

# Summary of Community Energy and Emissions Plan Development Workshop

January 2024

Submitted to:







# ACKNOWLEDGMENTS

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# About QUEST Canada

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

Learn more about QUEST Canada and join the network at <u>questcanada.org</u>.





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# **1.0 EXECUTIVE SUMMARY**

# 1.1 Background

As part of QUEST Canada's Smart Energy Communities Accelerator Program, the Town of Riverview is developing a Community Energy and Emissions Plan (CEEP) to achieve milestone three of the Federation of Canadian Municipalities and ICLEI's Partners for Climate Protection Program. A CEEP identifies ways to reduce GHG emissions, support the local economy, increase competitiveness, create jobs, improve energy efficiency, and keep energy dollars in the local economy.

The Town of Riverview and QUEST Canada engaged community stakeholders to help inform the development of a CEEP. This report summarizes workshop results, including measures selected and recommendations for a CEEP.

The proposed CEEP would contain **46 action strategies** or projects whose potential reductions contribute to the overall Greenhouse Gas Emissions reduction target.

In the short term, the CEEP includes:

- Developing a Community Efficiency Financing Program with funding from FCM
- Improving awareness of all available programs/incentives in relation to clean energy conversion through public website/ outreach
- Conducting a technical and financial feasibility study for waste energy or district energy, in collaboration with TransAqua for the Town's Arena
- Updating Municipal Plan, Zoning bylaw to adopt policies to encourage compact, mixed-use and transit-oriented developments
- Adopting a policy regarding active transport that guides rules of the road, distance from bike paths, etc., and create a map of the Active Transportation Network

The actions in the Town of Riverview CEEP are similar to the actions in the CEEPs of other nearby communities. This means that many of the Town of Riverview CEEP actions, such as residential and commercial energy efficiency retrofits, clean energy conversions, and promoting EV networks, 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 Riverview could work with neighboring communities and partner organizations (such as the Regional Service Commission) to **establish a** regional coordinator staff position. Such a position would be responsible for ensuring the advancement of CEEP actions, stakeholder engagement, and more. A sample job description, skills, and credentials needed, are included in the annex of this report.

Development of a governance structure, communications and stakeholder engagement strategy, key performance indicator framework, and action priority and implementation strategy within the plan must incorporate the community context.





These key aspects are defined during our CEEP implementation workshop, as part of QUEST Canada's SEC Accelerator Program. QUEST Canada could also undertake an economic impact assessment of the communities plan in order to determine annual savings, job creation and the potential for economic development if the CEEP is implemented.

### **1.2 What this Report Covers**

The Town of Riverview, in partnership with QUEST Canada, hosted a CEEP development workshop on November 28, 2023. The workshop engaged local stakeholders and municipal staff to help identify actions and measures for a CEEP.

Additionally, it included an overview of community energy and emissions planning and an overview of the results from the SEC benchmark exercise conducted by QUEST Canada. QUEST Canada then facilitated an action planning exercise that engaged local stakeholders to compare and select measures to include in a CEEP. This report contains a summary of the workshop — preferred measures are described in Section 2.

### **1.3 Who Participated in the Workshop**

Representatives of:

- The Town of Riverview
- NB Power
- TransAqua
- QUEST Canada

The total number of participants was eleven community representatives. See Annex 5 for a complete list of workshop participants.



# **2.0 CEEP ACTION PLANNING EXERCISE**

### 2.1 Key Recommendations and Outcomes

All CEEP action strategies are included in a separate <u>spreadsheet</u>. Participants reviewed all the action strategies provided by QUEST Canada, discussed additional actions and assigned each one a lead, level of priority, timeframe and cost, and indicated whether it needs a study, funding, or supporting policy.

# 2.1.1 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/bylaws, and partner initiatives. The community and partners could also develop a community retrofit project (combining energy efficiency initiatives).

Priority	High	Medium	Low
-			

Priority	Str	ategy for Implementation	Lead	Additional Details	Start Date
High	a.	Develop a community efficiency financing program with funding from FCM.	Finance Dept with assistance from CAO	It is unknown if it will require dedicated funding or a feasibility study. With potential partners/ commitments from NB Power	2025
High	b.	Adopt a public education strategy that includes knowledge sharing on public websites, newsletters and outreach initiatives to facilitates:	Communication Dept.	Low-cost strategy. It is unknown if it will require dedicated funding or a feasibility study. It will not require supporting policy to implement.	2024





Priority	Strategy for Implementation	Lead	Additional Details	Start Date
	<ul> <li>i. Improving awareness of all available programs/incentives and where to go, to encourage clean energy conversion in the community, including NB Power incentives for businesses (e.g. small business lighting program, commercial buildings retrofit program, net Metering).</li> </ul>			
High	<b>c.</b> Establish a target to increase System Operational Efficiency	NB Power/ Utilities	High-cost strategy. It is unclear if it will require policy to implement.	Unknown
High	<b>d.</b> Establish a target to increase Operational Productivity	NB Power/ Utilities	High-cost strategy. It is unclear if it will require policy to implement.	Unknown
High	e. Pilot the installation of residential EV chargers. Pilot installations can be part of an overall community program, which consist 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 electric vehicles will reduce combustion emissions and GHGs.	NB Power/ Utilities	High-cost strategy. It will require dedicated funding and a feasibility study. It is unclear if it will require policy to implement.	Unknown





Priority	Str	ategy for Implementation	Lead	Additional Details	Start Date
Medium	f.	Develop additional incentives to encourage homeowners, and businesses to improve the energy efficiency of heating systems.	Community engagement team	Low-cost strategy. It is unknown if it will require dedicated funding or a feasibility study. It will require supporting policy to implement. With potential partners/ commitments from NB Power.	2024
Medium	g.	Adopt a public education strategy that includes knowledge sharing on public websites, newsletters and outreach initiatives to facilitates: i. Improving awareness of all available programs/incentives and where to go, to encourage energy efficiency both for commercial and residential, including NB Power incentives for businesses (e.g. small business lighting program, commercial buildings retrofit program, net Metering).	Community Engagement Team	Low-cost strategy. It is unknown if it will require dedicated funding or a feasibility study. It will not require supporting policy to implement.	2024
Medium	h.	Develop a community efficiency financing program, with funding from the FCM.	Municipal staff, the Province of New Brunswick, and the FCM	Medium-cost strategy. It will require additional funding (FCM, PACE Atlantic) and a feasibility study. It is	2024



Priority	Stı	rategy for Implementation	Lead	Additional Details	Start Date
				unknown if it will require supporting policy.	
Low	i.	Obtain funds (from the FCM GMF) to undertake a feasibility study for a community retrofit aimed at improving energy efficiency of residential and commercial buildings in the community to reduce GHG emissions and lowering energy cost/ improving affordability.	Finance Dept with assistance from CAO	With potential partners/ commitments from NB Power and Southeast Regional Service Commission	2025

# 2.1.2 Distributed Energy Resources

Participants expressed support for:

**1. Waste Energy and District Heat.** This action strategy entails using a renewable or waste heat source(s), piping the heat underground, converting homes and businesses to district heat, monitoring, and managing load, and more. A technical study helps the community to understand all the components required and their cost.

				Priority	High	Medium	Low
Priority	Stra	ategy for Implementation	Lead	Add	itional Deta	ails	Start Date
High	a.	Conduct a technical and financial feasibility study to explore the creation of a district heat system, specifically for the Arena.	Collaborate with TransAqua	Hig It w ded (thr a fe is u req	h-cost stra ill require icated fun ough FCM asibility st nknown if uire policy	tegy. ding ) and udy. It it will	2025





Priority	Strategy for Implementation	Lead	Additional Details	Start Date
			changes/implement ation.	

**2. 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

High

Medium

Low

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Low	Educate residents and/or businesses on the potential and benefits of solar energy	Communicati on and Community Engagement Team	Low-cost strategy	2026

3. Data.

Priority High Medium Low

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Low	Collect data and report into community energy and emissions planning process	Community Engagement Team	Low-cost strategy	





### 2.1.3 Transportation

Participants expressed support for:

**1. Active Transport.** The Town of Riverview may encourage active transport and commuting (where transit exists). In addition to reducing GHGs, active transportation can help to reduce traffic congestion, reduce parking congestion, promote active living, and contribute positively to air quality and human health. Active transport networks also contribute to a more inclusive community and help bring cultures together.

Priority High

Medium

Low

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
High	The municipality may adopt a policy that guides rules of the road, distance from bike paths, how to incorporate new technologies such as segways or electric bicycles, and for bylaw enforcement.	Community Engagement team	Medium-cost strategy. It will not require dedicated funding	2024
Medium	a. Encourage citizens to forego single occupancy vehicles for active transport using the Coastal Link mapping data to popularize the additional trail networks.	Communicati ons and the Community Engagement Team	Low-cost strategy. It will not require additional funding, a feasibility study, or any policy changes.	2025
Medium	<b>b.</b> The town may partner with community organizations to launch new projects encouraging active transportation (e.g., eBike sharing system, bicycle parking, resting/cooling station, showers, and lockers, signage to encourage active	Community Engagement Team	Medium-cost strategy. It is unknown if it will require additional funding, a feasibility study, or any policy changes.	2026





Priority	Strategy for Implementation	Lead	Additional Details	Start Date
	transportation, incentives for bike purchases/ exchange.			

**2. Fuel-Efficient Driving.** Fuel-efficient driving can save you hundreds of dollars in fuel each year, improve road safety and prevent wear on your vehicle. If all drivers in Canada practiced fuel-efficient driving, we would collectively prevent six megatonnes of carbon dioxide from entering the atmosphere each year. The combination of enhanced fuel efficiency, improved road safety and reduced GHG emissions make fuel-efficient driving a winning strategy for Canadian drivers.

Priority High Medium Low

. . ....

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Medium	Apply for funding from Eco-Action (Environment Canada - if led by a community organization/NGO), Irving Foundation, NB Environmental Trust Fund).	Community Engagement Team		2026
Low	Develop public awareness tools including printed materials, forums, webinars and free presentations, social media campaigns, media, editorials.	Community Engagement Team		2027
Low	Compliment activities with electric vehicle charging infrastructure.	Community Engagement Team		2027

**3. 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 — as EVs are cost-effective and deliver great performance — 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 High Medium

lm Low

Priority	Str	ategy for Implementation	Lead	Additional Details	Start Date
High	S\ el	witching municipal fleet of vehicles to ectric/hybrid/low-carbon.	Community Engagement Team	Medium-cost strategy	2026
Low	a.	Recommended that the town creates incentives that will reward individuals who choose to purchase EV or second-hand replacements, or demonstrably more fuel-efficient compact vehicles.	Community Engagement Team	Medium-cost strategy.	2028
Low	b.	The town, together with local partners, could conduct a campaign to educate citizens, promote benefits of switching to fuel-efficient vehicles, and highlight available rebates/programs, and address barriers (e.g., range anxiety).	Community Engagement Team	Low-cost strategy.	2028

**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 local context; ex. cycling networks, bike share programs, pathways, and pedestrian-friendly sidewalks). This could also include supporting/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	Additional Details	Start Date
High	Pedestrian-friendly sidewalks (expansion, streetscaping, shade tree planting)	Community Engagement Team	Medium-cost strategy	2023
Medium	Bike parking facilities or Bike Racks	Parks Operation	Low-cost strategy	2023
Medium	Bike Lanes (painted bike lanes, cycle tracks, 'shared roadways'/ sharrows, contraflow bike lanes)	Engineering and Public Works	High-cost strategy	2023
Low	Public bike tire pumps	Parks Operation	Low-cost strategy	2023
Low	Multi-use trails	Park Operations	Low-cost strategy	2023
Low	Carsharing programs	Community Engagement Team	High-cost strategy.	2030

#### 5. Data

Priority Medium High

Low

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Low	Collect data and report into community energy and emissions planning process	Community Engagement Team	Low-cost strategy	





### 2.1.4 Water Conservation

Participants expressed support for:

**1.** Optimizing Water and Wastewater Systems, promoting water conservation, promoting potable and non-potable water re-use, and enhancing stormwater management practices.

		Priority	High Medium		Low
Priority	Strategy for Implementation	Lead	Addit Detai	tional ils	Start Date
Medium	Implement measures to optimize water and wastewater systems to reduce energy consumed in the pumping and treatment of water. The measure could include efficiency upgrades to wastewater treatment equipment.	TransAqua			2030
Medium	Implement measures to promote conservation (public awareness campaign) and/or conduct a retrofit program to conserve water, such as targeting low-flow showerheads.	Communicatio ns and/or Community Engagement Team	Low-( strate	cost ?gy	2028
Medium	Establish a program to promote potable or non-potable water reuse. This could include a public awareness campaign, and also include incentivizing rain barrels.	Communicatio ns and/or Community Engagement Team	Low-( strate	cost ?gy	2023
Low	Implement measures to reduce peak flow, such as stormwater retention ponds/tanks, bioswales, or rain gardens. Also consider and prepare for changing weather patterns related to climate change that may impact infrastructure.				





2. Data					
		Priority	High	Medium	Low
Priority	Strategy for Implementation	Lead	Additior Details	nal	Start Date
Low	Collect data and report into the community energy and emissions planning process.	Community Engagement Team	Low-cos strategy	t	

# 2.1.5 Waste

Participants expressed support for:

1. Recycling and waste reduction practices				
	Priority	High	Medium	Low

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Medium	Establish waste management programs to reduce non recyclable, inorganic residential landfill waste as a means to reduce the total embedded energy in discarded products. This may include:			
Low	a. Pursue a commercial composting project because of its lower tipping fees compared to municipal composting.	SNBSC (waste management) and municipal staff	Medium-to high-cost strategy. Will not require a feasibility study. It is unclear if it will require the introduction or change of	Unkno wn





		policy. It may require funding.			
2. Data					
		Priority	High	Medium	Low
Priority	Strategy for Implementation	Lead	Additior Details	nal	Start Date
Low	Integrate and report into community energy and emissions planning process.	Community Engagement Team	Low-cos strategy	t	

### 2.1.6 Land Use

Participants expressed support for:

1. Updating the municipal plan, land use plan, and policies and bylaws. 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 Riverview 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	High	Medium	Low
Priority	Strategy for Implementation	Lead	Additi Detail	Start Date	
High	Adopt policies to encourage compact, mixed-use, and transit-oriented developments with a diversity of building types. This may include: - Updating the Official Community Plan	Council and municipal staff	Low-cost strategy. It requires supporting policy to implement.		2024





Low

- Updating Zoning Bylaw
- Diversifying land use mix
- Secondary suite bylaws
- Amendments to reduce parking requirements

### 2.1.7 Other

Participants expressed support for:

**Business Award** - Add an award category to the Town's existing business awards that would celebrate a local business that has taken measures to reduce their carbon footprint.

Priority High Medium

Priority	Strategy for Implementation	Lead	Additional Details	Start Date
Medium	Add a category to the Town's existing business awards to evaluate business based on their efforts to move towards energy efficiencies.	Community Engagement Team	Low-cost strategy.	2025





# **3.0 ENERGY MAP EXERCISE**

# 3.1 Key Recommendations and Outcomes

# **High level Summary of Key Findings**

Based on the results of the pre-survey and the workshop, the Town of Riverview has the following strengths and opportunities to advance community energy and emissions reduction initiatives.

Areas	Key Areas for Improvement and Opportunities
Energy Efficiency	<ul> <li>Energy efficiency retrofits for:</li> <li>Community properties – The Arena, Town Hall, Coverdale Centre, Riverview Mall, churches, future recreation centre, outdoor pool</li> <li>Schools – Riverview High School, Elementary School, Riverview East School, Frank L. Bowser School</li> <li>Commercial, Industrial properties, and Agricultural operations</li> </ul>
Waste and renewable heat	<ul> <li>Sources identified:</li> <li>Municipal wastewater treatment facilities (TransAqua)</li> <li>Long-term care facility (Coverdale Road)</li> <li>Nav Canada (Old Coach Road)</li> <li>Micro-breweries</li> <li>Operational Centre at Robertson Street (produced from surplus biomass)</li> <li>End Uses:</li> <li>Arena</li> <li>Operational of TransAqua</li> </ul>
Renewable power	<ul> <li>Sources:</li> <li>Solar roof/ ground potential at the TransAqua site</li> <li>Solar roof/ ground potential at the Operational Centre</li> <li>Biomass from the Operational Centre</li> <li>Solar rooftop potential at the Arena</li> <li>Wind potential at Moncton Golf Course</li> <li>Hydro potential from Mill Creek Dam</li> </ul>
Land use	<ul> <li>New residential and mixed-use development areas around Gunningsville and Dickey Boulevard, Suffolk Street, Coverdale Road,</li> </ul>

**Q**UEST\*



	<ul> <li>High-density housing opportunities near the Goldsboro Avenue, Trites Road, and Bridgedale Boulevard</li> <li>Green infrastructure opportunities around:         <ul> <li>Mill Creek Nature Park as carbon inventory</li> <li>Potential Storm Retention Pond location near Lawson Avenue, Findlay Boulevard</li> </ul> </li> </ul>
Transportation	<ul> <li>Potential New EV charging station at:         <ul> <li>Major destinations (e.g., Rebecca Schofield Accessible Playground on Cleveland Avenue)</li> <li>Town Hall</li> <li>Ops Centre</li> <li>Coverdale Road (Two Level.2 EV chargers planned in 2024)</li> </ul> </li> <li>A transit network spanning key destinations from Highway 106, Coverdale Road, and Gunningsville Boulevard to the vicinity of the Petticodiac River.</li> </ul>
Energy networks	<ul> <li>The TransAqua (wastewater treatment facilities) site and adjacent facilities</li> <li>A small industrial area</li> <li>The Operational Centre as a potential source for district heating to adjacent facilities</li> <li>The area surrounding Arena</li> </ul>
Other	<ul> <li>Potential for residential houses and businesses to undertake energy efficiency measures (e.g., rooftop solar, etc)</li> <li>Potential for reducing sewer overflow</li> <li>Potential growth in residents by 2040</li> <li>Expansion of currently identified sites</li> </ul>

Full Outcomes and findings can be found in the Community Energy Mapping Final Report – October 2023



# **4.0 SUMMARY OF PRIORITIZED ACTIONS**

For each action selected, participants determined a priority, cost level, lead responsible, partner actions, and preliminary strategy for implementation. They also identified whether it needs a study, funding, or supporting policy. Here is a summary of the priority of actions identified above:

In summary, the high priority actions are (to start in 2024):

- Develop a Community Efficiency Financing Program, with funding from FCM
- Invest in creating a public education strategy that includes a website and outreach initiatives to increase awareness of pilot projects, incentive programs, and clean energy conversion opportunities
- Utilities to establish target to increase System Operational Efficiency and Operation Productivity, and to increase pilot installation of residential EV chargers
- Conduct a technical and financial feasibility study to determine opportunities for waste energy use or district heat for the Town's Arena
- Adopt policies to encourage compact, mixed-used and transit oriented developments with a diversity of building types
- Adopt a policy that guides rules of the road, distance from bike paths, how to incorporate new technologies (e.g., segways or e-bikes and bylaw enforcement)
- Switching Municipal fleet of vehicles to electric/hybrid/low-carbon
- Implement pedestrian-friendly sidewalks (expansion, streetscaping, shade tree planting)
- Collect data and report all the measures chosen into the CEEP process

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

- Obtain annual data from energy utility/incentive providers regarding the number of incentives provided for clean energy conversion and commercial efficiency retrofits or new builds to measure GHG impact
- Develop a public education campaign to inform the public about available incentives for energy efficiency retrofits, including educational efforts aimed at promoting the installation of energy-efficient products
- Launch a community retrofit project or community efficiency program (or study) for energy efficiency in collaboration with partners/regions
- Launch an education campaign and community-wide challenges to encourage the public to opt for active transport over single occupancy vehicles
- Partner with community organizations to initiate new projects that promote active transportation
- Consider expanding bike parking facilities or installing bike racks, as well as creating additional bike lanes
- Upgrade water and wastewater equipment systems to enhance efficiency
- Promote water conservation by implementing a retrofit program to conserve water (e.g., toilet dams, faucet aerators or washers, rainwater harvesting)
- Promote potable and non-potable water re-use through public awareness campaigns





• Collaborate with Southwest Regional Service Commission to establish waste management programs for waste reduction (e.g., garbage bag tags, re-use programs/ community swap days)

The low priority actions are:

- Educate residents and/or business on the potential and benefits of solar energy
- Create incentives to rewards individuals for purchasing EVs or second-hand replacements
- Launch a campaign to educate residents and promote the benefits of switching to fuel-efficient vehicles
- Consider implementing transportation management demand measures, including public bike tire pumps, multi-use trails, and car-sharing programs

Other actions, with no priority assigned:

- Develop public awareness tools for fuel-efficient driving initiatives
- Apply for funding from Eco-Action, Irving Foundation, and NB Environmental Trust Fund in relation to fuel-efficient driving

Participants recommended starting by **studying or piloting specific measures** and **accessing funding** (e.g. FCM Green Municipal Fund, NB Environmental Trust Fund) to implement actions, support stakeholder engagement, and contribute to communications activities.

Participants identified the following **policies** that may be needed to support CEEP actions:

- Develop a policy or set of policies, and/or a bylaw or bylaws requiring connection to district heat for future developments in the community
- Develop and adopt a policy/bylaw to facilitate the process of building compact, mixed-use developments, and the adoption of energy efficiency measures in new developments
- Develop a policy that all building retrofits and new builds/ developments use LEDs

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

Utilities (e.g., NB Power and Liberty), that already offer programs/incentives will expand those, and pilot smart grid (e.g. storage), renewables, and smart metering programs. It is critical to align CEEP actions with utility programs or incentives that may become available. There is an opportunity for energy efficiency in the Town of Riverview, and a need for an energy efficiency strategy for low-income housing (e.g. using FCM GMF funding) and heritage buildings — although challenges exist. Additional funding mechanisms are listed in Annex 3.





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

#### Figure 2: Preliminary Roadmap for Implementation





# **5.0 POTENTIAL NEXT STEPS**

- Participate in QUEST Canada's CEEP Implementation Workshop, which is part of the Pan-Atlantic Accelerator Program. The workshop will help your community establish a governance structure (including internal capacity and committees), a communications and stakeholder engagement strategy, a strategy for data collection and monitoring key-performance indicators, and support the review and refinement of strategies for your CEEP actions.
- Request council to review and approve GHG emissions inventory and Community Energy and Emissions Plan. Submit to FCM-ICLEI Partners for Climate Protection program for milestone 3: pcp@fcm.ca
- Examine the potential of establishing a regional coordinator or coordinators for example within the regional services commission to support the Town of Riverview to advance CEEP actions (e.g. public education, anti-idling, energy efficiency, etc.). See sample job description in the Annex. If the first option proves unfeasible, examine the potential to assign or hire a dedicated municipal staff.
- Obtain funding (e.g. NB ETF, FCM GMF, SJ Energy, NB Power), for a coordinator position, convening committees, advancing CEEP actions, communications and public education.
- Develop a budget based on annual priorities/studies. Include requests into annual budgets, and prepare funding proposals for specific projects (e.g. NB Environmental Trust Fund, the FCM Green Municipal Fund, etc.), where needed. Some actions require no capital investments, only small amounts of labor time (e.g. communications support), or outsourcing (e.g. design, marketing, studies, etc.).
- Launch studies or pilots according to the implementation timeline. Analyze the outcomes of full-scale community-side projects or capital projects based on financial or technical feasibility. Each action in the spreadsheet identifies whether a study or pilot is needed.
- Bring related policy decisions to council members, as recommended by staff and committees, or as identified within each action strategy. Policy decisions rest with the council.
- Align with programs offered by organizations such as NB Power, the FCM, and the federal and provincial governments, whenever possible. These programs provide incentives for the successful implementation of actions related to the CEEP, including: energy efficiency, clean energy conversion, renewable energy, transportation, public education, and other related initiatives.
- Report successes, impacts, and benefits to the community through an annual report card. Conduct further outreach throughout the year as needed, in alignment with CEEP actions and adaptation plan.
- Continue to consult QUEST Canada's <u>resource library</u>. This digital document is full of resources and links that can help your community on its journey to net-zero.





# 6.0 CONCLUSION

QUEST Canada appreciates the opportunity to work with the Town of Riverview to help inform the development of your Community Energy and Emissions Plan, as part of the NB Smart Energy Communities Accelerator Program.

This report summarizes the proposed recommendations and feedback received during the workshop on Nov 28, 2023, to inform or serve as a foundation for your CEEP.

We look forward to engaging you in our CEEP Implementation workshop, and working with you through our other services offered as part of the NB Smart Energy Communities Accelerator Program. For any further information about this report or the Accelerator Program, please contact us at info@questcanada.org.

# QUEST\*



# 7.0 ANNEXES

# ANNEX 1: 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 and financial analysis

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

- Degree in planning, public policy, engineering, sustainability, environmental science, resource management, business 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 (CEPM) 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**

<u>Program Management</u>: 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.

<u>Support Projects</u>: 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.

<u>Report and Advise</u>: 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.

<u>Build Relationships</u>: 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.

<u>Community Engagement and Support</u>: 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.

<u>Research</u>: Conduct research and studies (e.g. industry sector trends, development strategies, funding sources and programs). Synthesize information to support and inform CEIS. Determine and recommend the best course of action in response to challenges and issues.

#### Desired Credentials (Related Knowledge, Skills and Abilities)

- Minimum undergraduate degree in a relevant field (e.g. engineering, environment science and 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:
  - Systems design thinking
  - All aspects of energy (electricity, natural gas, transportation fuels, etc.) and greenhouse gas emissions
  - Community energy and emissions planning and energy management principles
  - The opportunities and challenges associated with distributed generation and renewable energy implementation
  - Facility energy efficiency projects and audits impacting energy and fuel consumption
  - Energy conservation and demand side management principles, programs and incentives
- Successful track record of program management and implementation and partnership development, including experience leading initiatives with multiple stakeholders and competing interests





- Demonstrated ability to facilitate multi-stakeholder committees and discussions towards progressive action
- Proven expertise in developing innovative ways of engaging, influencing, and working with the community
- Effective written and verbal communication skills particularly in terms of presenting and reporting to decision-makers
- Applied research and data analysis skills using qualitative and quantitative methodologies to create and evaluate briefing materials, performance metrics, and project recommendations
- Familiarity with municipal processes (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 and stakeholder meetings and site visits.

#### Compensation and Benefits

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

#### **Application Process**

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

Applications must be received by :

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





### **ANNEX 2: Embed in municipal plans, policies, and processes**

Although CEEP measures are focused on community-side energy and GHG emissions reduction, the Town of Riverview 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 (e.g. through permitting), as well as through council decisions (e.g. new policies or bylaws and budget decisions). Refer to <u>QUEST Canada's CEEP primer</u> for more details on embedding the CEEP into other municipal plans, policies, processes, and more.





### **ANNEX 3: Funding for CEEP actions**

It will be important for the municipality 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:

- Recognize 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
- Develop a budget for every year of the action plan and update on an annual basis
- Utilize funding (e.g. from FCM) to conduct studies, pilots and projects

#### Strategies to secure financial resources

Sources	Description
Budget	Create budget item and fund for CEEP measures
Internal financing sources	<ul> <li>Property taxes, tax levies</li> <li>Tax increment financing, local improvement charges</li> <li>User fees (on water, power and natural gas distribution system and waste)</li> <li>Development cost charges (DCCs)</li> <li>Green bonds</li> </ul>
Local Incentives and Rebates	<ul> <li>Natural asset management approach, full cost accounting and valuation of natural assets</li> <li>Estimate benefits from green infrastructure</li> <li>Combine funding with gas tax revenue</li> <li>Reinvest efficiency savings into low cost CEEP measures and community engagement</li> </ul>
New accounting and decision-making tools	<ul> <li>Consider natural asset management approach, full cost accounting and valuation of natural assets</li> <li>Estimate benefits from green infrastructure</li> <li>Combine funding with gas tax revenue</li> <li>Reinvest efficiency savings into low cost CEEP measures and community engagement</li> </ul>
Institutional grants and external sources of funding	<ul> <li>Scan and submit funding applications to:</li> <li>Federal agencies and governments <ul> <li><u>Natural Resources Canada</u></li> <li><u>Environment and Climate Change</u> (ECC)</li> </ul> </li> </ul>





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

FCM and ICLEI published a toolkit called <u>On the money: financing tools for local climate action</u>, which explains how your municipality can leverage investors to help you take action on climate change in your community. This toolkit includes tips on how to harness people's power through group purchasing and community-owned renewable power. It also illustrates how to 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 4: Methods for measuring the economic impact of CEEP**

There are significant economic benefits from improving energy efficiency across the Town of Riverview and implementing the full range of measures identified in the CEEP. It is important to quantify the economic impact of CEEP measures in order to gain support from senior decision-makers, elected officials, and the community.

Different methods of economic analysis serve various purposes and information. All methods are relevant to assessing the economic, environmental and social benefits of CEEPs, and to increase the knowledge of the economic impacts of these investments.

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

Method	Purpose
Community energy cost	To discuss total community energy use in a metric everyone understands, in order to generate different conversations with elected officials and stakeholders. An example of this could be the dollar amount spent on energy or money leaving the community.
Financial feasibility	To screen and prioritize measures, programs, or portfolios to identify if and when the investment will breakeven.
Levelized unit energy cost	To compare the per kWh or per GJ costs of different energy generating technologies across the expected lifetime of the asset.
Marginal abatement cost curve	To compare GHG emission reduction options according to which will cost the least or deliver the most financial savings, and according to their potential impact on GHG reductions.
Community socio-economic benefits	To inform the decision-making process and stakeholders on the total value to the local community and economy of a CEEP, considering how expenditures recirculate through local businesses, households, and governments.
Cost benefits	To screen and prioritize measures, programs, or portfolios to identify if benefits over time exceed initial costs. It identifies a portfolio of measures that maximize the economic, environmental, and social benefits from CEEP implementation.





# **ANNEX 5: List of participants**

# List of participants Town of Riverview CEEP Implementation Workshop November 28, 2023

Name	Organization
Karen Thompson	Manager, Community Engagement   Town of Riverview
Martin Dube	Director of Development and Legislative Services/ Town Clerk   Town of Riverview
Shannon Parlee	Town Treasure/ Director of Finance   Town of Riverview
David Shea	Director of Parks, Recreation, and Community Engagement   Town of Riverview
Alicia Clarkson	Town of Riverview
Kevin Rice	General Manager, TransAqua/ Greater Moncton Wastewater Commission
Rob Robichaud	NB Power
Heldagardis Renyaan	QUEST Canada
Norma Panetta	QUEST Canada
Malsi Angekumbura	QUEST Canada
Peter Krajcovic	

All participants agreed to be invited to a meeting of the external stakeholder advisory committee, once established.