replacements. EV systems use electrical energy to power an electric motor, which ultimately reduces the need for gasoline and the dependence on damaging fossil fuels in a large part of the transportation sector. This transition will not only be more cost-effective for buyers in the long-term (EVs are cost-effective and deliver great performance), but it will also contribute to addressing the community's overall GHG emissions and air pollution levels.

Aside from hybrid vehicles, the two most common types of EV options include fully electric vehicles and plug-in hybrid vehicles.

Priority	Strategy for Implementation		Lead	Additional Details	Start Date
Medium	a.	Fuel efficient and electric vehicle replacements can be complemented by: switching municipal fleet of vehicles to electric/hybrid/low-carbon, enabling use of municipal electric vehicles by community organizations when not in use by the municipality, and via car share programs (commercial or non-profit).	Engineering Public Works	Some of the Town's fleet has already been replaced by electric vehicles and there are more plans to do so.	2022
Low	b.	The community, together with local partners, could conduct a campaign to educate citizens and promote the benefits of switching to fuel efficient vehicles (such as energy cost savings and GHG reductions), highlight available rebates/programs, and address barriers (such as range anxiety).	Town Clerk	Some awareness done through the Climate Action Conference	2023-24
Low	c.	Increase the number of EV charging stations locally and pilot the installation of residential EV chargers (e.g. as part of residential home charger rental or incentive program).	Engineering Public Works and Planning	Already started, 2024-25 for inclusion in bylaw. Make it a requirement to put charging stations in new multi-unit developments and parking lots (in zoning bylaw).	2024-25

3. Idle-Free Policy. The term "idling" refers to running a vehicle's engine when the vehicle is not in motion. This can occur while a car is being heated, cooled, stopped at a red light, or waiting while stationary with the engine running. The consequences of engine idling include wasting fuel and money, causing excessive engine wear, as well as being a main contributor to air pollution and the release of GHG emissions. For the average vehicle with a three-litre engine, every 10 minutes of idling costs more than one cup of wasted fuel — one half of a litre if your vehicle has a five-litre engine. It is important to keep in mind that every litre of gasoline used produces 2.4 kilograms of CO2.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Medium	a. Create an anti-idling or idle-free social marketing campaign that aims to encourage behaviour change through prompts, norms, and incentives, with a supporting bylaw if possible.	Town Clerk	Leverage the Chamber of Commerce, High School, and Cafes to help disseminate information. NB ETF funding.	2024
Medium	b. Conduct a study first, to gather information on the following: where idling occurs, what barriers or perceived barriers there are for not idling, which audience(s) should be targeted, what messages resonate well with those audience(s), and how and where prompts should be used.	Town Clerk	Climate Action / Zero Carbon Committee	2024

4. Transportation Demand Management. A comprehensive suite of transportation demand management actions could be undertaken in the community. This could include supporting a diversity of active transportation options to the degree that fits the local context, including cycling networks, bike share programs, pathways, and pedestrian-friendly sidewalks. This could also include supporting and providing public transit options with considerations for equitable access. For small or rural communities, options might be rideshare/carshare programs or buses. For mid-sized cities, options also include city buses, ride/car sharing, LRT use, and passenger rail stop. For large cities options include most or all of the above including multiple stops for LRT, passenger rail, and rapid transit.

Priority	Strategy for Implementation	Lead A	Additional Details	Start Date
Low to Medium	 a. Traffic circles. The Town has identified a desire for five additional traffic circles to reduce congestion. The intersections identified include: Highway 7 exit/entrance to St John, Waasis and Lincoln, Broad and Waasis, Oromocto First Nation, Broad and Restigouche. 	Public Works t t a t c c iii r r	It is recommended to conduct a study to see if this many are actually needed to reduce congestion, or if other more immediate and more affordable measures could be taken to do so.	TBD
Low	 b. Biking-related initiatives including: bike parking facilities or racks, bike lanes, bike share programs, and public bike tire pumps. 	Tourism and Rec		2024
Low	c. Car and ride sharing programs and/or carpooling lots.	Public Works s F C C	Leverage partners such as Urban Rides, Fredericton, CFB Gagetown, Oromocto First Nation, and funders FCM and NB ETF.	2024-25

3.1.5 Water Conservation

Priority	Strategy for Implementation	Lead	Additional Details	Start Date	
Medium	Implement measures to reduce peak flow, such as stormwater retention ponds/tanks, greening roofs, bioswales, permeable pavement, etc. Also, consider and prepare for changing weather patterns related to climate change that may impact infrastructure. Measures could include:	Engineering Public Works and CFB Gagetown		2023-24	

	 Stormwater retention ponds/tanks Bioswales Rain gardens Permeable pavement green roofs 			
N/A	Implement measures to promote water conservation (public awareness campaign)	Town Clerk	Promote low flow showerheads and Faucet aerators	ongoing
N/A	Implement measures to optimize water and wastewater systems to reduce energy consumed in the pumping and treatment of water.	Engineering Public Works	Maintain a water leak detection program	ongoing

3.1.6 Waste

Participants did not complete this section of the Action Strategy Exercise, but one action was identified during the November 2021 workshop.

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Medium	 Conduct a study to determine waste diversion potential by analyzing landfill content for organic and recyclable matter. 	Engineering Public Works and Fredericton Regional Solid Waste	Town recently held a plebiscite with residents voting 'no' on curbside recycling pickup. Town staff are uncertain as to how much of what is going to the landfill is recyclable or compostable, or whether this has been studied.	2023

3.1.7 List of Public Outreach Activities

The Town has recognized that many public outreach, education and communications activities can start now. Though most of these activities are included in the tables above, the table below provides access to them all in one place to assist with planning and organization.

Priority	St	rategy for Implementation	Lead Additional Details		Start Date
High	a.	The community can encourage energy efficiency through public education and communications strategy (e.g. The NB Environmental Trust Fund can also be used for public education initiatives or non-profit initiatives aimed at installing energy efficient products).	Town Clerk	Leverage partners such as NB Power, Liberty, Schools and consider a role to coordinate community outreach and communications.	2023
High	b.	Through public website development and outreach, improve awareness of all available programs and incentives to encourage clean energy conversion in the community.	Town Clerk		2023
Medium	c.	Develop an educational component to help the community understand why the community is moving in this direction for future development / land use, and what the benefits exist (e.g. community wellbeing, energy affordability, GHG reduction, etc.) for people considering purchasing a home.	Town Clerk		2024
Medium	d.	Create an anti-idling or idle-free social media marketing campaign that aims to encourage behaviour change through prompts, norms, and incentives; with a supporting bylaw if possible.	Town Clerk	Leverage the Chamber of Commerce, High School, and Cafes to help disseminate information. NB ETF funding.	2024

Priority	Strategy for Imp	lementation	Lead Additional Details Star		Start Date
Low	idling occurs perceived ba for not idling you should t messages rea that audienc	mation on: where , what barriers or arriers there are g, which audience	Town Clerk	Climate Action / Zero Carbon Committee action for January 2023 meeting.	2024
Low	with local pa conduct a ca educate citiz benefits of s efficient veh cost savings, etc.), highlig	ens, promote witching to fuel icles, (e.g. energy GHG reduction, ht available programs, and iers (such as	Town Clerk		2024
Low	g. Firewood bu garbage edu	rning and cation campaign.	Town Clerk		2023

4.0 Data and Key Performance Indicators

4.1 Introduction

Monitoring and reporting on implementation can build ongoing support among elected officials, staff and community stakeholders. Precise, measurable and defensible data, when presented on an ongoing basis, can increase the overall confidence and support of senior decision makers. When the CEEP is monitored on an annual basis, successes can be celebrated which can 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 Town of Oromocto needs to adopt a strategy for collecting data in order to monitor progress and measure key performance indicators. The options for tools that can be used, data sources, and key performance indicators that were discussed during the third tabletop session on November 3, 2022, and reviewed in October 2023, are listed below.

4.2 Key Tools

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

- A. Require committee meetings and reports from stakeholders and department heads. CEEP reporting is coordinated annually by the CEEP coordinator, with support of the Climate Action / Zero Carbon Committee, and presented to Council.
- B. Utilize the <u>PCP Milestone Tool</u> for creating and updating corporate and community GHG Inventories and reporting outcomes of CEEP measures to FCM.
- C. Use QUEST Canada's <u>Smart Energy Communities Benchmark</u> to measure progress across all CEEP actions and advance implementation.
- D. Use the <u>PCP Hub</u> to connect with the national PCP network, access information resources, and ask questions to peers.
- E. **Conduct surveys** for community side actions, such as determining how many households participate in anti-idling, clothesline programs, efficiency, heat conversion and purchasing EVs. Student work could include initiatives like anti-idling surveys at schools.
- F. **Request data and information from partners.** This could include aggregate energy use data and uptake in efficiency programs.
- G. **Create a data dictionary and registry of sources.** Invite community partners to commit to updating the Town of Oromocto's dictionary and registry on an annual basis. This could be done via email, surveys, mail (CD-rom) or though a web page with a simple reporting form and the ability to upload files.
- H. **Use a dashboard** to display progress within key activity categories and share a description of the status for each individual activity.

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

Discussion Notes:	Decision:
Option 1: Meetings of Committee.	Participants ranked the tools in the following order:
Pros: Can help gather and share data. Cons: Members are volunteers and may not be able to ensure data collection or have required expertise. Committee may need additional representation.	 Make requests to data providers (e.g. utilities, government, other municipal departments, key employers).
	2. Use internal and external committees to gather and
Option 2: PCP Milestone Tool. Pros: Free. Cons: Tedious.	share data, conduct annual reporting and create a data dictionary listing data types and sources.
Option 3: SEC Benchmark Tool. Pros: Is already used and can be	3. Use the PCP Milestone Tool to update GHG inventory every three years.
updated each year fairly easily. Cons: None identified.	 Use the SEC Benchmark tool annually to track progress on policy and programs.
Option 4: PCP Hub. Pros: Generally thought of as useful.	5. Create a dashboard to share information about the Town of Oromocto's climate actions and to collect

Cons: None identified.

Option 5: Conduct surveys. Pros: Can be useful to gather data from the community. Cons: May only get a small sample size of respondents, can easily be ignored, and can easily be falsified.

Option 6: Request data from providers. **Pros:** Easier as time goes on. **Cons:** None identified.

Option 7: Data dictionary. **Pros:** Generally thought of as useful. **Cons:** None identified.

Option 8: Dashboard. **Pros:** Generally thought of as useful. **Cons:** None identified. data.

- 6. If needed, conduct surveys (such as in a water bill insert), noting that this method may not be effective. Surveys should target specific things.
- 7. Use the PCP Hub as needed, to find case studies and network with other Canadian municipalities in the PCP Program.

Initially, the Planning Department is responsible for coordinating data collection, with support of the Climate Action / Zero Carbon Committee. Eventually, this would be the role of the CEEP Coordinator (whether a new hire, or a regional human resource).

4.3 Key Data

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

4.3.1 For Updating GHG Inventories

A consistent methodology is particularly important for primary indicators, such as energy use and GHG emissions, since a range of methodologies can be used to create an emissions inventory. Inventories should be consistent with the methodology used for the Town of Oromocto's baseline GHG inventory. The GHG inventory can be compiled using the same spreadsheet as the baseline inventory, or using the <u>PCP Milestone Tool</u>. If rigorous data is difficult to obtain, try developing assumptions. Be explicit about any assumptions made in the monitoring and reporting process. The process of gathering data and monitoring KPIs should be embedded into the work plans of key staff, and in the terms of reference of the Climate Action / Zero Carbon 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 and businesses took advantage of efficiency programs and collect the resulting total energy and GHG reductions. Local stakeholders can also report on energy and GHG emissions reduction, indicating improved efficiency and integrated clean energy.

Propane and Heating Fuels: Consumption estimates for propane and heating fuels are nearly impossible to get from the distributor, although it's worth asking. If it's not available, you can use per capita or per household estimates and scale it down to your municipality using population or number of households.

<u>NRCan's National Energy Use Database</u> is a good source. You can also ask the Canadian Oil & Heat Association (COHA) for input.

Waste Emissions: For waste emissions, you can use the methane commitment model using the total tonnage of waste landfilled and information on waste composition. This is option 4 in the PCP tool for calculating waste emissions. The total amount of landfilled waste can 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 <u>PCP Protocol</u>.

- A. **Transportation emissions** can be a bit more challenging to determine, 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 Town of Oromocto, 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 or 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.

Resulting GHG emissions reductions from individual actions in the CEEP, can be measured in different ways. See KPIs listed below (section 4.4).

4.3.2 For Monitoring Progress on CEEP Implementation

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

QUEST Canada's <u>Smart Energy Communities Benchmark</u> is a tool that the Town of Oromocto can use to check their progress on enabling policies and programs to advance community energy and emissions planning. The Benchmark allows communities to assess their energy processes, policies, programs, and projects and gives them an accessible visual snapshot of their progress as compared to Canadian best practices. The Benchmark is made up of 10 indicators and a scoring framework designed to measure and track the progress of a community's energy-smart journey. The indicators describe the key components

of an energy-smart community. The first five indicators 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 Town of Oromocto and its energy utilities can show elected officials, stakeholders, and citizens the strengths of their community energy leadership and emissions reductions, and areas where ambition needs to be increased. The Benchmark assists communities in reaching their energy-smart goals and contains resources to assist communities in increasing their scores over time.

The Town of Oromocto undertook the SEC Benchmark in 2021. QUEST Canada re-benchmarked the community in 2022-23, and the Town retains access to the SEC Benchmark tool for tracking progress and continuous improvement. At the time of re-benchmarking, Oromocto showed a 20% improvement in overall score.

4.3.3 For Energy Mapping

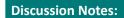
An energy map illustrates spatial information about energy end use in a community over time. It can visually identify opportunities for reducing energy use (e.g. targeting energy efficiency programs), opportunities for shifting modes of transportation (e.g. transit projects), potential sources of energy (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 modelled based on flow rates, percentage of trucks versus cars, vehicle kms travelled, and related emissions ratings. The Town of Oromocto also has access to transportation and land use maps. This data can be integrated using the Town of Oromocto's GIS / mapping software, and could be published online with appropriate constraints to protect privacy (e.g. aggregating energy usage). Over time, additional data such as renewable resource availability could be added.

Consider the following when developing an energy map:

- The overall objectives of your CEEP. Use the energy map as a strategic tool to illustrate opportunities to achieve those objectives.
- Many energy data providers may not provide parcel-level information due to privacy constraints, however, parcel-level data is often not needed to illustrate energy opportunities in your community. Consider developing a map at a postal code scale. If possible, identify energy intensity by land use type, or building type or by hectare or m².
- Maps should include key roads and/or buildings to help viewers orient themselves, and labels for key identifiers.
- 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, pros and cons of each option above. Discussion points and the resulting recommendations are as follows:



Decision:

Updating the GHG inventory was thought of as useful to track progress and make adjustments over time. However, due to the level of effort required, it was determined that doing so every three years to be realistic. The Town could negotiate a discounted costing with a consultant, as part of a standing contract for every 3 years.

Updating the SEC Benchmark scores was thought of as useful and easily done. Participants agreed this could be done annually, along with making data requests to key providers, such as utilities.

The town is hiring a GIS technician, and may consider preparing maps showing energy demand and clean energy potential, and other elements of the CEEP, in the future. This is not a priority at the current time.

Participants identified organizations which can contribute to KPIs:

NB Power, Liberty Utilities, Provincial Government, Municipal Departments, Key Employers, and members of the Climate Action / Zero Carbon Committee.

4.4 Key Performance Indicators

CEEPs have the potential to contribute to significant economic, health, social, resilience, and environmental benefits. It is important to select key performance indicators to measure and report on progress implementing your CEEP and reducing GHG emissions. Consider obtaining data for energy, GHG emissions and other KPIs for an **annual report card**, **or every three years**. Indicators should be measurable (i.e. data is available), should require a reasonable effort to track, and should be cost-effective to track. Community partners are needed to assist in reporting achievements, reductions in energy, and GHG emissions.

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

- General Community Energy and Emissions Plan:
 - Amount of GHGs (CO2 equivalent) reduced (corporate and community side).
 - Annual amount (\$) spent on energy (corporate and community side).
 - Number of partners or stakeholders engaged.
 - Number of actions achieved in the CEEP.
 - Residential, commercial, and industrial success stories.
- Energy Efficiency:

Participants indicated a preference for:

- 1. Updating the GHG inventory every 3 years (possibly with a consultant).
- 2. Updating the SEC Benchmark scores each year (internal review).
- In the future, examine the role of GIS / Mapping to support CEEP implementation and public awareness.

- Amount of funds saved through efficiency measures (corporate and community side).
- Energy use (aggregated by sector) and per capita.
- Number of households and businesses engaged and amount of energy efficiency rebates provided.
- Water Conservation:
 - Total water use (total and per capita) and percentage change, three year average and year to year.
 - Water Metering / Peak Demand reduction (# of participants).
- Distributed Energy Resources:
 - GJ or MW of clean energy produced, three-year average and year to year.
 - Number of households and businesses engaged (e.g. clean energy conversion for heating).
 - Number of households installing heat pumps.
- Land Use:
 - Development footprint: change in the area (km squared) of developable land and area zoned as non-buildable, or green space, or green energy zone, three year average and year to year.
 - Number of kilometres of multi-use or bike trails constructed.
- Transportation:
 - Number of vehicle owners not idling and reduced idling time.
 - Number of EVs purchased/registered in the Town of Oromocto.
 - Number of fuel efficient vehicles purchased or registered in the Town of Oromocto, replacing older vehicles.
 - Kilometres of bicycle lanes constructed and number of users cycling for utilitarian purposes.
- Waste:
 - Quantity of waste recovered, diverted, or recycled; tonnes of organic solid waste diverted from landfill.
- Economy:
 - Changes to property values.

Participants recommended measuring the KPIs listed below. This could include showing people what the financial savings are, and be included in communications and outreach strategy. **Participants discussed the merits of each KPI. Discussion points and the resulting recommendation are as follows:**

CEEP Action Types	Key Performance Indicators	YES / NO	Data Sources
Energy Efficiency:	Identify money spent on energy versus saved through efficiency programs (community side).	YES	Relies on utility data for community-wide analysis.
For example: residential and commercial efficiency	Analysis of where energy spending goes (e.g. local, provincial, abroad).	NO	

retrofits, clean energy conversion (heating) and LEDs.	Total savings associated with energy efficiency and conservation measures or change in energy use (total and per capita), three year average and year to year. Also need building age.	YES	Can do for municipally owned buildings, and would rely on utility data for community- wide analysis.
	Energy use (aggregated by sector) and per capita.	YES	Relies on utility data for community- wide analysis.
	GJ (energy) and GHG reductions for each action.	MAYBE	Where possible.
	Number of households or 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	Relies on utility data for community- wide analysis.
	Residential, commercial, and industrial success stories.	YES	Surveys.
	Number of participants in the clothesline program and the number of reduced dryer loads.	NO	Not applicable in Oromocto.
Water Conservation	Total water use (total and per capita) and percentage change, three year average and year to year.	YES	Public Works.
For example: Clothesline	Water Metering / Peak Demand reduction (number of participants).	YES	Public Works.
program	Switch to low-flow fixtures.	NO	
	Based on metered water, extrapolate for households on wells.	NO	
	Provincial data on groundwater.	NO	
Distributed Energy	Spending on local distributed energy resources (e.g. solar PV, solar heating and CHP).	NO	
Resources For example: Rooftop solar,	GJ or MW of clean energy produced.	YES	In the future. Also, identify what is the related savings.
Community Solar Farm or Wind Farm, Clean Energy	Number of households/businesses engaged (e.g. clean energy conversion - for heating).	YES	Relies on utility data for community-wide analysis.
Conversion (heating), and District Heat	Number of households installing heat-pumps, this figure could be based on the number of upgrades to electricity entrances.	YES	Can use permit data, and utility data for community-wide

			analysis.
	Residential, commercial, and industrial success stories.	YES	Surveys.
	Annual load of district heat subscribers, seasonal load requirements and estimated GHG reduction/offset.	NO	
Land Use For example: green space, green energy zones, redeveloped brownfields	Development footprint: change in the area (km squared) of developable land and area zoned as non-buildable, or green space, or green energy zone, three year average and year to year. Use density measure instead.	YES	Planning Department.
Transportation	Number of vehicle owners not idling and reduced idling time.	MAYBE	With students.
For example: Anti Idling and Fuel Efficient Driving	Annual average daily flow of traffic (vehicles/day) and the number of vehicles from outside coming into the Town of Oromocto.	MAYBE	Where collected on major roads in and out of the community.
initiative; Encouraging	Number of vehicle kilometres/trips reduced.	NO	
uptake in fuel efficient, compact or electric vehicles; Active Transportation initiatives	Number of EVs purchased/registered in the Town of Oromocto. This can be tracked through provincial statistics, and by offering discounts at dealers for home charging units.	YES	If possible. Would rely on provincial registration data / statistics.
	Number of fuel efficient vehicles purchased/registered in the Town of Oromocto, replacing older vehicles. This can be tracked through provincial statistics, or offering a discount at dealers.	YES	If possible. Would rely on provincial registration data / statistics.
	Ridership on public transportation and transit ridership per capita.	NO	
	Kilometres of bicycle lanes constructed or dedicated and number of users cycling for utilitarian purposes.	YES	Planning Department.
	Pedestrian counts.	NO	
Waste E.g. organic waste diversion	Quantity of waste recovered, diverted, or recycled; tonnes of organic solid waste diverted from landfill.	DONE BY FSWC	Fredericton Solid Waste Commission.

Air Quality	Baseline studies on air quality, number of days with poor air quality.	NO	
	Ground level ozone criteria hours exceeding 50 ppb		
	Annual average sulphur dioxide concentration.		
	Annual average nitrogen dioxide concentration.		
	Annual average inhalable particulate matter concentration.		
	Hospitalization rate for respiratory illness per 100,000 people - and associated health care costs.	NO	
	Number of houses heating with wood (EPA certified stove), + sustainable wood source. Check with insurance companies.	NO	
Economy	Total savings associated with energy efficiency and conservation measures and change in energy use (total and per capita), three year average and year to year.	MAYBE	Can do for municipally owned buildings, but would rely on utility data for community- wide analysis.
	Unemployment rate and percentage change.	NO	
	Number of jobs created in sectors related to energy efficiency, clean energy, clean technologies, etc.	NO	
	Number of businesses with environmental certification (e.g. LEED).	NO	
	Real median income - reveals whether purchasing power is increasing or decreasing relative to inflation.	NO	
	Property values (change).	YES	May not be a good or accurate indicator.
Satisfaction	Decision Trust: surveyed feeling among residents that local decision-makers have the best interest of the community in mind most or all of the time (percentage and change).	NO	
	Decision-input: surveyed satisfaction among residents with opportunities to provide input to community decision-making (percentage).	NO	
	Surveyed satisfaction rate: e.g. with active transport improvements, community energy projects, etc.	NO	

Other ActionsMeasuring increase in value of residential propertyNO/ Other notesbased on energy efficient updates.

Could also focus on less KPIs - environment and for economics.

4.5 Quality Control Measures

When collecting and integrating data for updating the GHG inventory, CEEP 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 City for monitoring purposes.
- Check a sample of input data for errors. Clarify data questions with providers.
- Check that the assumptions for methods and data 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 and conversion factors are properly labeled.
- Check that conversion factors are correct (e.g. kWh to GJ, CO2 coefficients).
- Check the data processing equations in the spreadsheets.

5.0 Communications and Engagement

5.1 Introduction

To ensure the successful implementation of the CEEP, a communication 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.

Participants recommended the communications strategy be coordinated and implemented by the CEEP Coordinator, with support of municipal communications staff. In addition, the Town of Oromocto's communications staff should be involved in committees. Funding may need to be secured for certain communications related initiatives.

5.2 Public Engagement and Communications

There are several channels the Town of Oromocto can use to educate, inform, and engage the public. Consider an approach of going **to** the community to conduct engagement.

Priority	Method	Description	Frequency
High	Webpage (hosted by Town or new external site)	Content should include visual depiction and simple explanation of the GHG emissions in the community, the GHG emissions reduction target, high level objectives and measures within the CEP, links to programs/incentives, policies, tips and guidance, contact information, and annual achievements. See Annex 6 for sample content.	Create asap then update monthly
High	Social Media	Utilize Facebook, Twitter, LinkedIn, and Instagram. Content should include CEP details, progress on actions/impacts, highlights of success stories, calls to action, and contests. See Annex 6 for sample content. Social media should link to fact sheets, success stories, and progress report(s), and should link back to the webpage.	Monthly
Low	Media	Newspaper, Radio, TV	As needed
Medium to High	Bill Inserts	Content should encourage residents and businesses to improve efficiency, promote programs/incentives, share facts, etc. Could be done online (e.g. pop-up) instead of a paper insert.	Twice a year
Medium	Open Houses	Content should focus on updating the public on CEEP progress and opportunities to participate.	Project- specific
Low to Medium	Fact Sheets	Showing progress achieved/impact of CEEP measures, tips/guidance, etc. Use as bill inserts, or on social media and the website.	Webpage
Low to Medium	Online Dashboard	To display progress within key activity categories, plus a description of the status for each individual activity. It is a good visual tool for the media, public, and investors.	TBD
Medium	Events	Hold networking events, awards gala, attend markets, festivals, or provincial holidays/events (with a table display or speaker). Also join other community events.	As needed
Medium to High	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	Annually

Method	Description	Frequency
	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. Holds us accountable.	
Contests	Promote seasonal opportunities/contests to reduce energy use, increase active transport, transit ridership, etc. Could include contests between homeowners for energy savings, or between residents of each municipality. Community Recognition for good GHG reductions (e.g. Star Program).	
Engage Schools / Youth groups	Promote awareness and early actions with help of community partners. Can partner with school board, schools, and other stakeholder groups. Go to their events.	Annually
Other	Annual 'Tradeshow' to highlight local business and educate the citizens	Semi- annually
Partner Actions / notes	It shouldn't just be the Town promoting awareness. Neighbouring municipalities and local stakeholders need to support with awareness raising activities. Need solid calls to action. Need to communicate benefits / value proposition for different	
	Contests Contests Engage Schools / Youth groups Other Partner Actions /	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. Holds us accountable.ContestsPromote seasonal opportunities/contests to reduce energy use, increase active transport, transit ridership, etc. Could include contests between homeowners for energy savings, or between residents of each municipality. Community Recognition for good GHG reductions (e.g. Star Program).Engage Schools / Youth groupsPromote awareness and early actions with help of community partners. Can partner with school board, schools, and other stakeholder groups. Go to their events.OtherAnnual 'Tradeshow' to highlight local business and educate the citizensPartner Actions / notesIt shouldn't just be the Town promoting awareness. Neighbouring municipalities and local stakeholders need to support with awareness raising activities. Need solid calls to action. Need to communicate

5.3 Stakeholder Engagement

All capacity holders and stakeholders should be engaged in the Climate Action / Zero Carbon Committee and be invited to register (annually) for newsfeed/updates.

Priority	Approach	Description	Frequency
Medium	Ongoing teleconference and email correspondence	Engage and inform stakeholders through regular updates (e.g. email listserve) including calls to action, meeting announcements, celebrating successes, requests for information, and discussion threads related to CEEP	Bi-annual through newsletter

Priority	Approach	Description	Frequency
		implementation. Also use webpage and social media.	
Medium	External Stakeholder Advisory committee	Purpose: Provide updates, monitor and report on implementation, identify opportunities, integrate initiatives, gain commitments, etc. (see Governance section)	Monthly
Medium	One-on-one meetings	Purpose: identify CEEP objectives, stakeholder objectives, where is alignment, pursue collaborative opportunities, gain commitments. Early days, meeting amongst the Town, utilities, and other key stakeholders. Over time, this will happen at the committee level.	Ongoing
Medium	Workshops and focus groups	Obtain targeted feedback on concepts and approaches to implementing CEEP measures. Can be done in person, by teleconference or online with Survey Monkey (builds ownership and feedback loop).	Ongoing
Medium	Attend Stakeholder meetings	The Town participates in meetings hosted by stakeholders to present information about CEEP and obtain support (e.g. associations)	Ongoing
Low to Medium	Networking Events and Charrettes	Host networking events for stakeholders; or charrettes to engage in dialogue for implementing new actions. Optional exercise if there is a topic or a need.	As needed
Medium	Open Houses	Highlight CEEP measures, impacts, and opportunities for participation.	Project- specific
Low	Ambassador Program	Recognize business leaders and encourage local stakeholders to be leaders for advancing CEEP measures and communicating benefits.	
Low	Declaration	Invite partners to sign a declaration to generate awareness. Enable new partners to join each year. Do annual awards.	

5.3.1 Why and How to Engage Key Stakeholders

All stakeholders should be engaged in the committees and be invited to register 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 Town of Oromocto's CEEP is a platform to achieve energy and GHG reductions while facilitating economic growth and can directly help achieve provincial goals.	Engage Manager-level staff in ministries including but not limited to energy, land use/municipal affairs, environment and economic development.
	Health care costs represent a large, and increasing portion of provincial budgets and community energy and emissions planning can help to reduce these costs.	Ensure ongoing engagement with the manager and/or appointed staff person.
	Provincial government oversees policies and programs that may impact or be impacted by community energy and emissions planning. They may also have technical expertise needed for CEEP implementation. They may also have energy end use data and Key Performance Indicator data needed to monitor implementation progress and report on outcomes.	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.
Energy Utilities	Electricity, natural gas and thermal energy distributors are critical partners for CEEP implementation. The business models of energy distributors are evolving. The CEEP 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.	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 on the stakeholder committee.
	The CEEP also calls for distributed energy resources, electric vehicle charging, etc. Energy distributors can support CEEP 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.	Energy distributors often have strong relationships with facilities departments. This may be a good entry point for communication if your utilities do not yet have a community energy and emissions planning contact person.
	The Town of Oromocto has access to development data that may not be available to energy distributors, but could provide insights with respect to future land use and energy needs.	

NGOs and Associations

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

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

Real Estate

(e.g. Developers, homebuilders, Building owners and operators, Architecture firms, Real estate agents) There is a growing mismatch between the high demand for energy 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.

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

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

The implementation of demonstration projects.

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

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

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

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

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

Local Business and Industry

Increasing concerns from building owners and operators about the growing cost of energy as a proportion of overall building operating costs. Businesses have unique opportunities to reduce peak demand, improve efficiency, integrate waste energy and renewable energy sources. Businesses can take Reach out (e.g. via Chamber of Commerce) to request expressions of interest, or to identify businesses with an interest in community energy and efficiency.

	advantage of efficiency programs to reduce energy costs, and incorporate energy distributed energy measures (e.g. rooftop solar), and can engage employees / promote conservation and fuel efficiency. They may also be able to provide incentives at Points of Purchase, and help promote to the public. Businesses may also offer energy services, incentives, or technologies that can help the community achieve CEEP targets, and contribute to economic growth. Industry may have opportunities for process improvements, peak demand reduction.	Engage business executives or staff, with an invitation for a one-on-one meeting to align on projects, and engage them on stakeholder committee. Identify opportunities to collaborate. Recognize business leadership through a Digital Button, green award, or ambassador program.
Academia	Schools have opportunities to reduce peak demand, improve energy efficiency, fuel switch, integrate small scale renewable resources, and engage students through curriculum. Community College and Universities provide opportunities to engage faculty/students in research, studies, engineering projects, etc. related to implementing the CEEP.	Engage Dean, Faculty, with an invitation for a one-on-one meeting, and engage them on stakeholder committee. Invite Faculty and students to participate in studies, pilots, or projects, related to implementing the CEEP.
Neighboring Municipalities	Town of Oromocto commuter-shed includes the City of Fredericton, which also has a CEEP, and is pursuing similar initiatives. In some cases, it makes sense to partner on CEEP 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, not to mention consistent messaging in the region.	Engage the CAO/Town Clerk, or CEEP coordinator, in each neighboring municipality, with an invitation for a teleconference, and to participate on stakeholder committee. Explore the potential to share a human resource.

6.0 Conclusion

QUEST Canada appreciates the opportunity to work with the Town of Oromocto on this project, and engage local stakeholders in developing recommendations for CEEP governance, implementation, communications and key performance indicators.

This report summarizes the proposed recommendations and feedback received during the workshops in December 2021 and November 2022, as well as the review session held October 2023. It also provides

useful information and templates that can be used to advance the CEEP actions, communicate with the public, engage stakeholders, and report on key performance indicators, on an ongoing basis.

Potential high-priority next steps are identified in section 1.4.

7.0 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 CEEP Staff Committee is to bring together municipal professionals (across Departments) to ensure advancement of the Community Energy and Emissions Plan. This committee would involve municipal staff and council representation. The Committee Chair will interact with the Climate Action / Zero Carbon Committee, and report to Council.

Scope and issues to be addressed - The Staff Committee will:

- Stay current on urban and rural energy-related matters pertaining to Community Energy and Emissions Planning and climate change impacts/science and adaptation measures, specifically in a municipal context.
- Exchange knowledge, identify and address issues, and facilitate the advancement of actions in the Community Energy and Emissions 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 CEEP progress and GHG reductions.

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

- Quarterly or monthly teleconferences or meetings; minutes compiled.
- Sub-committees (e.g. mitigation vs. adaptation, or action/policy specific).
- Consultations as needed (e.g. community stakeholders, fund providers).
- Assist with policy recommendations and new project / funding applications.

Participation: Led by the Chair, the Staff Committee will have representation from key departments.

Objectives - Priorities identified by the working group include:

- 1. Advance priority actions as part of implementation of Community Energy and Emissions Reduction Plans.
- 2. Support internal activities such as: planning and policy efforts, communications.
- 3. Launch studies and pilots, where needed.
- 4. Gather and report on data and KPIs.
- 5. Other business: e.g. announcements, new funding, etc., as may arise.

Meeting Schedule: This will be determined during the inaugural meeting (suggested monthly, then quarterly).

Stakeholder Advisory Committee Terms of Reference

The following could be added to the mandate of the Climate Action / Zero Carbon Committee

Co-Chairs: TBD

Objective: The objective of the CEEP Stakeholder Committee is to bring together community stakeholders to ensure advancement of the Community Energy and Emissions Plan.

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

- Stay current on urban and rural energy-related matters pertaining to Community Energy and Emissions Planning, and climate change impacts/science and adaptation measures, specifically in a municipal context.
- Exchange knowledge, identify and address issues, and facilitate the advancement of actions in the Community Energy and Emissions Plan, and Climate Change Adaptation Plan / Resilience.
- Act as a central resource for information gathering and sharing, knowledge exchange.
- Gather data to help report on CEEP progress and GHG reductions, as well as CC adaptation (KPIs).
- Support community outreach and communications activities.
- Make recommendations for programs, projects, policies, etc.
- Collaborate on funding proposals and partnerships to deliver actions.
- Launch studies and pilots, where needed.

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

- Bi-monthly teleconferences or meetings; minutes compiled.
- Sub-committees (e.g. mitigation vs. adaptation, or action/policy specific).
- Consultations as needed (community stakeholders, fund providers).
- Discuss policy recommendations and new projects and funding applications.

Participation - the Stakeholder Committee will have representation from a diversity of organizations that are interested in engaging in activities related to the Community Energy and Emissions Plan. This may include:

- Energy utilities (e.g. NB Power, Liberty Utilities, etc.).
- Energy service and tech providers.
- Real estate developers.
- Non-profit organizations (e.g. Regional Services Commission).
- NB Department of Environment and Local Government, NB Department of Energy and Natural Resources.
- Academic Institutions: NBCC, UNB.

Objectives - Priorities identified by the working group include:

- 1. Share and discuss strategies for advancing actions as part of implementation of Community Energy and Emissions Reduction Plans and Climate change adaptation and resilience plans.
- 2. Gather and report data / KPIs.
- 3. Peer-to-peer exchange.

4. Other business: e.g. announcements, new funding, partnership development, etc, as may arise.

Meeting / Call Schedule: bi-monthly

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 (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 communication
- Registered Professional Engineer or Planner, Member of 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, ON)

Full Time Temporary (3 Year Contract)

The Community Energy Program Manager (CEEPM) is responsible for implementation of the Community Energy Investment Strategy (CEIS) for 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 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 Certified Energy Manager (CEM) 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:
 - \circ Systems design thinking
 - All aspects of energy (electricity, natural gas, transportation fuels, etc.) and greenhouse gas emissions
 - o community energy and emissions planning and energy management principles
 - The opportunities and challenges associated with distributed generation and renewable energy implementation
 - Facility energy efficiency projects and audits impacting energy/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 towards progressive action
- Proven expertise in developing innovative ways of engaging, influencing, and working with the community
- Effective written and verbal communication skills particularly in terms of presenting and reporting to decision-makers
- Applied research and data analysis skills using qualitative and quantitative methodologies to create and evaluate briefing materials, performance metrics, and project recommendations
- Familiarity with municipal processes (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 CEEPM 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 time of notification of interview process.

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

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

- Updates of plans
- Council strategic plans
- Official plans and regulations
- Secondary plans and plan amendments
- Community improvement plans
- Zoning and building code by-laws
- Site plan control
- Height and density bonusing
- Plan of subdivision
- Development permits
- Development cost charges
- Parking charges
- Budget

This can be accomplished through regular meetings of an internal committee or by coordinating inter-departmentally (on a case-by-case basis, or as part of plan review), through ongoing processes (such as permitting), as well as through council decisions (like new policies and by-laws, and budget decisions). See QUEST Canada's <u>CEEP Primer</u> for more details on each of these options for embedding the CEEP.

ANNEX 4 - Funding for CEEP Actions

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

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

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

Sources	Description	
Budget	Create budget item and fund for CEEP measures	
Internal financing sources	 Property taxes, tax levies. Tax Increment Financing, Local Improvement Charges. User fees (on water, power and natural gas distribution system, waste). Development Cost Charges (DCCs). Green bonds. 	
Local Incentives and Rebates	 Development Cost Charge reductions. Local Improvement Charge financing (LIC) or Property Assessed Clean Energy (PACE) programs. Fee rebates and credits (on water and energy bills), local economic incentives for investing in energy efficiency for households and businesses, and new developments (e.g. tax holidays for businesses, faster permitting for developments meeting certain efficiency criteria). 	
New accounting/ decision- making tools	 Consider a natural asset management approach - full cost accounting and valuation of natural assets. Estimate benefits from green infrastructure. Combine funding with Gas Tax revenue. Reinvest efficiency savings into low cost CEEP measures, community engagement, etc. 	
Institutional grants and external sources of funding	Scan and submit funding applications to: • Federal agencies and governments • Natural Resources Canada • Environment and Climate Change (ECC) • Infrastructure Canada programs	

Strategies to secure financial resources

	 FCM programs, including: <u>Green Municipal Fund</u> <u>Municipalities for Climate Innovation Program</u> <u>Municipal Asset Management Program</u> Provincial programs and agencies (e.g. NB Environmental Trust Fund).
Loans	FCM low-interest loan (GMF).Municipal green bonds.
Leverage private investments	 Engage the private sector to partner and financially support actions that improve community-side efficiency, clean energy or transport modes. Ensure the local Chamber of Commerce or others support efforts of small enterprises to improve energy efficiency.
Economy of scales and synergies at the local level	 Leverage existing initiatives or projects by expanding and adapting their scope and collaborating with other departments (thinking beyond silos). Take a regional approach - collaborate with neighbouring municipalities. When a measure involves several communities, cost-share (e.g. procurement).

FCM and ICLEI published a toolkit called <u>On the money: Financing tools for local climate action</u>, 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)
- <u>Community Energy Investment Strategy for Waterloo Region</u> (2018)

ANNEX 5 - Methods for measuring the economic impact of CEEP

There are significant economic benefits from improving energy efficiency across the Town of Oromocto, and implementing the full range of measures identified in the CEEP. It will be important to quantify the economic impact of CEEP measures, to gain support from senior decision-makers and elected officials as well as the community at large (public, businesses, energy stakeholders, service providers, etc). As part of the NB Smart Energy Communities Accelerator, your community may benefit from an Economic Impact Assessment.

Different methods of economic analysis serve different purposes and provide different information. All are relevant to assessing the economic, environmental, and social benefits of CEEPs, 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 CEEP should only go as deep as is needed. This analysis can be undertaken by either the lead coordinator, or committee, and could accompany annual updates on CEEP progress, making requests for funding or new policies and by-laws, engaging partners to advance key measures, and demonstrating economic, environmental, and social benefits in the community.

Method	Purpose				
Community Energy Cost	Discuss total community energy use in a metric everyone understands, in order to generate different conversations with elected officials and stakeholders. (e.g. money spent on energy / money leaving the community).				
Financial Feasibility	Screen and prioritize measures, programs, or portfolios to identify if, and when, the investment will break even.				
Levelized unit energy cost	Compare the per kWh or per GJ costs of different energy generating technologies across the expected lifetime of the asset.				
Marginal abatement cost curve	Compare GHG emission reduction options according to which will cost the least or deliver the most financial savings, and according to their potential impact on GHG reductions.				
Community socio-economic benefits	Inform the decision-making process, and stakeholders, on the total value to the local community and economy of a CEEP, considering how expenditures recirculate through local businesses, households, and governments.				
Cost benefits	Screen and prioritize measures, programs, or portfolios to identify if benefits over time exceed initial costs, and to identify a portfolio of measures that maximize the economic, environmental, and social benefits from CEEP implementation.				

ANNEX 6 - Sample Webpage and Social Media Content

Webpage	Content should include visual depiction and simple explanation of:
	• Energy spending, energy use and GHG emissions in the community, as a pie chart (e.g. tons of CO2 by sector).
	• The GHG emissions reduction target (total tons of CO2).
	• A short list of objectives and measures identified within the CEEP.
	 Annual achievements: actions taken, impacts (e.g. energy/GHGs reduced, energy costs reduced, energy dollars staying in community).
	• Easy button or link to get engaged, or subscribe to updates.
	 Hyperlinks to documents, programs and incentives, policies, news, contests.
	 Downloadable tips and guidance for improving energy efficiency at home and for business, as well as any incentives.
	 Description of governance structure (e.g. Lead Coordinator, Committee and its Members).
	Contact information.
	• Testimonials.
Social Media	Use the Town of Oromocto's Facebook, Twitter, LinkedIn, Instagram, or create a new social media account for the purpose of promoting CEEP progress. Content should include:
	• A "did you know?" segment (e.g. community spends X on energy, emits X GHGs).
	 Describe specific measures identified in the CEEP, benefits to the community, and update on progress on actions and impacts.
	 Tips and guidance for improving energy efficiency at home and for business, as well as any incentives. Promote anti-idling, clothesline
	program, etc.
	program, etc.Share highlights of success stories.
	• Share highlights of success stories.

Name	Title and Organization	CE Mapping Workshop Dec 1, 2021	CEP Dev Workshop Dec 2, 2021	CFB Gagetown Tour Nov 2, 2022	CEP Impl Workshop Nov 3, 2022	CEP Review Session Oct. 2023
Cindy Goguen	Town of Oromocto	1	<i>✓</i>	1	\checkmark	
Dallas Gillis	Town of Oromocto			1	1	1
David Goodfellow	Town of Oromocto		<i>✓</i>	1	1	
John Jackson	Town of Oromocto	1			1	
Bill Jarratt	Town of Oromocto	1	1	1		
Jody Price	Town of Oromocto	1	1			
John Thomson	Town of Oromocto	1	1		\checkmark	
Peter Wong	Town of Oromocto				1	
Robert Powell	Town of Oromocto	1	1		1	
Lorraine Dawe	Town of Oromocto	1				
Dr. Vaughan Roxborough	Climate Action / Zero Carbon Committee	1	1	1	1	
Bob Clarke	Climate Action / Zero Carbon Committee			1	1	
Bruce Langhus	Climate Action / Zero Carbon Committee	1	1	1	1	
Clair Ripley	Climate Action / Zero Carbon Committee	1			1	
Tanya Malloy	Climate Action / Zero Carbon Committee	1	1			
Winnie Hsu	Climate Action /	1	1	1	1	

List of Participants in CEEP Workshops

	1	1	1	1	1	
	Zero Carbon Committee					
Mr. Kim Hughes	Climate Action / Zero Carbon Committee			1	1	
Ed Genova	NB Power	1				
Sara Mudge	NB Power	1				
Jason Walsh	Liberty Utilities	1				
Patrick Nicholson	Liberty Utilities	1				
Marc-Etienne Rodrigue	Canadian Forces - Gagetown	1				
Jin Ma	Canadian Forces - Gagetown			1		
Eddie Oldfield	QUEST Canada			1	1	~
Omar Bhimji	QUEST Canada	1	1			
Shane Monague	QUEST Canada	1	1			
Ericka Wicks	QUEST Canada	1	1	1	1	
Luke Bulmer	Atlantic Canada Opportunities Agency			1		
Karen-Anne Mallet	Atlantic Canada Opportunities Agency				1	