



QUEST



**SMART ENERGY
COMMUNITIES
BENCHMARK**
September 2021



TOWN OF OROMOCTO, NB



Copyright © QUEST - Quality Urban Energy Systems of Tomorrow, 2021.

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

These materials are provided on an “as is” basis, and neither QUEST nor their affiliates guarantee any parts or aspects of these materials. QUEST and their 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.

New Brunswick Smart Energy Communities Accelerator Pilot Program Funders



TABLE OF CONTENTS

1	INTRODUCTION
5	GOVERNANCE
6	STAFF
11	DATA
16	FINANCIALS
20	STRATEGY
23	LAND USE
27	ENERGY NETWORKS
32	WASTE & WATER
36	TRANSPORTATION
41	BUILDINGS

Town of Oromocto, New Brunswick

Introduction:

This Benchmark Report was prepared by QUEST for the Town of Oromocto as part of the Smart Energy Communities Accelerator. This document identifies local strengths and potential opportunities, and can be used to update your scoring year after year.

Oromocto is a Canadian town in Sunbury County, New Brunswick. The town is located on the west bank of the Saint John River at the mouth of the Oromocto River, approximately 20 kilometres southeast of Fredericton. The town's name is derived from the name of the Oromocto River. Oromocto is thought to have originated from the Maliseet word *welamukotuk* which means "deep water". It is the administrative headquarters of the Oromocto First Nation band government and the site of Canadian Forces Base Gagetown, which dominates its economy and modern history.

Oromocto is growing and as of the 2016 census had a population of 9,223. Two additional communities are located within the Town Limits of Oromocto that are not counted in the municipal population. First is Oromocto 26, the First Nation Reserve, second is Base Gagetown. Taking the Reserve into consideration, the town has more than 9,000 residents. The Government of Canada states that there is normally an additional 1,000 personnel training on the Base. During the summer training period this may rise to 5,000 people.

Oromocto's layout is based on an innovative urban community design by well-known McGill University professor, architect, and planner Harold Spence-Sales. In 1956, when Professor Spence-Sales designed the community, it was considered novel because the schools were placed in the middle of each neighbourhood and surrounded by green space, houses were situated on the outskirts, power lines were underground, and the military base was at the forefront. The town celebrated its 50th anniversary in 2006 and continues to thrive today.

Key Recommendations / Identified Priorities:

GOVERNANCE

1. **Town and stakeholders:** Establish committee or cross-sectoral leadership team with a Terms of Reference and regular meetings who can help with or partner on implementation of community energy initiatives.
2. **Town:** Ensure all relevant local government departments are involved in the planning and implementation of community energy initiatives.
3. **Town and CFB Gagetown:** Add energy to planning bi-annual working group meeting agendas. Extend invitation to Oromocto First Nation.

STAFF

1. **Town:** Leverage community energy planning awareness raising / training for staff.
2. **Town:** Formalize community energy planning into staff roles.
3. **Town, OFN (Oromocto First Nation) and NGO (non-government organization):** Obtain support for Community Energy staff (internal, embedded, partners).
4. **Town and Utilities:** Succession planning related to community energy.
5. **Utilities and/or other levels of government:** Explore opportunities to supplement Town staff by embedding expertise or through funding; enhance program delivery.
6. **Utilities:** Dedicate single point of contact for the Town.

DATA

1. **Utilities:** Define a standardized process for requesting and sharing data (currently ad-hoc), including appropriate contact persons, application and release documents and estimated timelines.
2. **Town and OFN:** Create an inventory of emissions and energy use / spending for the community and corporate operations.
3. **Town and Stakeholders:** Undertake an energy mapping exercise and model future scenarios, including for efficiency potential, renewable energy potential, energy poverty, infrastructure constraints, social acceptance, distribution of costs and benefits, climate risks, etc., and publish the map/model outputs.

FINANCIALS

1. **Utilities:** Ensure programs exist for multi-residential buildings and low income housing.
2. **Town:** Publish list of financial tools to support community action / to spur investment in local energy systems / projects, particularly energy efficiency in new and existing buildings.
3. **Town:** Consider long-term budget allocation, revolving funds, or energy performance contracts (for corporate energy initiatives).
4. **Town:** Explore/adopt financial levers to support densification and high energy performance of new buildings, for example: density bonusing, development charge or tax adjustments, permit fee reimbursements etc.

STRATEGY

1. **Town and Stakeholders:** Develop a community energy plan.
2. **Town and Stakeholders:** Conduct a community-wide economic analysis to determine the total and relative costs of potential community energy initiatives within the community.
3. **Town:** Establish schedule for updating and engaging the public and local stakeholders.
4. **CFB Gagetown:** Integrate plans and apply an energy lens.

LAND USE

1. **Town:** Strengthen policy supporting high energy performance of new buildings and developments, e.g. expedited permit process, energy efficiency design guidelines, requiring analysis of energy performance at plan or development stages, fee adjustments, stretch codes, etc.
2. **Town:** Consider cool roof / green roof policy, expanding green space and 'urban' gardens.
3. **Town:** Include local and/or renewable energy options into land-use plans, policies, tools and processes.
4. **Town and/or local organizations:** Engage public on impacts of land use patterns on energy.

ENERGY NETWORKS

1. **Town or Utilities:** Launch education/engagement strategy about energy delivery systems.
2. **Town and OFN:** Undertake analysis of potential local renewable resources.
3. **Town and/or Utility:** Expand alternative fuel infrastructure (e.g. EV charging).
4. **Utilities:** Further development of Smart Grid, identify local opportunities.
5. **Town:** Investigate feasibility of district energy systems to increase efficiency and incorporate local and/or renewable thermal energy sources such as waste heat, geothermal, biomass, CHP, and solar.

WATER AND WASTE

1. **Town and CFB Gagetown:** Increase public education on water conservation, re-use, energy impact.
2. **Town and Developers:** Consider bioswales, rain gardens, permeable pavement, vegetation, for improved stormwater management and management initiatives that consider future climate risk. Monitor energy impact.
3. **Town:** Consider a rainwater collection program.
4. **Town and/or FRSC (Fredericton Region Solid Waste Commission):** Implement garbage bag limits or tipping fees, plastic bag bans, expand recycling.

TRANSPORTATION

1. **Town:** Consider more bike racks and bike repair stations, bike share program, carpool program, or rideshare program especially for public sector buildings.
2. **Town:** Develop an anti-idling program or policy (for community, not just staff).
3. **Town:** Consider corporate procurement policy for clean vehicles (e.g. fuel efficient, hybrid, electric).
4. **Town, Public Sector and Utility:** Increase EV charging and active transportation (AT) amenities at facilities.

BUILDINGS

1. **Town, OFN and Utilities:** Increase public education on buildings and energy use, available programs.
2. **Town:** Integrate sustainable building standards (e.g. Town Green Building Standards, LEED) for the design, construction and operation of new developments.
3. **Town:** Integrate waste energy or renewable energy in municipal buildings / public facilities.
4. **All:** Increase the number of municipal, utility and commercial buildings that are retrofitted or built to high energy performance standards, use renewables, and are benchmarked.

Governance

6 / 14.5 (41%)

1.1.1. A community energy leadership team to co-govern community energy initiatives	
Checklist	
A multi-sectoral entity of community leaders (community leadership team) is formed around a common agenda to promote and facilitate community energy goals/implementation, and foster partnerships. [1 point]	
The community leadership team members actively participate, and implement actions within their own organizations to promote SEC goals/implementation. [1 point]	
Regular meetings between the leadership team occur. [0.5 point]	
An organization and/or individual acts as secretariat for the leadership team, and leads and coordinates community engagement. [1 point]	

NOTES:

During an interview with John Jackson (Director of Planning and Compliance) and Cindy Goguen (Legislative Clerk) in May 2021, both noted that Oromocto is new to community energy planning. They are not involved in the Federation of Canadian Municipality (FCM)'s Partners for Climate Protection Program (PCP) and thus do not have an energy and emissions inventory. Ideally they'd like to see 4-8 staff working at varying capacities involved in governing community energy planning over time.

1.1.2a. Cross-departmental coordination within the local government	
Checklist	
Regular meetings occur, with relevant departments, within the local government. [1 point]	
A clear mandate exists for all relevant departments such as through an Official Community Plan or Strategic Plan. [2 points]	

NOTES:

See note for 1.1.1.

1.1.2b. Strategic alignment within the local electric utility	
Checklist	
Meetings between relevant departments occur within the electric utility on a project-to-project basis as they relate to community energy initiatives. [1 point]	✓

Participation in, and support for, community energy initiatives is seen as a strategic priority within the electric utility.



[2 points]

NOTES:

Énergie NB Power’s community energy initiatives come in many forms: adding public EV charging networks to a community, helping municipalities to make their buildings and operations more energy efficient by participating in energy efficiency programs, as well as opportunities for renewable generation through competitive programs such as the Community Energy Program, LORESS (Locally Owned Renewable Energy Projects that are Small Scale Program), and Embedded Generation. Some of these programs and services are offered on an ongoing, regular basis while others are offered as needed.

Departments involved in offering these products, services and programs include but are not limited to: Customer Energy Solutions, Energy Smart NB, Strategic Planning, Operations, and many more. NB Power is in the process of developing a Community Energy Strategy. This will include an overview of the products, services, and programs available to municipalities, and how NB Power can better meet the needs of municipal customers.

1.1.2c. Strategic alignment within the natural gas utility

Checklist

Meetings between relevant departments occur within the natural gas utility on a project-to-project basis as they relate to community energy initiatives.



[1 point]

Participation in, and support for, community energy initiatives is seen as a strategic priority within the natural gas utility.



[2 points]

NOTES:

Liberty is working with several communities on energy projects (confidential). They are embarking on energy initiatives to help communities with their energy and emissions. They are working with one community, Havelock (outside of Moncton), to install a natural gas pipeline to serve an anchor load. All their initiatives are strategic priorities, so working with communities is seen as part of their goals.

1.1.3. Knowledge sharing with other communities

Scale

Representative(s) from the community leadership team has attended or participated in events or knowledge sharing groups that involves members from outside of the community.

[1 point]

Representative(s) from the community leadership team has presented in events or led/facilitated knowledge sharing groups that involves members from outside of the community.

[2 point]

NOTES:

See note for 1.1.1.

Staff

9 / 24 (38%)

1.2.1a. Local government staff resources tasked with managing community energy initiatives

<i>Scale</i>	
The local government has greater than 0.25, but less than 1, FTE staff tasked with applying an energy lens to community initiatives and overseeing specific community energy initiatives. [1 point]	
The local government has 1-2 FTE staff tasked with applying an energy lens to community initiatives and overseeing specific community and corporate energy initiatives. [2 points]	
The local government has equal to or greater than 3 FTE staff tasked with applying an energy lens to community initiatives and overseeing specific community and corporate energy initiatives. [3 points] [N/A for communities with population <10 000]	N/A

NOTES:

During an interview with John Jackson (Director of Planning and Compliance) and Cindy Goguen (Legislative Clerk) in May 2021, both noted that Oromocto is new to community energy planning. They are not involved in the Federation of Canadian Municipality (FCM)'s Partners for Climate Protection Program (PCP) and thus do not have an energy and emissions inventory. Ideally they'd like to see 4-8 staff working at varying capacities involved in governing community energy planning over time.

The former CAO was the individual who got the community involved with NB SECA and John and Cindy have continued the initiative. Not a full time effort by Cindy and John (less than 5% of their time each).

1.2.1b. Community energy staff position support

<i>Scale</i>	
There is an external staffing resource within the community to support the coordination of community energy initiatives. [1 point]	
There is an embedded community energy manager program or cost-sharing agreement for staff person(s) with split-accountability dedicated to working on community energy initiatives. [2 points]	

NOTES:

N/A.

1.2.1c. Electric utility has staff resources tasked with supporting and engaging with community energy initiatives

<i>Scale</i>	
The electric utility has greater than 0.25, but less than 1, FTE staff tasked with supporting and engaging with community energy initiatives. [1 point]	
The electric utility has equal to or greater than 1 FTE staff tasked with supporting and engaging with community energy initiatives. [2 points]	✓

The electric utility has a dedicated single point of contact engaging directly with the municipality or other community leaders. [3 points]	
--	--

NOTES:

Énergie NB Power has a full-time Community Energy Specialist, who helps connect municipalities to relevant products/services and programs available through NBP to support their initiatives. In general, municipalities have the support of their Account Manager for general advice, account inquiries, access to historical energy consumption, and walk-throughs of buildings. Several Énergie NB Power Energy Advisors and program support staff help municipalities participate in Energy Efficiency programs, and help align their initiatives with Énergie NB Power services and incentives, including low carbon economy funding. Product Managers work with municipalities on everything from LED street lighting to public EV charging stations.

Mayors and Council have a line to Énergie NB Power via their Director of Government Relations to discuss strategic initiatives at a more senior level. Énergie NB Power is developing a community engagement strategy to better service customers and their unique needs.

Énergie NB Power is looking at sub-classes (rates) for different types of customers, including for municipalities. This would affect the access/services for municipalities (for energy efficiency). Énergie NB Power has recognized a need to augment / increase their team to respond to municipal needs.

1.2.1d. Natural gas utility staff resources tasked with supporting and engaging with community energy initiatives

<i>Scale</i>	
The natural gas utility has greater than 0.25, but less than 1, FTE staff tasked with supporting and engaging with community energy initiatives. [1 point]	
The natural gas utility has equal to or greater than 1 FTE staff tasked with supporting and engaging with community energy initiatives. [2 points]	✓
The natural gas utility has a dedicated single point of contact engaging directly with the municipality or other community leaders. [3 points]	

NOTES:

Liberty has staff for Government Relations and Business Development and actively engages with communities to see what their energy goals and opportunities are. Municipal energy initiatives are seen as opportunities for Liberty as an energy service provider. They indicated they are willing to look at new energy opportunities.

1.2.3a. Local government support for community energy management staff education

<i>Scale</i>	
Staff involved in community energy initiatives participate in, on average, 1 educational or training session per staff personnel per year relating to aspects of community energy initiatives. [1 point]	

Staff involved in community energy initiatives participate in, on average, 1 to 4 educational or training sessions per staff personnel per year relating to aspects of community energy initiatives. [2 point]	
Staff involved in community energy initiatives participate in more than 4 educational or training sessions per staff personnel per year relating to aspects of community energy initiatives. [3 point]	

NOTES:

Building inspectors receive energy-related training (captured in 1.2.3b).

1.2.3b. Building inspector staff education

Checklist

The local government has a process for educating building inspectors on energy efficiency policies to ensure effective enforcement. [2 points] [N/A for northern communities and/or with population <10 000]	✓
---	---

NOTES:

Points awarded despite N/A status given building inspector training.

From follow-up communications with John Jackson (June 2021), building inspectors are fully trained and certified members of the New Brunswick Building Officials Association. They have the capacity to deal with any type of building code issues, including energy efficiency requirements. Oromocto has created various guides to help the public and contractors alike meet required standards.

1.2.3c. Electric utility support for staff education related to community energy

Scale

Staff involved in community energy initiatives participate in, on average, 1 educational or training session per staff personnel per year relating to aspects of community energy initiatives. [1 point]	
Staff involved in community energy initiatives participate in, on average, 1 to 4 educational or training sessions per staff personnel per year relating to aspects of community energy initiatives. [2 point]	✓
Staff involved in community energy initiatives participate in more than 4 educational or training sessions per staff personnel per year relating to aspects of community energy initiatives. [3 point]	

NOTES:

Énergie NB Power offers a variety of workshops every year, including the Energy Efficiency conference which contains modules available to both employees and attendees from other organizations to better understand Community Energy Plans and other areas of interest to municipalities. Energy Advisors within Énergie NB Power are continually expanding their expertise through memberships in organizations such as the Green Building Council, the Smart Energy Consumer Collaborative, the Association of Energy Engineers, and many more. Many of their Energy Advisors are Engineers and/or Certified Energy Managers which requires ongoing training to maintain certifications. Staff attend training on technology specific integrations (e.g. arena technologies, solar technologies etc). Employees in these areas are continually expanding their knowledge and skills to better support customers – such as municipalities – to implement their energy management and energy reduction projects. Community Energy Specialists also participate in community-based workshops on community energy planning.

1.2.3d. Natural gas utility supports for staff education related to community energy	
Scale	
Staff involved in community energy initiatives participate in, on average, 1 educational or training session per staff personnel per year relating to aspects of community energy initiatives. [1 point]	✓
Staff involved in community energy initiatives participate in, on average, 1 to 4 educational or training sessions per staff personnel per year relating to aspects of community energy initiatives. [2 point]	
Staff involved in community energy initiatives participate in more than 4 educational or training sessions per staff personnel per year relating to aspects of community energy initiatives. [3 point]	

NOTES:

Some Liberty staff obtain training related to community energy initiatives. They also learn about new energy innovations to understand how to apply them to NB. Lately, they've been learning about hydrogen, co-generation, and renewable natural gas.

1.2.4. Succession planning for staff roles managing and supporting community energy initiatives	
Checklist	
There is a program or strategy in place to facilitate succession of local government staff managing community energy initiatives. [1 point]	
There is a program or strategy in place to facilitate succession of electric utility staff supporting and engaging with community energy initiatives. [1 point]	
There is a program or strategy in place to facilitate succession of natural gas utility staff supporting and engaging with community energy initiatives [1 point] [N/A for communities not connected to natural gas grid]	

NOTES:

N/A.

Data

11.5 / 30 (38%)

1.3.1a. Electric utility commitment to sharing data	
Scale	
Requests for data and information are addressed in an ad-hoc fashion. [1 point]	✓
A standardized format for community energy data has been established for sharing data. [2 points]	
A standardized process is in place for requesting and sharing data, including appropriate contact persons, application and release documents and estimated timelines. [3 points]	

NOTES:

Énergie NB Power's Customer Service Infrastructure Team is able to provide municipalities with their historical corporate energy profiles, as well as aggregate level data at the community level for residential and commercial customer classes within their municipality. Provided that the data requirements are clearly defined, it typically takes 3-4 weeks from the date of request to generate the reports.

1.3.1b. Natural gas utility commitment to sharing data	
Scale	
Requests for data and information are addressed in an ad-hoc fashion. [1 point]	✓
A standardized format for community energy data has been established for sharing data. [2 points]	
A standardized process is in place for requesting and sharing data, including appropriate contact persons, application and release documents and estimated timelines. [3 points]	

NOTES:

Liberty provides energy data if it's been requested by a customer, on a case by case basis. They need customers' approval, but not for aggregation. An online customer portal is available.

1.3.2a. Community energy inventory and reporting	
Checklist	
A basic community energy or GHG inventory has been completed that includes energy use or emissions from residential, institutional, commercial, industrial, transportation, and solid waste sectors. [1 point]	

The community inventory includes a high level of detail, such as organization by building typology, transportation type, waste streams, and other uses as applicable (such as agriculture, land use change, or industrial processes). This may also include organization by energy spending.	
[1 point]	
A community energy or GHG target has been established and approved.	
[1 point]	
Realistic evidence-based (as opposed to aspirational), sector-specific community targets have been established and approved.	
[1 point]	
A timeline for inventory renewal is clear.	
[1 point]	
Inventory methodology and results are transparent and publicly available, such as through methodology documents.	
[1 point]	

NOTES:

N/A.

1.3.2b. Local government corporate energy inventory and reporting

Checklist

A basic corporate energy or GHG inventory has been completed that includes energy use or emissions from corporate owned buildings, street lighting, water and wastewater treatment, municipal fleet, and corporate and/or community solid waste.	
[1 point]	
A corporate energy or GHG target has been established and approved.	
[1 point]	
Realistic, evidence-based (as opposed to aspirational) corporate target(s) have been established and approved.	
[1 point]	
A timeline for inventory renewal is clear.	
[1 point]	
Inventory methodology and results are transparent and publicly available, such as through methodology documents.	
[1 point]	

NOTES:

Building condition assessments for four municipally-owned buildings were conducted in 2019. An energy lens did not appear to be applied and none of the capital plan recommendations include references to energy efficiency options.

1.3.2c. Electric utility corporate inventory and reporting

Checklist

Corporate energy or sustainability inventory/report has been completed that includes energy use or GHG emissions from utility operations. [1 point]	✓
The corporate inventory/report includes a high level of detail, such as organization by community boundaries or facilities, and/or other aspects of environmental management (such as water and waste). [1 point]	
Corporate energy or sustainability targets have been established. [1 point]	✓
Timeline for inventory/report renewal is clear. [1 point]	✓
Report methodologies are transparent and publicly available, and/or are aligned with existing reporting initiatives such as Global Reporting Initiative (GRI), Canadian Electricity Association (CEA) Sustainable Electricity Program, Carbon Disclosure Program (CDP) etc. [1 point]	

NOTES:

Énergie NB Power reports on its emissions annually, but not by facility. They have a goal to maintain a minimum of 40% of electricity generation from renewable energy sources, and a minimum of 75% of generation from non-emitting sources. In 2019-20, Énergie NB Power achieved 44% of generation from renewables, with 80% of it's generation coming from non-emitting sources.

More information can be found at: https://www.nbpower.com/media/1489943/2019-20_annual_report_en.pdf

Their integrated resource plan (IRP) mentions their sustainability goals, a profile of energy generation by type, and overall GHG emissions, as well as the Energy Smart Plan for NB: <https://www.nbpower.com/media/772015/nb-power-2017-irp-public-english.pdf>

1.3.2d. Natural gas utility corporate inventory and reporting	
<i>Checklist</i>	
Corporate energy or sustainability inventory/report has been completed that includes energy use or GHG emissions from utility operations. [1 point]	✓
The corporate inventory/report includes a high level of detail, such as organization by community boundaries or facilities, and/or other aspects of environmental management (such as water and waste). [1 point]	✓
Corporate energy or sustainability targets have been established. [1 point]	✓

Timeline for inventory/report renewal is clear. [1 point]	✓
Report methodologies are transparent and publicly available, and/or are aligned with existing reporting initiatives such as Global Reporting Initiative (GRI), International Petroleum Industry Environmental Conservation Association (IPIECA), Carbon Disclosure Program (CDP) etc. [1 point]	✓

NOTES:

Corporately and regionally Liberty has developed sustainability councils. Their goal is to hit sustainability targets by 2023, including 2,000 MW of additional renewable electricity.

There are 9 ESG (Environment, Social, Governance) goals in total: <https://libertyutilities.com/uploads/APUC-Sustainability-Report-2020.pdf>

1.3.3. Climate hazard assessments	
<i>Checklist</i>	
The community has an assessment of climate-related hazards and risks that exist, and are predicted into the future, within the community. This includes Traditional Ecological Knowledge and/or scientific information related to climate change. [1 point]	✓
The community has ongoing environmental monitoring programs in place to report on climate hazards. [0.5 point]	
The community has identified opportunities and actions to adapt and improve resilience to climate risks, such as through a climate resilience plan or strategy. [0.5 point]	✓

NOTES:

The Town of Oromocto has a detailed Emergency Operations Plan and fully functional Emergency Operations Centre located at its Municipal Offices on Doyle Drive. The Committee meets regularly and routinely exercises its plan. The Oromocto Emergency Operations Centre works closely with the New Brunswick Emergency Measures Organization (NB EMO), a division of the provincial government. NB EMO coordinates preparedness, response and recovery operations during emergencies and administers disaster financial assistance programs. The Provincial Emergency Operation Centre (PEOC) is located in Fredericton NB. From this facility, the “whole of government” response to an emergency is coordinated.

From the Sustainable Community Strategy (2014, pg. 30) the town has several projects to develop emergency recovery and mitigation strategies in response to disasters, including large scale disasters, and to develop solutions to mitigate climate change and other hazards as part of the Town’s Disaster Plan. The Town also has plans for programs that expand disaster response capabilities through the development of a highly skilled team including staff, volunteers and regional partners, and ensure that resources and infrastructure are sufficient to meet current and future disaster planning needs.

From the pre-SEC Benchmark survey, there is an understanding that there is a flood warning, and steps have been taken to prohibit development within the identified floodplains within the Town. There is no specific flood mitigation plan, however, the Town owns most of the flood prone land with exception of a few small parcels. These areas are either zoned in a way that will not allow for permanent development on that site, or they must be built to a minimum floor elevation of 1 metre above flood level.

From a follow-up email in June 2021, climate hazard assessments were created in order to develop contingency plans for the following climatic hazards: forest fire, hurricane, earthquake, tornado, flood and major winter storm.

1.3.4. Energy mapping	
Checklist	
Community undertakes an energy mapping exercise to identify local energy priorities and opportunities. [1 point]	
A climate hazard map layer has been integrated into the energy mapping process. [0.5 point] [N/A if energy map has not been completed and/or for communities with population <10 000]	N/A
Municipal and/or utility infrastructure and asset management planning has been integrated into the energy mapping process. [0.5 point] [N/A if energy map has not been completed and/or for communities with population <10 000]	N/A
A community-informed map layer of social acceptance for community energy initiatives has been integrated into the energy mapping process. [0.5 point] [N/A if energy map has not been completed and/or for communities with population <10 000]	N/A

NOTES:

Energy mapping has not yet been conducted with this community but will be during the NB Smart Energy Communities Accelerator program. It is strongly recommended to involve CFB Gagetown and Oromocto First Nation in the exercise.

1.3.5 Energy scenario modelling	
Checklist	
An energy model has been completed, which incorporates scenarios for both supply and demand of energy. [1 point]	N/A

Energy modelling includes multi-stakeholder considerations such as major energy users and suppliers, energy distribution infrastructure constraints, and/or how costs and benefits are distributed throughout the community.	N/A
[0.5 point] [N/A if energy model has not been completed and/or for communities with population <10 000]	
Assumptions and methodologies in energy modelling are transparent and readily accessible.	N/A
[0.5 point] [N/A if energy model has not been completed and/or for communities with population <10 000]	
Outputs from energy modelling are presented in a digestible way, such as through infographics or one-pagers.	N/A
[0.5 point] [N/A if energy model has not been completed and/or for communities with population <10 000]	

NOTES:

This section is N/A.

Financials

16 / 23 (70%)

1.4.1. Assessment of financial mechanisms and funding	
Checklist	
A transparent and publicly available assessment of financing mechanisms (to offer or to take advantage of) has been completed.	
[1 point]	
Assessment of financial mechanisms includes considerations of a variety of ownership models.	
[1 point]	
Assessments of financial mechanisms include considerations of social equity, such as access by financially underserved populations.	
[1 point]	

NOTES:

No assessment of financial mechanisms and funding for energy initiatives were included in any key documents or on the Town's website.

From the pre-SEC Benchmark survey sent to the community, "...we do not have any specific fund being allocated to [community energy/emissions reduction initiatives]. The Planning & Compliance Department has allocated some funds through its operating budget to help small contractors pair up with Énergie NB Power's new home energy savings program."

1.4.2. Financial mechanisms for local government corporate energy initiatives	
Scale	
The local government has funded corporate energy initiatives through grants from upper-levels of government or utility incentives.	
[1 point]	
The local government has funded corporate energy initiatives through ad-hoc capital budget allocation(s).	✓
[2 point]	

The local government is committed to funding corporate energy initiatives through financial vehicles such as long-term budget allocation, revolving funds, or energy performance contracts.	
[3 point]	

NOTES:

The Town has taken advantage of a few Énergie NB Power programs implemented within the building department to perform some retrofits.

From the pre-SEC Benchmark survey sent to the community: "At this time, we do not have any specific fund being allocated in this area. The Town does keep an eye on incentive programs. We do have some capacity to fund smaller projects through some of our general capital reserves (less than \$500K). Anything larger would require borrowing."

1.4.3. Fees to address automobile congestion

<i>Checklist</i>	
The local government implements parking charges.	
[1 point]	
The local government (or regional government) implements road tolls/congestion charges	N/A
[1 pont] [N/A for communities with population <10 000]	

NOTES:

N/A.

1.4.4. Funding for active transportation infrastructure

<i>Scale</i>	
The local government funds active transportation infrastructure through grants from upper-levels of government or utility incentives.	
[1 point]	
The local government funds active transportation infrastructure through ad-hoc capital budget allocation(s).	✓
[2 point]	
The local government is committed to funding active transportation infrastructure through operating budget allocation.	
[3 point]	

NOTES:

The Town's Active Transportation Network was completed in 2017 according to the Corporate Action Plan (pg. 6). From a follow-up email with the community in June 2021, most of the funding for active transportation comes from capital budget allocation for the original construction, and the commitment of operating budgets for operation and maintenance.

1.4.5. Financial levers for densification

<i>Scale</i>	
The local government has aligned or incorporated at least 1 financial lever to support densification.	N/A
[1 point] [N/A for communities with population <10 000 and/or growth <0% annual change]	

The local government has aligned or incorporated more than 1 financial lever to support densification [2 points] [N/A for communities with population <10 000 and/or growth <0% annual change]	N/A
---	-----

NOTES:

This section is N/A.

1.4.6a. Incentives for energy initiatives in new buildings	
<i>Checklist</i>	
Incentives exist for energy initiatives in new single family residential units. [1 point] [N/A for communities with population <10 000 and/or growth <0% annual change]	✓
Incentives exist for energy initiatives in new multi-unit residential, commercial, and/or mixed-use buildings. [1 points] [N/A for communities with population <10 000 and/or growth <0% annual change and/or no significant multi-unit residential or commercial / mixed-use building stock]	✓

NOTES:

Points awarded despite N/A status in Benchmark due to Énergie NB Power programs.

Énergie NB Power offers an incentive program for new homes built with electricity that are designed to use at least 50% less energy than code. <https://www.saveenergynb.ca/en/save-energy/residential/new-home-energy-savings-program/>

There are also incentives for new commercial buildings, but not specifically multi-unit residential.

The natural gas utility (Liberty) does not provide incentives / programs.

1.4.6b. Retrofit program for existing single family residential building stock	
<i>Checklist</i>	
Community program exists to help homeowners conduct energy audits or evaluate feasibility of energy efficiency retrofits of existing single family residential units. [1 point]	✓
Incentives exist for energy efficiency retrofits of existing single family residential units. [1 point for simple retrofit and 2 points for deep energy retrofit]	✓✓
Repayment mechanisms exist for energy efficiency retrofits of existing single family residential units. [1 point]	
Community retrofit programs (audits, simple and deep energy retrofits) are delivered in a streamlined system to support building owners and tenants with retrofit programs, including financial incentives, technical support and behaviour modification. [1 point]	✓

NOTES:

All homeowners and commercial class buildings in New Brunswick are eligible to participate in energy audit-based efficiency programs: <https://www.saveenergy.nb.ca/en/save-energy/residential/total-home-energy-savings-program/>

The natural gas utility (Liberty) does not provide incentives / programs. There are some incentives for fuel-switching (oil to electricity) on a case by case basis.

1.4.6c. Retrofit program for existing multi-unit residential building stock	
<i>Checklist</i>	
Community program exists to help building owners and operators conduct energy audits or evaluate the feasibility of energy efficiency retrofits for existing multi-unit residential buildings. [1 point] [N/A for communities with no significant multi-unit residential building stock]	N/A
Incentives exist for energy efficiency retrofits of existing multi-unit residential buildings. [1 point for simple retrofit and 2 points for deep energy retrofit] [N/A for communities with no significant multi-unit residential building stock]	N/A
Repayment mechanisms exist for energy efficiency retrofits of existing multi-unit residential buildings. [1 point] [N/A for communities with no significant multi-unit residential building stock]	N/A
Community retrofit programs (audits, simple and deep energy retrofits) are delivered in a streamlined system to support building owners and tenants with retrofit programs, including financial incentives, technical support and behaviour modification. [1 point] [N/A for communities with no significant multi-unit residential building stock]	N/A

NOTES:

Oromocto does not have significant multi-unit residential building stock.

General: While all homeowners and businesses qualify for Énergie NB Power efficiency programs and incentives, gaps exist for multi-unit residential programming. Anything over 4 stories is considered commercial, not multi-unit residential. There is currently no energy evaluation tool for multi-unit residential buildings in Canada. Hot2000 and RetScreen can be used to calculate energy / emissions, but they come at a cost.

The Province has not yet adopted the National Energy Code for Buildings.

The natural gas utility (Liberty) does not provide incentives / programs. There are some incentives for fuel-switching (oil to electricity) on a case by case basis.

1.4.6d. Retrofit program for existing commercial / mixed-use building stock	
<i>Checklist</i>	
Community program exists to help building owners and operators conduct energy audits or evaluate the feasibility of energy efficiency retrofits for existing commercial and mixed-use buildings. [1 point] [N/A for communities with no significant commercial / mixed-use building stock]	✓
Incentives exist for simple energy efficiency retrofits of existing commercial and mixed-use buildings. [1 point for simple retrofit and 2 points for deep energy retrofit] [N/A for communities with no significant commercial / mixed-use building stock]	✓✓

Repayment mechanisms exist for energy efficiency retrofits of existing commercial and mixed-use buildings. [1 point] [N/A for communities with no significant commercial / mixed-use building stock]	N/A
Community retrofit programs (audits, simple and deep energy retrofits) are delivered in a streamlined system to support building owners and tenants with retrofit programs, including financial incentives, technical support and behaviour modification. [1 point] [N/A for communities with no significant commercial / mixed-use building stock]	✓

NOTES:

All commercial class buildings in New Brunswick are eligible to participate in energy audit-based efficiency programs. <https://www.saveenergynb.ca/en/save-energy/commercial>

The natural gas utility (Liberty) does not provide incentives / programs. There are some incentives for fuel-switching (oil to electricity) from the province on a case by case basis.

1.4.7. Energy programs targeting energy poverty and/or low-income households	
Scale	
Energy poverty and/or low income household programs are being piloted. [1 points]	
Energy poverty and/or low income household programs are in place. [2 points]	✓

NOTES:

There is a low-income energy efficiency program funded by the Government of NB and administered by Énergie NB Power to do what is economically feasible to be done on low-income housing (insulation, upgrades at no cost to participants. The program focuses on upgrades most likely to result in energy savings and achieve a realistic payback: insulation, some HVAC or ventilation, direct install of low-cost items such as LED bulbs, water efficient showerheads, etc. <https://www.saveenergynb.ca/en/save-energy/residential/low-income-energy-savings-program/>

A separate program exists through NB Housing - Social Development exists to make improvements. https://www2.gnb.ca/content/gnb/en/departments/social_development/services/services_renderer.8735.Programme_f%EF%BF%BDd%EF%BF%BDral_provincial_de_r%EF%BF%BDparations.html

People can contact Énergie NB Power or NB Housing - Social Development to register. There are approximately 1,000 people on the waitlist, and there is a 2 year wait due to demand and budget limitations). The program is not currently advertised.

The Town does not have a local energy poverty program.

There are no energy poverty / low-income programs offered by Liberty.

Strategy

0 / 16 (0%)

1.5.1. Community engagement for visioning, goal-setting and prioritization

Checklist

<p>A stakeholder engagement framework has been documented, which may include:</p> <ul style="list-style-type: none"> - Who stakeholder groups are (and individual contacts within them), - Why they are important and/or what issues are important to the stakeholder group; and, - How key stakeholders are engaged (engagement methods). <p>[1 point] [N/A for communities with population <10 000]</p>	N/A
<p>Organizations within the community have been engaged, with engagement(s) documented in meeting minutes and/or a list of participants.</p> <p>[1 point]</p>	
<p>The general public has been engaged, with lessons learned documented.</p> <p>[1 point]</p>	
<p>A schedule has been established for updating/conducting regular public engagement and education initiatives, and outreach to new participants.</p> <p>[1 point]</p>	

NOTES:

N/A.

1.5.2. Community-wide economic analyses

Checklist

<p>An economic analysis that covers a wide diversity of community energy initiatives has been completed for the community within the past three years.</p> <p>This may include one or more of the following considerations or tools:</p> <ul style="list-style-type: none"> -Financial feasibility -Levelized unit energy cost -Marginal abatement cost curve -Community socio-economic benefits -Cost benefit analysis <p>[1 point]</p>	
---	--

NOTES:

N/A.

1.5.3. A plan or strategy to manage community energy initiatives and transition

Checklist

<p>A community energy plan or strategy has been adopted by council.</p> <p>[1 point]</p>	
<p>There are clearly defined benefits and advantages, and risks associated with inaction, from community energy initiatives.</p> <p>[1 point]</p>	

A plan or strategy clearly defines who in the community needs to be involved, when and what actions they need to undertake for implementation.

[1 point]

NOTES:

The Town of Oromocto, Oromocto First Nation, nor CFB Gagetown have a plan for managing community energy initiatives and transition. As CFB Gagetown is a federal institution, they are part of the federal mandate to reduce GHG emissions. They follow the ADMIE Green Building Directive which just released new net-zero ready building standards (used to be LEED silver for any new construction on base), but do not have an integrated plan or strategy.

1.5.4. A holistic and integrated approach to community energy

Checklist

Community energy initiatives address land use, transportation, and waste and water.

[1 point]

Community energy initiatives consider socioeconomic considerations (such as social housing or poverty)

[1 point]

NOTES:

N/A.

1.5.5. SMART community energy initiatives

Checklist

Specific community energy initiatives have been identified.

[1 point]

Community energy initiatives have quantitative (or qualitative) measures associated with their implementation and success.

[1 point]

Community energy initiatives are considered attainable (costed/financially viable).

[1 point]

Community energy initiatives are clearly aligned with community priorities/objectives.

[1 point]

Community energy initiatives are assigned timelines (short-, medium, or long-term) for action and completion.

[1 point]

NOTES:

N/A.

1.5.6. Establishment of community energy planning as an ongoing process

Checklist

There is an established schedule for review of progress on community energy initiatives.	
[1 point]	
There is an established schedule for renewal of community energy initiatives and the broader community energy plan or strategy.	
[1 point]	

NOTES:

N/A.

Land Use

8 / 14.5 (55.%)

2.1.1. Public engagement and education on energy and land use	
Checklist	
Members of the public are informed of initiatives and educated on land use-energy impacts through basic methods, such as: -Website updates -Newsletters -Print materials (such as brochures, fact sheets, information packages) -Social media updates -Webinars or conference calls -Open houses	
[0.5 point]	
Members of the public are engaged on land use-energy impacts through innovative methods, such as: - Highly creative or interactive web-based reporting - Highly creative or interactive open houses or participation at community events - Advanced social media/networking - Embedded videos - Innovative stakeholder feedback mechanisms - Interactive workshops -Tables/participation at community events -School promotion	
[1 point]	

NOTES:

From the Sustainable Community Strategy (2014) and Corporate Action Plan (2020), the Town has a project in place to create an environmental conservation program to educate citizens and visitors about environmental assets, but it is not related to energy.

CFB Gagetown does not do any energy-related engagement with their workers or residents.

2.1.2. Compact, mixed use, transit-oriented development policies
Checklist

Compact, mixed use and transit-oriented development is encouraged in the community's Official Community Plan (and Secondary Plans where applicable)	✓
[1 point]	
The community's zoning bylaw identifies built up areas for intensification, with consideration to transit nodes and corridors, zoned for mixed-uses and with increased height and density, as well as settlement area boundaries for undeveloped areas to be protected if applicable	✓
[1 points]	
Compact, mixed use and transit-oriented developments are promoted through the use of at least one of the following: Community Improvement Plans (for brownfield or greyfield redevelopment, and/or infill) Secondary suite bylaws Reducing/eliminating Parking minimums	N/A
[1 points] [N/A for communities with population <10 000 and/or growth <0% annual change]	

NOTES:

The Municipal Plan and Zoning Bylaw 522 both contain provisions for mixed use development.

The Overall Development Concept (s 4.3.1) of the Municipal Plan adds an initiative to re-position the Hazen Park District as a fully serviced mixed use neighbourhood complemented by higher density housing development. The plan overall encourages greater mixing of land uses within areas and structures. The approach has worked effectively in the Town's Integrated Development Area and offers benefits for other areas of the town.

The Zoning Bylaw identifies both the Town Centre (s 3.7) and Integrated Development (s 3.15) areas as mixed use zones to encourage residential, commercial and recreational activities.

The Municipal Plan Bylaw (2016) states that it will facilitate the development of higher density residential development within Oromocto to accommodate its aging population (pg. 68) and Developers should be encouraged to provide low to medium-rise apartment structures in appropriate locations within new subdivisions. Infill opportunities should be available within the original town area and construction on such sites should be encouraged according to the plan.

Oromocto does not currently have a public transit system.

2.1.3. Energy efficiency and performance in planning policies and processes for new developments	
<i>Checklist</i>	
The local government has policies or processes that support building-level energy performance in new developments.	✓
[4 points; 1 point per] [N/A for communities with population <10 000 and/or growth <0% annual change]	
The local government has policies or processes that support neighbourhood-level energy performance in new developments.	
[4 points; 1 point per] [N/A for communities with population <10 000 and/or growth <0% annual change]	

NOTES:

From the pre-SEC Benchmark survey sent to the community, Oromocto does encourage energy performance standards/initiatives, stating "The Planning & Compliance Department has encouraged small contractors to pair up with NB Power's new home energy savings program. We help contractors meet or exceed the prescriptive energy efficiency requirements outlined in the National Building Code of Canada, and, "The Planning & Compliance Department has a program where we offer to pay the registration fee and submit the necessary plans and paperwork for a local contractor to take part in the NB Power new home energy savings program."

Oromocto encourages developers to adhere to the 2021 National Building Code and offers a guidebook "Contractors Guide to Energy Efficiency Requirements of the 2010 National Building Code".

2.1.4. Embedding of local energy supply options into land-use plans, policies, tools and processes	
Scale	
Development of local and/or renewable energy options and energy efficiency are mentioned and encouraged in the community's Official Community Plan (and Secondary Plans where applicable)	
[1 point]	
Energy supply options are listed as permitted land uses in the community's zoning bylaws where applicable (ideally informed by energy mapping)	
[2 points]	
The use of local energy supply options or energy efficiency are promoted through the use of at least one of the following: Community Improvement Plans Site Plan Control or Plans of Subdivision requirements Expedited processing for development permits (including Development Permit Systems) By-law or policy to permit right-of-ways for district energy infrastructure	N/A
[3 points] [N/A for communities with population <10 000]	
The use of local energy supply options or energy efficiency are promoted through the use of more than one of the following: Community Improvement Plans Site Plan Control or Plans of Subdivision requirements Expedited processing for development permits (including Development Permit Systems) By-law or policy to permit right-of-ways for district energy infrastructure	N/A
[4 points] [N/A for communities with population <10 000]	

NOTES:

N/A.

2.1.5. Preservation of natural lands in land use practices	
Scale	
Natural assets, such as ecologically significant or sensitive areas, watersheds and/or permafrost, are identified for preservation in the community's Official Plan	
[1 point]	

<p>Natural assets are identified and preserved through the community's zoning bylaw, and Site Plan Control and Plans of Subdivision where applicable</p> <p>[2 points]</p>	
<p>Preservation of natural assets is enhanced through at least one of: conservation easements, land acquisition, and/or incentives</p> <p>[3 points] [N/A for communities with population <10 000]</p>	✓

NOTES:

Section 4.2 of the Town's Municipal Plan focuses on 'Conservation and Environment' and contains multiple policies to preserve natural assets, prohibit development in areas designated or determined to be wetlands, and to ensure that land uses within and abutting environmentally sensitive areas are compatible with, and have minimal impacts on, the natural environment.

Under Section 4.0 General Provisions of the Zoning Bylaw 522 item 9 states "...no person shall erect a building or structure, or carry out any other development in any zone within 30 metres of a watercourse or wetland without approval from the New Brunswick Department of the Environment."

Pg. 35 of the Municipal Plan Bylaw (2016) includes an Environmental Constraints Map (2015) detailing the location of provincially significant and regulated wetlands, flood zones, waterbodies, slopes greater than 10%, Town boundaries, among other features of interest.

The Municipal Plan Bylaw (2016), policy P1.3.1 (pg. 58) includes the statement, "Identify and protect areas of significant environmental and wildlife habitat and provide for the orderly and comprehensive management of shorelines, flood plains, and wetlands."

Pg. 61 of the Municipal Plan Bylaw (2016) details guiding principles of planning work when wetlands are involved and reiterates the provincial Watercourse and Wetland Alteration Regulation which mandates that work within the 30 m buffer of a wetland is prohibited unless a permit has been provided. Pg. 62 of the plan also states that flood-prone areas and wetlands will be protected by the Town for wildlife, will be managed appropriately, and have been zoned for Park use with the exception of one property.

Pg. 64, policy p.2.4.1 states: "Secure land within environmentally sensitive areas through land acquisitions, development agreements, and zoning mechanisms."

2.1.6. Programs to expand and enhance green space, and mitigate urban heat island effect	
<i>Checklist</i>	
<p>Checklist up to a maximum for initiatives (plans, policies, programs) by the local government or other community organization(s) that target:</p> <ul style="list-style-type: none"> Expanding parkland Promoting of green roofs Creating urban gardens or vegetation into streetscaping Creating urban farming Shade tree-planting or Expanding urban forest (in coordination with utility) <p>[2 points; 1 point per]</p>	✓✓

Checklist up to a maximum for the local government or other community organizations(s):

- Cool roofs or pavement policies
- Education programs of urban heat island effects
- Urban heat island effect-specific goal (temp., permeable surfaces, green space)
- Any of the initiatives listed to expand / enhance green space

N/A

[1 point] [N/A for northern communities and/or with population <10 000]

NOTES:

Expand Parkland: The Municipal Plan Bylaw (2016, pg 62) includes plans for the wetland between Gateway Drive and Restigouche Road, which it intends to preserve as the Gateway Wetland. The Town hopes to develop trails within the wetland and build the Gateway Wetland Trails and Conservation Centre to provide parking and access, as well as an interpretive centre. Further, the plan increased provisions for dedication of new subdivision land for public purposes to 10% from 8% from the previous plan (2006). Policies to increase parkland also include P2.4.8, P2.4.9 (pg.63).

Shade-tree planting: From follow-up with the community, they have also just recently adopted an Urban Forest Management Plan as well as a Park Plan which includes shade tree planting and parkland expansion.

Energy Networks

20.5 / 27 (76%)

2.2.1. Public engagement and education on energy delivery systems	
Checklist	
<p>Members of the public are informed of initiatives and educated on energy networks through basic methods, such as:</p> <ul style="list-style-type: none"> -Website updates -Newsletters -Print materials (such as brochures, fact sheets, information packages) -Social media updates -Webinars or conference calls -Open houses <p>[0.5 point]</p>	✓
<p>Members of the public are engaged on energy networks through innovative methods, such as:</p> <ul style="list-style-type: none"> - Highly creative or interactive web-based reporting - Highly creative or interactive open houses or participation at community events - Advanced social media/networking - Embedded videos - Innovative stakeholder feedback mechanisms - Interactive workshops -Tables/participation at community events -School promotion <p>[1 point]</p>	

Public engagement and educational activities are developed/delivered collaboratively between multiple stakeholders. [0.5 point]	
--	--

NOTES:

Information about Énergie NB Power’s plan to modernize the grid can be found on their website, as well as information on how to understand your bill, an outage map where you can lookup by phone number or account and see if there are any outages reported in your area and their status, and also information and research and development projects currently happening in NB related to DERs and Smart Grid. NB Power is also often out in the community attending trade shows, home shows and community events where they discuss issues of importance to their customers and provide them with access to resources.

Reference materials: www.nbpower.com
<https://www.nbpower.com/Open/Outages.aspx>
<https://www.nbpower.com/en/grid-modernization/>
<https://www.nbpower.com/en/accounts-billing/>
<https://www.nbpower.com/en/grid-modernization/smart-grid-atlantic/shediac-smart-energy-community-project/>

The natural gas utility (Liberty) uses basic information methods (website). They work collaboratively with other stakeholders.

CFB Gagetown does not do any energy-related engagement with their workers or residents.

2.2.2a. Electrical load management	
	Scale
Peak shaving measures considered in planning processes [1 point]	
Peak shaving measure in place and being tracked [2 points]	
Peak shaving results are shared to relevant stakeholders, lessons learned identified and documented [3 points]	✓

NOTES:

Énergie NB Power offers programs to support demand management to municipal staff. It's up to the municipality to identify what type of 'peaking'. An Energy Advisor can assist to identify peak shaving measures.

Énergie NB Power has developed the Energy Smart Plan for NB, as outlined in the Integrated Resources Plan. The plan has 3 pillars: Smart Grid, Smart Habits and Smart Solutions with targets to reduce both overall energy consumption as well as peak demand. The targets for energy and peak reduction and how they will be achieved are outlined in the Demand Side Management Plan: https://www.nbpower.com/media/1489275/dsm_plan-2019-2021-en.pdf

There have been at least 13 participants in the Peak Rebate Program since 2019.

2.2.2b. Natural gas load management

Scale	
Peak shaving measures considered in planning processes [1 point]	
Peak shaving measure in place and being tracked [2 points]	✓
Peak shaving results are shared to relevant stakeholders, lessons learned identified and documented [3 points]	

NOTES:

Liberty buys gas for years of contract in advance. They can regulate the price throughout the year, because they have bought it in advance. The natural gas pipeline is still able to take on more customers. They control peak demand through price controls. At point of purchase (bulk), peak demand is considered.

2.2.3a. Climate risk management in electric utility asset management and operations

Scale	
Risks have been identified in asset management plans, resilience plans, or risk assessments. This should include slow on-set risks, such as permafrost thawing or sea level rise, and rapid onset such as flooding, extreme heat and forest fires. [1 point]	
Actions have been identified that can be taken to address risks and avoid or mitigate impacts. [2 points]	
Action has been implemented to address risks and/or avoid or mitigate impacts [3 points]	
Actions to address risks and/or avoid or mitigate impacts are shared to relevant stakeholders within the community, lessons learned identified and documented [4 points]	✓

NOTES:

Énergie NB Power is continually monitoring and upgrading infrastructure to be more resistant to climate change. For example, in 2018 they launched a \$92M capital project to reinforce poles to better withstand severe ice storms (as experienced in 2017). Updated policies have also been put in place for vegetation management, as well as “build back better” standards for much of the infrastructure.

Énergie NB Power has also partnered with IBM’s The Weather Company to better predict outage severity and grid impacts in advance of major weather events so that we can react proactively ahead of a storm. NB Power has participated in numerous Resilience Planning workshops and provincial exercises, and public presentations, on the impacts of climate change on their infrastructure and the actions they are taking to adapt.

2.2.3b. Climate risk management in natural gas utility asset management and operations

Scale	
-------	--

Risks have been identified in asset management plans, resilience plans, or risk assessments. This should include slow on-set risks, such as permafrost thawing or sea level rise, and rapid onset such as flooding, extreme heat and forest fires. [1 point]	
Actions have been identified that can be taken to address risks and avoid or mitigate impacts. [2 points]	
Action has been implemented to address risks and/or avoid or mitigate impacts [3 points]	
Actions to address risks and/or avoid or mitigate impacts are shared to relevant stakeholders within the community, lessons learned identified and documented [4 points]	✓

NOTES:

Liberty understands that natural gas is still partly emitting. They are doing research on new green technologies such as renewable natural gas, hydrogen, and co-generation. They indicated they know which assets could be at risk, and are taking appropriate measures to mitigate risk. With respect to climate change risks, the company has an environmental section in their sustainability report. Assets in NB are considered to be relatively new and they indicated they are using the latest and greatest of technologies to put infrastructure in the ground.

2.2.4. Natural gas infrastructure is used for electric storage

<i>Scale</i>	
An assessment/study of power-to-gas opportunities has been completed within the past three years. [1 point]	✓
A power-to-gas project has been developed. [2 points]	

NOTES:

Being looked at in New Brunswick (confidential in nature therefore the findings of the report are unknown).

2.2.5. Thermal grids that utilize local and/or renewable thermal energy resources

<i>Scale</i>	
A feasibility assessment/study for thermal grids has been completed within the past three years. This may include heat/cooling load densities [demand], available thermal energy sources [supply]), and economic feasibilities. [1 point]	
A thermal grid(s) are established. [2 points] [N/A if infeasible]	

There is a plan or project in place to integrate local/renewable thermal sources, thermal energy storage, and/or lower temperature distribution piping, into thermal grids. [3 point] [N/A if infeasible]	
--	--

NOTES:

N/A.

2.2.6. Infrastructure to support alternative fuel vehicles

<i>Checklist</i>	
An assessment/study of alternative fuel opportunities (based on location, CEP, impact to electric and/or gas grids, costs, etc.) has been completed in the past three years. [Max 2 points] [N/A for communities with population <10 000]	N/A
Alternative fuel infrastructure project(s) have been developed in the community. [1 point] [N/A if infeasible]	N/A
Utility(ies) have (and follow) plans/processes/programs in place to integrate alternative fuelling infrastructure into their grid(s) [1 point] [N/A if infeasible]	✓
Results of projects have been shared across community, with lessons learned identified and documented. [1 point] [N/A if infeasible]	N/A

NOTES:

Énergie NB Power implemented the e-charge network to increase EV charging across the Province and provincial highways every 65 kms. The e-charge program offers municipalities the opportunity to expand EV charging in their community by participating in the Community Champion program: <https://echargenetwork.com/become-a-champion>

Liberty has conducted an assessment of alternative fuel opportunities, including CNG for vehicles, and will be looking at RNG and Hydrogen.

2.2.7. Smart grid technologies used in electricity distribution infrastructure

<i>Checklist</i>	
The electric utility has plans/processes/programs in place, within the community, to integrate and promote: Grid level smart technologies Home level smart technologies [2 points; 1 point per]	✓✓
When integrating smart grid technologies, the electric utility considers: Cybersecurity considerations in plan or implementation of projects Data sharing policy Partnerships with builder/real estate developer [3 points; 1 point per]	✓✓✓

NOTES:

Application for installation of smart meters approved by the Energy and Utilities Board (EUB):
<https://www.nbpower.com/en/smart-grid/smart-meters/>

As part of Smart Grid Atlantic, a \$92M project with funding from the Federal Government, Énergie NB Power is also in the process of building 3 Smart Energy Communities in NB: a First Nations microgrid community, a net-zero new homes project using nano-grid technology, and a 500 home retrofit project deploying a variety of energy technologies hooked to an Energy Services Platform to manage the variety of distributed energy resources (DERs to be deployed).

Énergie NB Power cannot, for obvious reasons, publish their cybersecurity plans. Considerations include ongoing training of all employees and a cybersecurity department under our the Chief Technology Officer

As a provincial entity all customer data is protected under the Right to Information and privacy Act (RTIPA):
<http://laws.gnb.ca/en/ShowTdm/cs/R-10.6//>

Énergie NB Power is also piloting a net-zero new homes program and a retrofit program with local builders and contractors that will test a variety of technologies, including cybersecurity equipment.

Waste & Water

7 / 21 (33%)

2.3.1a. Public engagement and education on water and wastewater conservation, and its relationship with energy	
Checklist	
<p>Members of the public are informed of initiatives and educated on water/wastewater conservation through basic methods, such as:</p> <ul style="list-style-type: none"> -Website updates -Newsletters -Print materials (such as brochures, fact sheets, information packages) -Social media updates -Webinars or conference calls -Open houses <p>[0.5 point]</p>	
<p>Members of the public are engaged on water/wastewater conservation through innovative methods, such as:</p> <ul style="list-style-type: none"> - Highly creative or interactive web-based reporting - Highly creative or interactive open houses or participation at community events - Advanced social media/networking - Embedded videos - Innovative stakeholder feedback mechanisms - Interactive workshops - Tables/participation at community events - School promotion <p>[1 point]</p>	

Public engagement and educational activities are developed/delivered collaboratively between multiple stakeholders. [0.5 point]	
--	--

NOTES:

The Town nor CFB Gagetown conduct engagement about the energy-water nexus and reducing usage.

2.3.1b. Public engagement and education on waste management, and its relationship with energy

Checklist

Members of the public are informed of initiatives and educated on waste management through basic methods, such as: -Website updates -Newsletters -Print materials (such as brochures, fact sheets, information packages) -Social media updates -Webinars or conference calls -Open houses [0.5 point]	✓
--	---

Members of the public are engaged on waste management through innovative methods, such as: - Highly creative or interactive web-based reporting - Highly creative or interactive open houses or participation at community events - Advanced social media/networking - Embedded videos - Innovative stakeholder feedback mechanisms - Interactive workshops -Tables/participation at community events -School promotion [1 point]	
--	--

Public engagement and educational activities are developed/delivered collaboratively between multiple stakeholders. [0.5 point]	
--	--

NOTES:

From the pre-SEC Benchmark community survey, Oromocto has done some public education through flyers, website and social media platforms, mostly around recycling & waste reduction/composting. The Town has waste reduction and sorting information on their website.

2.3.2. Energy recovery from waste

Checklist

The production of electrical, thermal, or chemical energy products from landfill waste materials such as: Incineration Gasification Depolymerization [1 point for initiative, 0.5 point for feasibility]	✓
--	---

<p>The production of electrical, thermal, or chemical energy products from organic waste materials such as:</p> <p>Incineration Gasification Depolymerization Anaerobic digestion Pyrolysis Fermentation</p> <p>[2 points, 1 point per initiative, 0.5 point for feasibility]</p>	✓
<p>The production of electrical, thermal, or chemical energy products from wastewater materials such as:</p> <p>Gasification Anaerobic digestion Fermentation</p> <p>[1 point, 0.5 point for feasibility]</p>	✓

NOTES:

The Town has a landfill gas program in partnership with the Fredericton Region Solid Waste Commission. This program directly targets methane and CO2 creating green electricity. It is Canada's first UN Clean Development offset project and the first New Brunswick landfill gas project. This program is also the largest Énergie NB Power embedded energy source and smart grid development partner.

This process removes the equivalent of about 15,000 cars from the road each year in terms of greenhouse gasses and creates enough green and renewable energy to power 2000 homes.

On pg.60 of the Municipal Plan, it states that the town will consider the development of a solid waste management strategy that "...explores opportunities for developing and/or expanding existing initiatives which seek to convert solid waste into energy."

Anaerobic digestion is done for organic waste (spring and fall pick-ups) and wastewater treatment.

Liberty is also looking at potential opportunities for anaerobic digestion.

2.3.3. Waste reduction	
<i>Checklist</i>	
<p>Landfill diversion programs run by the local government or other community organization(s) are in place for reducing landfill waste including:</p> <p>Garbage bag collection tags/limits or tipping fee Plastic bag bans Re-use or community swap days Composting</p> <p>[Max of 2; 1 point per program]</p>	✓
<p>Landfill diversion programs are in place for hazardous/special waste</p> <p>[0.5 point]</p>	

<p>Programs run by the local government or other community organization(s) are in place for improving non-residential waste diversion such as:</p> <p>Recognition for high performers Expanding recycling or organic waste programs to include eligible ICI or CRD waste</p> <p>[Max of 2; 1 point per program] [N/A for communities with no significant commercial / mixed-use building stock]</p>	
<p>Programs run by the local government or other community organization(s) are in place for collecting and recycling:</p> <p>Glass Paper Plastics Metals Electronic waste Textiles</p> <p>[3 points; 0.5 point per material]</p>	✓
<p>Integration and reporting into community energy planning process</p> <p>[0.5 point]</p>	

NOTES:

The town has both anaerobic (landfill gas) and aerobic (backyard composting) in place for its composting program.

The Town partners with the Fredericton Region Solid Waste which operates a region-wide recycling program which brings in more than 5,800 tonnes of recyclable material per year. Paper and metals are recycled.

From the Sustainable Community Strategy (2014, pg. 23), the Town has a project to Introduce pilot programs for improvements to waste management, to include composting and recycling and a program to study the feasibility of “Pay per garbage bag”. This has not been adopted. The Town tried to introduce a plebiscite in 2016 for curbside recycling and whether residents would pay for it but it didn’t pass. The residents drop recyclables at collection points throughout town. These collection points are well-used.

2.3.4. Water and wastewater programs	
<i>Checklist</i>	
<p>The community has water infrastructure initiatives, such as:</p> <p>Leak detection and repair Water meters/Water-use monitoring Pressure reducing valves Efficiency upgrades to wastewater treatment equipment</p> <p>[1.5 point; 0.5 point per] [N/A for communities with no centralized water systems]</p>	½

<p>The community has retrofit programs to conserve water, such as targeting:</p> <p>Toilet dams Low-flow showerheads Faucet aerators or washers Rainwater collection</p> <p>[1.5 point, 0.5 point per]</p>	✓
<p>The community has a program in place to promote potable or non-potable water reuse.</p> <p>[0.5 point]</p>	
<p>Integration and reporting into community energy planning process</p> <p>[0.5 point]</p>	

NOTES:

From the Sustainable Community Strategy (2014, pg. 22) the Town has created a program to maintain a water leak detection program, a water main flushing program, and a water main replacement program.

Énergie NB Power promotes low flow showerheads and faucet aerators.
<https://www.saveenergynb.ca/en/save-energy/residential/community-outreach-program/>
<https://www.thermalwisenb.ca/en/total-home-energy-savings-program>

2.3.5. Low impact development and resilient storm water management

Checklist

<p>The community has programs to manage stormwater and reduce peak flow, such as:</p> <p>Stormwater retention ponds/tanks Bioswales Rain gardens Permeable pavement</p> <p>[2 points; 1 point per]</p>	
<p>Storm water management initiative(s) consider future climate risks.</p> <p>[0.5 point]</p>	
<p>Integration and reporting into community energy planning process</p> <p>[0.5 point]</p>	

NOTES:

From the Municipal Plan Bylaw (2016, pg. 80-84), it is mentioned that the Town has plans to construct a new wastewater and water treatment plant, and that storm water retention for new developments are not needed. The Plan caveats with a statement that retention of storm water may be necessary under legislation in future, and policy P.4.2.9 states that the Town will: "Provide storm water management in accordance with applicable standards and guidelines."

Transportation

12.5 / 24.5 (51%)

2.4.1. Public engagement and education on mobility networks

<i>Checklist</i>	
<p>Members of the public are informed of initiatives and educated on mobility networks through basic methods, such as:</p> <ul style="list-style-type: none"> -Website updates -Newsletters -Print materials (such as brochures, fact sheets, information packages) -Social media updates -Webinars or conference calls -Open houses <p>[0.5 point]</p>	✓
<p>Members of the public are engaged on mobility networks through innovative methods, such as:</p> <ul style="list-style-type: none"> - Highly creative or interactive web-based reporting - Highly creative or interactive open houses or participation at community events - Advanced social media/networking - Embedded videos - Innovative stakeholder feedback mechanisms - Interactive workshops -Tables/participation at community events -School promotion <p>[1 point]</p>	
<p>Public engagement and educational activities are developed/delivered collaboratively between multiple stakeholders.</p> <p>[0.5 point]</p>	

NOTES:

The Town has multiple resources on its site including its Active Transportation (AT) Plan, a list of trails, Links to AT via its Fitness & Health page, and updates on its Facebook page.

The Town also has an AT Committee.

CFB Gagetown does not do any energy-related engagement with their workers or residents.

2.4.2. Active transportation integrated into a Transportation Master Plan

<i>Checklist</i>	
<p>Transportation Master Plan includes active transportation or there is an Active Transportation Master Plan.</p> <p>[1 point]</p>	✓
<p>Community has mapped its active transportation network and its relation to other mobility options</p> <p>[1 point]</p>	✓

NOTES:

A proposed Active Transportation Network map is included in the Municipal Plan Bylaw (2016, pg. 37-38) and includes primary and secondary routes for walking and cycling. According to the Corporate Action Plan (2014, pg. 6), the active transportation network has been completed.

2.4.3. Transportation demand management

Checklist

<p>The community has basic infrastructure to support active transportation, including:</p> <p>Pedestrian-friendly sidewalks (expansion, streetscaping, shade tree planting) Bike parking facilities or Bike racks Bike lanes (painted bike lanes, cycle tracks [spatial or physical separation], “shared roadways”/sharrows, contraflow bike lanes) Bike share programs Public Bike tire pumps Multi-use trails</p> <p>[4 points; 1 point per]</p> <p>For small communities this may also include: sidewalks, slow speed limits</p>	<p>✓✓✓</p>
<p>The community has alternative car-transportation programs to reduce single-occupancy vehicle travel, including:</p> <p>Carsharing programs Carpooling programs/lots Ride Sharing programs</p> <p>[1 point; 1 point per for implementation, 0.5 point per for assessment]</p>	
<p>The community has public transit options available, including:</p> <p>Buses* Bus rapid transit* Street rail** Light rail** Subway**</p> <p>*may only be appropriate to mid-large communities **may only be appropriate to large communities</p> <p>[1 point for communities >10 000] [1 point for 3 options for communities >100 000]</p>	<p>N/A</p>
<p>Available public transit systems make efforts towards continuous improvement such as increasing:</p> <p>frequency of routes accessibility (e.g. kneeling Buses) service to low-income housing interconnectedness ('last mile' / multimodal integration e.g. bike parking, regional transit connection)</p> <p>[1 point; 0.5 points per] [N/A for communities with no public transit system]</p>	<p>N/A</p>

NOTES:

From the Municipal Plan Bylaw (2016, pg. 78), the Town has a pedestrian network consisting of sidewalks and connecting pathways. This network has been augmented with additional pedestrian connections incorporated in new subdivisions and trails through parks and conserved areas. The Town has multi-use trails, bike lanes, and pedestrian-friendly sidewalks in some areas (in others the speed limit is reduced).

2.4.4. Alternative energy sources of public transit systems

Scale

Scoping (opportunities identified, feasibility assessments) for alternative fuels in public transit systems has been completed [1 point]	N/A
An alternative fuel transit fleet vehicle pilot project has been developed. [2 points]	N/A
A procurement policy for alternative fuel transit fleet vehicles has been adopted. [3 points]	N/A

NOTES:

The Town does not have a public transit system.

2.4.5. Anti-idling policies

<i>Checklist</i>	
A policy has been adopted and is enforced, or a program exists to encourage an alternative to idling (ex. block heaters, solar heating) [0.5 points]	

NOTES:

A short-term project of the Sustainable Community Strategy (2014, pg. 22) includes replacing traffic lights with traffic circles to reduce vehicle emissions.

2.4.6a. Local government leadership by example in transportation demand management among staff

<i>Checklist</i>	
Support for transportation demand management and alternative fuel vehicles at the workplace exists, such as: Bike racks or secure storage facilities Public tire pumps Showers and changing facilities Transit subsidies Carpooling Flexible work scheduling/remote working options EV charging stations for employee or public use [3 points; 1 point per]	✓✓

NOTES:

From follow-up with the community in June 2021, the town has showers and changing facilities & EV charging stations for employee or public use.

2.4.6b. Public sector organization leadership by example in transportation demand management

<i>Scale</i>

<p>Support for transportation demand management and alternative fuel vehicles at the workplace exists in one public sector organization, such as:</p> <p>Bike racks or secure storage facilities Public tire pumps Showers and changing facilities Transit subsidies Carpooling Flexible work/study scheduling or remote working/study options EV charging stations for employee/student or public use</p> <p>[1 point]</p>	
<p>Support for transportation demand management and alternative fuel vehicles at the workplace exists in some public sector organizations, such as:</p> <p>Bike racks or secure storage facilities Public tire pumps Showers and changing facilities Transit subsidies Carpooling Flexible work/study scheduling or remote working/study options EV charging stations for employee/student or public use</p> <p>[2 points]</p>	
<p>Support for transportation demand management and alternative fuel vehicles at the workplace exists in all public sector organizations, such as:</p> <p>Bike racks or secure storage facilities Public tire pumps Showers and changing facilities Transit subsidies Carpooling Flexible work/study scheduling or remote working/study options EV charging stations for employee/student or public use</p> <p>[3 points]</p>	

NOTES:

CFB Gagetown is collaborating currently with Oromocto First Nation on a traffic project through the lens of Indigenous and cultural rights. Gilden is conducting the traffic analysis. It does not as yet include an energy lens but could.

2.4.7a. Local government leadership by example with corporate-owned fleet greening	
<i>Scale</i>	
<p>A feasibility study for green fleet vehicles has been completed within the past 3 years.</p> <p>[1 point]</p>	
<p>A green fleet vehicle pilot project has been developed.</p> <p>[2 points] [N/A if infeasible]</p>	✓

A green procurement policy for fleet has been adopted. [3 points] [N/A if infeasible]	
--	--

NOTES:

In 2020 the Town purchased its first 2 fully electric vehicles for its fleet.

2.4.7b. Electric utility is leading by example with corporate-owned alternative fuel fleet vehicles

<i>Scale</i>	
A feasibility study for alternative fuel vehicles has been completed within the past 3 years. [1 point]	
An alternative fuel vehicle pilot project has been developed. [2 points] [N/A if infeasible]	
Alternative fuel fleet vehicles are seen as a strategic priority. [3 points] [N/A if infeasible]	✓

NOTES:

Énergie NB Power has 65 electric vehicles and hybrid vehicles on it's fleet, and is seen as a strategic priority.

2.4.7c. Natural gas utility is leading by example with corporate-owned alternative fuel fleet vehicles

<i>Scale</i>	
A feasibility study for alternative fuel vehicles has been completed within the past 3 years. [1 point]	
An alternative fuel vehicle pilot project has been developed. [2 points] [N/A if infeasible]	
Alternative fuel fleet vehicles are seen as a strategic priority. [3 points] [N/A if infeasible]	

NOTES:

Liberty (corporately) has a fleet with CNG, hybrid, or electric, but not yet in New Brunswick.

Buildings

6 / 16 (38%)

2.5.1a. Public engagement and education on energy in single family residential buildings

<i>Checklist</i>

<p>Members of the public are informed of initiatives and educated on single family home energy use through basic methods, such as:</p> <ul style="list-style-type: none"> -Website updates -Newsletters -Print materials (such as brochures, fact sheets, information packages) -Social media updates -Webinars or conference calls -Open houses <p>[0.5 point]</p>	✓
<p>Members of the public are engaged on single family home energy use through innovative methods, such as:</p> <ul style="list-style-type: none"> - Highly creative or interactive web-based reporting - Highly creative or interactive open houses or participation at community events - Advanced social media/networking - Embedded videos - Innovative stakeholder feedback mechanisms - Interactive workshops - Tables/participation at community events - School promotion <p>[1 point]</p>	
<p>Public engagement and educational activities are developed/delivered collaboratively between multiple stakeholders.</p> <p>[0.5 point]</p>	

NOTES:

Énergie NB Power also uses basic methods of information (website, social media, etc. to engage and educate the public on single family residential building energy uses, and practices to improve home energy performance: <https://www.nbpower.com/en/save-energy>

Énergie NB Power also partners with other stakeholders, for example, with the Gaia Project to bring hands-on experiential learning opportunities to students, the Energy Engineers program to teach grades 3-5 the basics of electricity generation, the Energy Detectives Program to teach the basics of an energy audit and how you can identify simple and low cost ways to save energy in your school and at home, and the Electrify your Ride program where students can get hands-on and under the hood of an EV. Also an intro to Smart Grid and how electrification of transportation and other sectors means we need to move to a smarter way of managing electricity. <https://thegaiproject.ca/en/programs/>

Liberty uses basic information methods (e.g. website) and collaborates with other stakeholders to educate/engage the public.

CFB Gagetown does not do any energy-related engagement with their workers or residents.

2.5.1b. Public engagement and education on energy in other buildings
Checklist

<p>Members of the public are informed of initiatives and educated on multi-unit residential, commercial, or other building energy use through basic methods, such as:</p> <ul style="list-style-type: none"> -Website updates -Newsletters -Print materials (such as brochures, fact sheets, information packages) -Social media updates -Webinars or conference calls -Open houses <p>[0.5 point]</p>	✓
<p>Members of the public are engaged on multi-unit residential, commercial, or other building energy use through innovative methods, such as:</p> <ul style="list-style-type: none"> - Highly creative or interactive web-based reporting - Highly creative or interactive open houses or participation at community events - Advanced social media/networking - Embedded videos - Innovative stakeholder feedback mechanisms - Interactive workshops -Tables/participation at community events -School promotion <p>[1 point]</p>	
<p>Public engagement and educational activities are developed/delivered collaboratively between multiple stakeholders.</p> <p>[0.5 point]</p>	

NOTES:

Énergie NB Power uses basic methods of information (website, social media, etc.) to engage and educate the public on building energy uses, and practices to improve energy performance. They offer advice and incentives on how to make buildings more energy efficient. They also have an Energy Management Service Provider Network customers can access to receive a subsidized energy audit. <https://www.nbpower.com/en/save-energy>

Énergie NB Power offers an annual energy efficiency conference which brings together a variety of stakeholders and customers to discuss, educate, engage and inform their partners and interested attendees on all things energy efficient. They also offer ongoing workshops in partnership with CIET and other organizations. Staff from Énergie NB Power regularly attend conferences, such as the Smart Energy Event in Nova Scotia, or their own Energy Innovations Forum, as a presenter or as participant in a variety of panel discussions related to the industry. Interested parties can also register on their website to be notified when new workshops or courses will be offered by the utility and its partners: <https://www.nbpower.com/en/save-energy/events-and-training/>

2.5.2a. Local government leadership by example in corporate-owned facilities	
<i>Checklist</i>	
<p>Corporate process is in place to improve energy efficiency, including through energy standards/certifications and a schedule for regular recommissioning, in existing corporate facilities.</p> <p>[0.5 points]</p>	

Corporate process is in place to improve energy efficiency, including through energy standards or certifications, in new corporate facilities. [0.5 point] [N/A for small or no-growth communities]	
A process is in place to procure local/renewable heat/electricity for corporate facilities. [0.5 points]	
A process exists to use a benchmarking, labelling and disclosure system for corporate-owned facilities. [0.5 points]	

NOTES:

From the Sustainable Community Strategy (2014, pg. 48), the town has a project to complete “Building Condition and Energy Assessments” of all Municipal Buildings.

The Sustainable Community Strategy mentions use of sustainable building standards (e.g. Town Green Building Standards, LEED) for the design, construction and operation of new development and renovations. A follow-up discussion with John Jackson July 7 (2021) confirmed that this is not happening in practice and that it was more of a goal. They haven’t employed these standards yet.

Oromocto First Nation has solar panels on 3 of their community buildings and a handful of homes.

2.5.2b. Electric utility leadership by example in owned facilities

<i>Checklist</i>	
The electric utility has developed a new high performance utility-owned facility, or retrofitted an existing facility, that demonstrates leadership in energy efficiency and/or the use of local/renewable energy sources. [0.5 points]	✓
The electric utility uses a benchmarking, labelling and disclosure system for all owned facilities. [0.5 point]	
Energy performance of utility-owned facilities is seen as a strategic priority for the electric utility. [1 point]	✓

NOTES:

Énergie NB Power has a full time Energy Manager who works with Facilities Management and Station Services to identify and implement energy savings opportunities.

2.5.2c. Natural gas utility leadership by example in owned facilities

<i>Checklist</i>	
The natural gas utility has developed a new high performance utility-owned facility, or retrofitted an existing facility, that demonstrates leadership in energy efficiency and/or the use of local/renewable energy sources. [0.5 points]	
The natural gas utility uses a benchmarking, labelling and disclosure system for all owned facilities. [0.5 point]	

Energy performance of utility-owned facilities is seen as a strategic priority for the natural gas utility.	
[1 point]	

NOTES:

Liberty is looking at energy performance of existing buildings. Some buildings (not in NB) also have solar PV, storage, EV charging, etc.

2.5.2d. Public sector organization leadership by example in local facilities

<i>Checklist</i>	
Energy efficiency retrofits of existing buildings, including certification of previously uncertified buildings, have been demonstrated in at least one public sector organization in the past three years. [1.5 points; 0.5 points for one, 1 point for some, 1.5 points for all]	✓
High performance of new buildings has been demonstrated in at least one public sector organization building constructed in the past ten years. [1.5 points; 0.5 points for one, 1 point for some, 1.5 points for all]	✓
Use of local/renewable heat/electricity has been demonstrated in at least one public sector organization in the past three years. [1.5 points; 0.5 points for one, 1 point for some, 1.5 points for all]	½
Benchmarking and public disclosure of performance of buildings has been demonstrated in at least one public sector organization. [1.5 points; 0.5 points for one, 1 point for some, 1.5 points for all]	✓

NOTES:

Many of the high schools in NB have undergone energy efficiency retrofits. Some have installed solar PV arrays (the largest net-metered array is on FHS), and 15 schools have converted from oil to biomass pellets / boiler systems using sustainable waste biomass.

There are approximately 740 government owned buildings in NB. The province targets the most intense energy users for energy efficiency improvements and solar PV or biomass pellets where feasible, other buildings are undergoing efficiency audits, others are focused on maintenance only. All new buildings built by the province are built according to the Provincial Green Building Policy, to LEED 2009 or Green Globes standards, which includes high energy performance, measurement, and active transportation.

CFB Gagetown:

- They have a 375 kW solar installation powering 8-10 bldgs
- They are planning a 5MW solar installation (they wanted to do 10 by NB Power wouldn't allow it)
- They have adopted the same emissions reductions targets as the federal government (as they are part of it).
- They follow the ADMIE Green Building Directive which just released new net-zero ready building standards (used to be LEED silver for any new construction on base)
- They will soon be working with an energy performance contractor to perform a feasibility study for energy reduction on the buildings (mostly lighting and VFDs)

2.5.2e. Community-wide private sector leadership in incorporating energy efficiency and distributed energy resources, and energy labelling or standards into buildings

<i>Checklist</i>

<p>Energy efficiency retrofits of existing buildings, including certification of previously uncertified buildings, have been demonstrated by at least one private sector building owner/operator in the past three years.</p> <p>[2 points; 1 point for one, 2 point for multiple]</p>	
<p>High performance of new buildings has been demonstrated by at least one private sector developer building constructed in the past ten years.</p> <p>[2 points; 1 point for one, 2 point for multiple]</p>	
<p>Use of local/renewable heat/electricity has been demonstrated in at least one privately owned/operated or developed building in the past three years.</p> <p>[2 points; 1 point for one, 2 point for multiple]</p>	
<p>Benchmarking and public disclosure of performance has been demonstrated by at least one private sector building owner/operator.</p> <p>[2 points; 1 point for one, 2 point for multiple]</p>	

NOTES:

From the pre-SEC Benchmark survey, private sector developers, owners/operators, are not a prominent stakeholder in the community.

QUEST

