



QUEST



**SMART ENERGY
COMMUNITIES
BENCHMARK**
October 2021



Town of Saint Andrews, New Brunswick



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



Atlantic Canada
Opportunities
Agency

Agence de
promotion économique
du Canada atlantique



Énergie NB Power



Liberty™



Stantec



SUNCOR
ENERGY
FOUNDATION

TABLE OF CONTENTS

1	INTRODUCTION
4	GOVERNANCE
7	STAFF
12	DATA
18	FINANCIALS
23	STRATEGY
26	LAND USE
31	ENERGY NETWORKS
36	WASTE & WATER
42	TRANSPORTATION
48	BUILDINGS

Town of Saint Andrews, New Brunswick

Introduction:

This Benchmark Report was prepared by QUEST for the Town of Saint Andrews 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.

The Town of Saint Andrews is a town located in Charlotte County along Passamaquoddy Bay in New Brunswick. It has a population of 1,786 residents. The Town's Historic District is a National Historic Site of Canada as it has retained much of its 18th-century character. The Town is also referred to as St. Andrews-by-the-Sea and is known to the Passamaquoddy First Peoples as Qua-nos-cumcook. The town is grid connected with electricity provided by NB Power.

Key Recommendations / Identified Priorities:

GOVERNANCE

1. **Town & Stakeholders:** Establish an organization and/or individual to act as secretariat for the energy leadership team, and lead and coordinate community engagement.
2. **Utility:** Ensure programs are accessible and well aligned to address municipal customers' needs

STAFF

1. **Town:** Formalize community energy planning into staff roles
2. **Town:** Increase access to training for City staff/those involved with community energy initiatives
3. **Town and Utility:** Develop a program or strategy to facilitate succession planning of staff (Town and utility) managing community energy initiatives
4. **Utilities/Other levels of government:** Explore opportunities to supplement Town staff by embedding expertise or through funding; enhance program delivery.
5. **Utilities:** Dedicate a single point of contact for the coordination and communication of energy initiatives

DATA

1. **Town:** Develop community inventory of energy use and spending, or emissions inventory, organized into categories such as buildings categories, personal, active and public transportation, waste, water and wastewater
2. **Town:** Establish and approve a corporate energy or GHG target & timeline for inventory renewal
3. **Town:** 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
4. **Utilities:** Define a standardized process for requesting and sharing data (currently ad-hoc), including appropriate contact persons, application and release documents and estimated timelines.

FINANCIALS

1. **Town:** Create a transparent and publicly available assessment of financing mechanisms (to offer or to take advantage of).
 - a) **Town:** Conduct an assessment of financial mechanisms that consider a variety of ownership models.

- b) **Town:** Conduct assessments of financial mechanisms that consider social equity, such as access by financially underserved populations.
2. **Town:** Consider long-term budget allocation, revolving funds, or energy performance contracts (for corporate energy initiatives)
 3. **Town:** Consider repayment mechanisms as a form of funding to support energy initiatives in the community (e.g. on-bill financing, PACE style programming, FCM CEF program)
 4. **Utilities:** ensure energy programs exist for multi-residential buildings and low income housing.

STRATEGY

1. **Town:** Develop a community energy plan or strategy with clear goals, priorities, indicators and an implementation plan (including actions, roles and responsibilities and an implementation schedule) for community energy initiatives, that is then adopted by council.
2. **Town:** Conduct a community-wide economic analysis to determine the total and relative costs of potential community energy initiatives within the community
3. **Town:** Establish a schedule for updating/conducting regular public engagement and education initiatives, and outreach to new participants.

LAND USE

1. **Town:** Increase informational resources and activities to engage and educate the public on the impacts on energy from various land use patterns to include innovative methods such as interactive web-based tools or workshops, and may be integrated with broader community energy engagement and education activities.
2. **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.
3. **Town:** Consider cool roof / green roof policy, expanding green space and 'urban' gardens

ENERGY NETWORKS

1. **Town/Utility:** Launch education/engagement strategy around energy delivery systems. This should include clarity on charges on energy bills for customers, education about distributed energy resource integration, and communication related to extended/widespread outages.
2. **Town:** Implement peak monitoring and peak shaving measures to optimize the use of existing energy supply infrastructure assets..
3. **Town:** Undertake analysis of potential local renewable resources
4. **Town:** Establish thermal grids or conduct feasibility studies on thermal grids and invest in the development of heat exchange or thermal networks (if feasible)
5. **Town/Utility:** Expand alternative fuel infrastructure in the community (e.g. EV charging)
6. **Utility:** Undertake further development of Smart Grid, and identify local opportunities for Smart Grid

WATER AND WASTE

1. **Town:** Increase public education on water conservation, re-use, and the energy impact of water waste
2. **Town:** Expand waste reduction activities to non-residential waste diversion program(s). These can include:
 - Garbage bag collection tags/limits or tipping fee
 - Plastic bag bans
 - Re-use or community swap days
2. **Town/RSC:** Consider an organic waste program (currently organics go to landfill)

3. **Town/RSC:** Explore energy recovery from waste streams (landfill, wastewater, agri-waste, etc)
4. **Town + Developers:** Develop low impact water management initiative(s). This includes potential infrastructure innovations to reduce peak flow, such as stormwater retention ponds/tanks, greening roofs, bioswales, and permeable pavement.

TRANSPORTATION

1. **Town:** Develop an anti-idling program or policy for both City staff and the entire community
2. **Town:** Consider developing a Procurement Policy for clean vehicles (e.g. fuel efficient, hybrid, electric)
3. **Town and Public Sector:** Increase EV charging and Active Transportation amenities at Town owned and operated facilities
4. **Town:** Ensure the community has alternative car-transportation programs to reduce single-occupancy vehicle travel, including:
 - Carsharing programs
 - Carpooling programs/lots
 - Ride Sharing programs

BUILDINGS

1. **Town + Utility:** Create more public education on both single and non-single family residential building energy uses, and practices to improve home energy performance (such as energy efficiency tips or use of distributed energy resources)
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 (e.g. Arena, community centre, etc)
4. **Town/Utility/Public & Private sectors:** Increase number of municipal, utility and commercial buildings, that are retrofitted or built to high energy performance standards, use renewables, and are benchmarked

Governance

9.5 / 11.5 (83%)

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 points]	✓
An organization and/or individual acts as secretariat for the leadership team, and leads and coordinates community engagement. [1 point]	

NOTES:

The Environment Advisory Committee act as an advisory committee to The Town of Saint Andrews Council to offer advice and recommendations to help guide and support positive environmental management protocols and policies outlined in various strategic documents including, but not limited to, the 2020 Municipal Plan and the Community Based Climate Adaptation Plan - amended May 4, 2020

Committee members were members from the Saint Andrews municipal constituent base as well as two ex-officio members from the Chamcook Watershed Homeowners' Association, two ex-officio members from Sir James Dunn Academy and one ex-officio member from the Eastern Charlotte Waterways.

The Saint Andrews Environmental Action Committee will meet approximately ten (10) times per year, typically the first Wednesday of every month, or as determined by the Committee after inception at the call of Chair.

One of the activities and responsibilities of the Committee explained in the document is to develop and recommend to Council the promotion of effective language around the promotion of good environmental practices. (Source: Saint Andrews Environmental Advisory Committee ToR)

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:

The Environment Advisory Committee acts as an advisory committee to The Town of Saint Andrews Council to offer advice and recommendations to help guide and support positive environmental management protocols and policies outlined in various strategic documents - amended May 4, 2020. Regular meeting(s) occur approximately ten times per year, typically the first Wednesday of every month, or as determined by the Committee after inception at the call of Chair. A clear committee mandate is established and explained in the Saint Andrews Environmental Advisory Committee ToR.

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

<i>Checklist</i>	
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]	N/A
Participation in, and support for, community energy initiatives is seen as a strategic priority within the natural gas utility. [2 points]	N/A

NOTES:

There is no natural gas in Town of Saint Andrews

1.1.3. Knowledge sharing with other communities

<i>Scale</i>	
Representative(s) from the community leadership team has attended or participated in events or knowledge sharing groups that involve members from outside of the community. [1 point]	✓
Representative(s) from the community leadership team have presented in events or led/facilitated knowledge sharing groups that involve members from outside of the community. [2 point]	

NOTES:

Representative(s) from the community attends the QUEST NB-PEI Municipal Working Group, for knowledge sharing and learning best practices, resources, and tools.

Staff

8 / 15 (53%)

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

The Environmental Advisory Committee comprised of members from the Saint Andrews municipal constituent base as well as two ex-officio members from the Chamcook Watershed Homeowners' Association, two ex-officio members from Sir James Dunn Academy and one ex-officio member from the Eastern Charlotte Waterways (source: Saint Andrews Environmental Advisory Committee ToR) Based on Pre-survey answers, three senior staff are involved with implementing CEP: Chris Spear - CAO/Treasurer, Paul Nopper - Senior Clerk Administrator, and Terry Acton - Asset/Operations Manager.

1.2.1b. Community energy staff position support	
Scale	
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:

The Environmental Advisory Committee comprised of members from the Saint Andrews municipal constituent base as well as two ex-officio members from the Chamcook Watershed Homeowners' Association, two ex-officio members from Sir James Dunn Academy and one ex-officio member from the Eastern Charlotte Waterways (source: Saint Andrews Environmental Advisory Committee ToR).

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

Scale	
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

Scale	
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]	N/A
The natural gas utility has equal to or greater than 1 FTE staff tasked with supporting and engaging with community energy initiatives. [2 points]	N/A

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

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

The staff participated in webinars and information sessions last year related to energy.

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]	N/A

NOTES:

Certified building inspectors subcontracted through the Regional Service Commission. There is also a program offered through NB Power on the National Energy Code.

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	
<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]	N/A
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 points]	N/A
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 points]	N/A

1.2.4. Succession planning for staff roles managing and supporting community energy initiatives	
<i>Checklist</i>	
There is a program or strategy in place to facilitate succession of local government staff managing community energy initiatives. [1 point]	

<p>There is a program or strategy in place to facilitate succession of electric utility staff supporting and engaging with community energy initiatives. [1 point]</p>	
<p>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]</p>	<p>N/A</p>

NOTES:

No formalized process. Staff are cross trained but no formal KRT process.

Data

7 / 23 (30%)

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]	N/A
A standardized format for community energy data has been established for sharing data. [2 points]	N/A
A standardized process is in place for requesting and sharing data, including appropriate contact persons, application and release documents and estimated timelines. [3 points]	N/A

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, inventory reports and/or lessons learned documented. [1 point]	

NOTES:

The City currently has not complete community inventory, but they did corporate inventory.

1.3.2b. Local government corporate energy inventory and reporting	
<i>Checklist</i>	
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, inventory reports and/or lessons learned documented. [1 point]	✓

NOTES:

Jacques Whitford conducted detailed building energy audits on the Town Hall, Public Works Garage, Library, Youth Center, Arena Building, and Fire Station.

This type of audit included a walk-through of each of the facilities to identify the major equipment and other sources of energy consumption. Each audit included a review of historic energy billings, energy modeling to determine areas of energy consumption, identification and calculation of EEMs, and the development of this report (Town of Saint Andrews Energy Audit 2008)

1.3.2c. Electric 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), 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, 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	
Checklist	
Corporate energy or sustainability inventory/report has been completed that includes energy use or GHG emissions from utility operations. [1 point]	N/A
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]	N/A
Corporate energy or sustainability targets have been established. [1 point]	N/A
Timeline for inventory/report renewal is clear. [1 point]	N/A
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]	N/A

1.3.3. Climate hazard assessments	
Checklist	
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 points]	✓
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 points]	✓

NOTES:

Over the last five years, the Town of Saint Andrews has made some steps toward adapting to the changing climate. Examples include the creation of a stormwater management plan, stormwater infrastructure upgrades throughout town, town meetings, information and newsletters and an incorporation of climate change into asset management and future municipal plans.

The following plan is informed by a number of important municipal and provincial planning documents including comparative case studies of other adaptation plans, the Saint Andrews 2020 Municipal Plan,

the General Operating Budget for 2019, the Five-Year Capital Budget and the New Brunswick provincial policies surrounding climate change adaptation planning in New Brunswick.

The Community Based Climate Action Plan was also informed by the expertise of the Climate Change Technical Advisory Committee as well as a large number of community members through several on the ground and online public engagement events. (Source: Saint Andrews Adaptation Plan).

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 points] [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 points] [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 points] [N/A if energy map has not been completed and/or for communities with population <10 000]	N/A

NOTES:

Part of this process is to identify these options for the municipality. (Source: Pre-survey answers)

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]	
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. [0.5 points] [N/A if energy model has not been completed and/or for communities with population <10 000]	N/A
Assumptions and methodologies in energy modelling are transparent and readily accessible. [0.5 points] [N/A if energy model has not been completed and/or for communities with population <10 000]	N/A

Outputs from energy modelling are presented in a digestible way, such as through infographics or one-pagers.
[0.5 points] [N/A if energy model has not been completed and/or for communities with population <10 000]

N/A

NOTES:

Part of this process is to identify these options for the municipality. (source Pre-survey answers)

Financials

18 / 29 (62%)

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:

Currently no financial mechanism in place. (Source: Pre-survey answers)

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:

Most projects have been funded through the municipal budget Operations and Capital process and through NB Power incentives program, as well as upper level government grants. (Source: Pre-Survey answers)

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

NOTES:

There is a suggestion for metered and paid parking lot payment mechanisms such as stand-alone parking meters and pay-and-display parking machines as mentioned on Transportation Master Plan Town of Saint Andrew - but it has not been implemented.

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 city has different sources to fund active transportation infrastructure such as: Municipal budget process, Infrastructure Canada, Kiwanis Club of St. Andrews, Saint Andrews Outdoor Recreation and Trails Inc., and other government grants when available. (source: Pre-survey answers)

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. [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:

There is a financial lever to support densification, which happens on an ad hoc basis. Anchors Landing - gave them that land to build a 36 unit apartment building. Also had a project in the early winter where CBCL created a conceptual drawing for expanding the subdivision, which included apartments and duplexes—doing the pre-planning (a year from now will answer this question more differently).

1.4.6a. Incentives for energy initiatives in new buildings	
Checklist	
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:

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.

1.4.6b. Retrofit program for existing single family residential building stock	
Checklist	
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.saveenergynb.ca/en/save-energy/residential/total-home-energy-savings-program/>

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]	
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]	
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]	
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]	

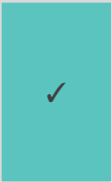
NOTES:

St. Andrews does not have significant multi-unit residential building stock. 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.

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]	

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>

1.4.7. Energy programs targeting energy poverty and/or low-income households

<i>Scale</i>	
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 New Brunswick and administered by 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 for social development, to make improvements/fixes to key aspects. People can contact NB Power directly or through Social Development. Approx 1000 people on the waitlist. There is a two year wait (due to demand, and budget limit). The program is not currently advertised. There is no local energy poverty program.

Strategy

2 / 16 (13%)

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:

On a large scale, the town hasn't had a real opportunity to focus on community energy planning. Still, it has a bit of exposure to the transportation plan, municipal plan, and zoning bylaw. Also featured in Charlotte County Television (CHCO) YouTube channel, Telegraph Journal, St. Croix Courier, 98.1 Charlotte FM, and CBC Radio One Saint John to inform the public.

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>	

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

Checklist

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

On a large scale, the town hasn't had a real opportunity to focus on community energy planning. Still, it has a bit of exposure to the transportation plan, municipal plan, and zoning bylaw.

Explained in the Municipal Plan that Council shall seek to work closely with community groups and other government departments to reduce greenhouse gas emissions and permit, in conjunction with the proposed clean energy strategy, renewable energy use within Town.

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:

On a large scale the town has not had a real opportunity to focus on community energy planning, but the Town has had some exposure in transportation planning, municipal planning, zoning bylaws.

Explained in the Municipal Plan (p. 9) section (8): Council shall support efficient and sustainable land use and development patterns and a mix of uses and densities that support pedestrian movement and that improve energy efficiency where feasible and appropriate.

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 (cost/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]	

1.5.6. Establishment of community energy planning as an ongoing process	
<i>Checklist</i>	
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:

On a large scale, the Town has not had a real opportunity to focus on community energy planning. Still, it has a bit of exposure to the transportation plan, municipal plan, and zoning bylaw.

Land Use

7.5 / 9.5 (79%)

2.1.1. Public engagement and education on energy and land use	
Checklist	
<p>Members of the public are informed of initiatives and educated on land use-energy impacts 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 points]</p>	✓
<p>Members of the public are engaged on land use-energy impacts 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>	

NOTES:

The Town of Saint Andrews through the Environment Advisory Committee informs the public with their bi-annual newsletters. They are also using social media a little bit. However, the Town does not have dedicated staff to perform all of this.

The complete information and/or plan related with land-use is explained in Saint Andrews Adaptation Plan - Community Based Climate Adaptation Plan 2018.

2.1.2. Compact, mixed use, transit-oriented development policies	
Checklist	
<p>Compact, mixed use and transit-oriented development is encouraged in the community's Official Community Plan (and Secondary Plans where applicable)</p> <p>[1 point]</p>	

<p>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]</p>	✓
<p>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 [1 points] [N/A for communities with population <10 000 and/or growth <0% annual change]</p>	N/A

NOTES:

Units downtown that are commercial have residential upstairs. Noted as a mixed use zone in the zoning bylaw. Nothing in the official plan about mixed use.

2.1.3. Energy efficiency and performance in planning policies and processes for new developments

<i>Checklist</i>	
<p>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]</p>	
<p>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]</p>	

NOTES:

As mentioned on the municipal website on November 6, 2017, the Town of Saint Andrews entered into an agreement with the Southwest New Brunswick Service Commission (SNBSC) for the provision of municipal planning and building inspection services.

Based on SNBSC planning- Starting on Feb 1st, 2021, the Province of New Brunswick adopted the National Building Code, 2015 edition. Application of this Code stated on Part 1 Compliance Section 1.1 General : This Code applies to the design, construction and occupancy of all new buildings, and the alteration, reconstruction, demolition, removal, relocation and occupancy of all existing buildings. (See Note A-1.1.1.1.(1).)

'Energy Efficiency' is mentioned in Division B Section 9.36 of the Code Scope:

- 1) This Section is concerned with the energy used by buildings as a result of
 - a) the design and construction of the building envelope, and
 - b) the design and construction or specification of systems and equipment for
 - i) heating, ventilating or air-conditioning, and
 - ii) service water heating.
- (See Note A-9.36.1.1.(1).)

The Town does not have a formal development bylaw at this point. But up until this year they have looked at development on an ad-hoc basis. Energy Efficiency wouldn't have been a priority. They wouldn't have discouraged it but it wasn't a priority. A year from now it might be different.

2.1.4. Embedding of local energy supply options into land-use plans, policies, tools and processes	
<i>Scale</i>	
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: <ul style="list-style-type: none"> - 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 [3 points] [N/A for communities with population <10 000]	N/A
The use of local energy supply options or energy efficiency are promoted through the use of more than one of the following: <ul style="list-style-type: none"> - 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 [4 points] [N/A for communities with population <10 000]	N/A

NOTES:

Zoning By-Law allows for the installation of solar energy projects and allowances for small wind turbines. (Source: Pre-Survey Answers). Explained in the Zoning By-Law Section 3.16-Building Structure Projections/ Permitted Encroachments : The requirements of this By-law with respect to the placing, erecting, or altering of a building or structure in relation to a lot line or street line apply to all parts of the building or structure except for: point (k) window bays and solar collectors may be permitted to project not more than 0.9 m (2.95ft) from the main wall into a required front, rear or flankage yard.

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

NOTES:

Preservation of natural lands in land use practises identified and explained in the Municipal Plan part 2.0 Overall Plan Goals page 7 "Protect and enhance the Town's natural environment and natural resources while mitigating and adapting to climate change."

It is also identified and preserved through the community's Zoning-By Law , explained on (p. 82), section 7.1.1 Green Space Zone Permitted Uses and section 7.2.1 ESA Zone Permitted Uses. Discussed at the council level about increasing green space inventory. 8% of the land to be designated as green space. Interested in increasing that.

2.1.6. Programs to expand and enhance green space, and mitigate urban heat island effect	
Checklist	
Checklist up to a maximum for initiatives (plans, policies, programs) by the local government or other community organization(s) that target: <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) [2 points; 1 point per]	✓✓
Checklist up to a maximum for the local government or other community organizations(s): <ul style="list-style-type: none"> - 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 [1 point] [N/A for northern communities and/or with population <10 000]	N/A

NOTES:

Page 10 section 2.1.3 point (1) of Municipal Plan : Saint Andrews currently has 6% of its land as publicly accessible greenspace. It is proposed that Council work towards raising that number to 10%. 8% is required under the community planning act - called land for public purposes. For Green Spaces. Could be impacted by local government reform.

2 Initiatives:

1. Creating urban farming . Page 9 section 2.1.2 point (9) of Municipal Plan: Council shall encourage limited forms of urban agriculture to promote food security by permitting it in the Zoning By-law in appropriate locations.
2. Expanding urban forest. Page 25 section 2.7.3 point (5) of Municipal Plan: It is proposed that Council develop an Urban Forest Strategy including investigating a system of permits for tree removal.

Energy Networks

14.5 / 21 (69%)

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 points]</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>	
<p>Public engagement and educational activities are developed/delivered collaboratively between multiple stakeholders.</p> <p>[0.5 points]</p>	

NOTES:

Explained on the city website and mentioned on the housing report. Use social media to share the news as well.

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 we discuss issues of importance to our 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/smart-grid/>

<https://www.nbpower.com/en/accounts-billing/>
<https://www.nbpower.com/en/smart-grid/smart-grid-atlantic/shediac-smart-energy-community-project/>

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'. 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]	N/A
Peak shaving measure in place and being tracked [2 points]	N/A
Peak shaving results are shared to relevant stakeholders, lessons learned identified and documented [3 points]	N/A

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]	N/A
Actions have been identified that can be taken to address risks and avoid or mitigate impacts. [2 points]	N/A
Action has been implemented to address risks and/or avoid or mitigate impacts [3 points]	N/A

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]	N/A
---	-----

2.2.4. Natural gas infrastructure is used for electric storage

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

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

Scale	
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 feasibility. [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]	

2.2.6. Infrastructure to support alternative fuel vehicles

Checklist	
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]	✓
Alternative fuel infrastructure project(s) have been developed in the community. [1 point] [N/A if infeasible]	✓
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 communities, 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>. The town has one in the Arena area. There is also one Tesla EV charging station near the Algonquin Hotel.

2.2.7. Smart grid technologies used in electricity distribution infrastructure

Checklist

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 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

8.5 / 23 (37%)

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 points]</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>	
<p>Public engagement and educational activities are developed/delivered collaboratively between multiple stakeholders.</p> <p>[0.5 points]</p>	

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 points]

✓

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 points]

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 points for feasibility]

½

<p>The production of electrical, thermal, or chemical energy products from organic waste materials such as:</p> <ul style="list-style-type: none"> - Incineration - Gasification - Depolymerization - Anaerobic digestion - Pyrolysis - Fermentation <p>[2 points, 1 point per initiative, 0.5 points for feasibility]</p>	½
<p>The production of electrical, thermal, or chemical energy products from wastewater materials such as:</p> <ul style="list-style-type: none"> - Gasification - Anaerobic digestion - Fermentation <p>[1 point, 0.5 points for feasibility]</p>	

NOTES:

Waste collected regionally. Need to confirm if waste for the region is used for energy recovery.

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> <ul style="list-style-type: none"> - Garbage bag collection tags/limits or tipping fee - Plastic bag bans - Re-use or community swap days - Composting <p>[Max of 2; 1 point per program]</p>	✓
<p>Landfill diversion programs are in place for hazardous/special waste [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> <ul style="list-style-type: none"> - Recognition for high performers - Expanding recycling or organic waste programs to include eligible ICI or CRD waste <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> <ul style="list-style-type: none"> - Glass - Paper - Plastics - Metals - Electronic waste - Textiles <p>[3 points; 0.5 points per material]</p>	✓ ✓ ½
<p>Integration and reporting into community energy planning process [0.5 points]</p>	

NOTES:

Within our local regions, the Southwest New Brunswick Service Commission operates Hemlock Knoll, our local solid waste disposal location near Lawrence Station, NB. It is professionally managed and follows best practices for minimum effect on the environment. It is a public facility that local residents are able to access.

Residential solid waste collection day is on Thursdays unless otherwise notified. By-law 98-2, A By-Law to Control and Regulate the Collection and/or Disposal of Garbage and Waste within the town of St. Andrews

The Commission also seasonally operates a “white goods” recycling program for fridges, stoves and other appliances. By appointment, they will retrieve the appliance from the front yard of the resident. The Southwest New Brunswick Service Commission implemented a residential curbside recycling program beginning in September 2018.

<https://www.townofsaintandrews.ca/town-hall/recycling-solid-waste/>

There is one program that exists, garbage bag collection, but not compost.

2.3.4. Water and wastewater programs	
<i>Checklist</i>	
<p>The community has water infrastructure initiatives, such as:</p> <ul style="list-style-type: none"> - Leak detection and repair - Water meters/Water-use monitoring - Pressure reducing valves - Efficiency upgrades to wastewater treatment equipment <p>[1.5 points; 0.5 points 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> <ul style="list-style-type: none"> - Toilet dams - Low-flow showerheads - Faucet aerators or washers - Rainwater collection <p>[1.5 points, 0.5 points per]</p>	
<p>The community has a program in place to promote potable or non-potable water reuse. [0.5 points]</p>	
<p>Integration and reporting into community energy planning process [0.5 points]</p>	

NOTES:

On the Saint Andrews Adaptation Plan page 24 mentioned to implement water monitoring in corporate buildings and also to upgrade the stormwater infrastructure.

General water saving measures are in place, such as:

1. The observed lavatory faucets consisted of standard volume aerators with some faucets having no aerators. Conventional aerators vary in flow rate from 2 to 3 gallons per minute.
2. The observed water closets in the various buildings mainly consisted of the tank-type gravity flush. Different types of water closets were observed ranging from 18.9 liters per flush (5.0 gallons per flush) to 6.0 liters per flush (1.6 gallons per flush).
3. The observed urinals in the various buildings consist of flush valve type and water tank type.
(Source: Town of Saint Andrews Energy Audit, 2008).

At local level

Énergie NB Power promotes low flow showerheads and faucet aerators.

<https://www.saveenergynb.ca/en/save-energy/residential/community-outreach-program/>

<https://www.thermalwisennb.ca/en/total-home-energy-savings-program>

2.3.5. Low impact development and resilient storm water management

<i>Checklist</i>	
<p>The community has programs to manage stormwater and reduce peak flow, such as:</p> <ul style="list-style-type: none"> - Stormwater retention ponds/tanks - Bioswales - Rain gardens - Permeable pavement <p>[2 points; 1 point per]</p>	✓
<p>Storm water management initiative(s) consider future climate risks. [0.5 points]</p>	✓

Integration and reporting into community energy planning process [0.5 points]	
--	--

NOTES:

Town Saint Andrews planning to investigate new water treatment technology and to upgrade their stormwater infrastructure. Retention pond initiative is in place.

Transportation

14.5 / 21.5 (67%)

2.4.1. Public engagement and education on mobility networks	
Checklist	
<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 points]</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 points]</p>	

NOTES:

Concurrent with the public meetings, The Town of Saint Andrews also launched an online participatory website and map, and a survey available both in print and online formats. The participatory map explored participants' places of residence (asking whether they were a local resident, or a visitor, their transportation priorities ranked by level of importance for a number of aspects including: Congestion management, Walking and Cycling, Public Parking, Complete Streets, Goods Movement, Public Transit, and Accessibility. (Source: Transportation Master Plan).

2.4.2. Active transportation integrated into a Transportation Master Plan

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

NOTES:

Source: Transportation Master Plan.

2.4.3. Transportation demand management

Checklist	
<p>The community has basic infrastructure to support active transportation, including:</p> <ul style="list-style-type: none"> - 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>[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> <ul style="list-style-type: none"> - Carsharing programs - Carpooling programs/lots - Ride Sharing programs <p>[1 point; 1 point per for implementation, 0.5 points per for assessment]</p>	
<p>The community has public transit options available, including:</p> <ul style="list-style-type: none"> - Buses* - Bus rapid transit* - Street rail** - Light rail** - Subway** <p>*may only be appropriate to mid-large communities **may only be appropriate to large communities [1 point for communities >10 000] [1 point for 3 options for communities >100 000]</p>	N/A

Available public transit systems make efforts towards continuous improvement such as increasing: 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) [1 point; 0.5 points per] [N/A for communities with no public transit system]	
--	--

NOTES:

Pedestrian sidewalks, bike lanes, bike share/rental program , multi use trail, and dial-ride program are provided. Considering the relatively-low population densities of communities in south-western New Brunswick, there is currently no dedicated public transit system in place serving the Town of Saint Andrews.

2.4.4. Alternative energy sources of public transit systems	
<i>Scale</i>	
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:

In summary, NB Power has completed a scoping of opportunity/feasibility assessment.

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:

There is a policy in place for corporate level- not community level.

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

Checklist

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:

During COVID-19, many government employees also worked remotely. There are EV charging stations at a few government facilities across the Province. In the future, additional amenities and support for active transportation and transportation demand management may be considered. Bike racks facilities available.

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

Scale

Support for transportation demand management and alternative fuel vehicles at the workplace exists in one public sector organization, such as:

- 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

[1 point]

Support for transportation demand management and alternative fuel vehicles at the workplace exists in some public sector organizations, such as:

- 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

[2 points]

✓

<p>Support for transportation demand management and alternative fuel vehicles at the workplace exists in all public sector organizations, such as:</p> <ul style="list-style-type: none"> - 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>[3 points]</p>	
--	--

NOTES:

Public buildings, such as government offices, schools, hospitals, provide amenities for active transportation (e.g. bike racks) and connectivity to trails, whenever possible - i.e. depending on municipal zoning, land use, proximity to AT infrastructure. During COVID-19, many government employees also worked remotely. There are EV charging stations at a few government facilities across the Province. In the future, additional amenities and support for active transportation and transportation demand management may be considered.

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

NOTES:

SWNBTAI and the Town of Saint Andrews are also considering collaboration with other towns (St. Stephen and Grand Manan/Blacks Harbour) and discussions with the Regional Service Commission concerning fleet ownership, fuel supply, and service to residents in the Local Service Districts.

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:

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]	N/A
An alternative fuel vehicle pilot project has been developed. [2 points] [N/A if infeasible]	N/A
Alternative fuel fleet vehicles are seen as a strategic priority. [3 points] [N/A if infeasible]	N/A

Buildings

8 / 20 (40%)

2.5.1a. Public engagement and education on energy in single family residential buildings	
Checklist	
<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 points]</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://thegaiaproject.ca/en/programs/>

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

Checklist

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:

- Website updates
 - Newsletters
 - Print materials (such as brochures, fact sheets, information packages)
 - Social media updates
 - Webinars or conference calls
 - Open houses
- [0.5 points]

✓

Members of the public are engaged on multi-unit residential, commercial, or other building energy use 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:

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 our 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 a 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/>. The Town website and social media are used to inform the public

2.5.2a. Local government leadership by example in corporate-owned facilities	
Checklist	
Corporate process is in place to improve energy efficiency, including through energy standards/certifications and a schedule for regular recommissioning, in existing corporate facilities. [0.5 points]	N/A
Corporate process is in place to improve energy efficiency, including through energy standards or certifications, in new corporate facilities. [0.5 points] [N/A for small or no-growth communities]	N/A
A process is in place to procure local/renewable heat/electricity for corporate facilities. [0.5 points]	N/A
A process exists to use a benchmarking, labelling and disclosure system for corporate-owned facilities. [0.5 points]	N/A

2.5.2b. Electric utility leadership by example in owned facilities	
Checklist	
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 points]	
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	
Checklist	
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]	N/A
The natural gas utility uses a benchmarking, labelling and disclosure system for all owned facilities. [0.5 points]	N/A
Energy performance of utility-owned facilities is seen as a strategic priority for the natural gas utility. [1 point]	N/A

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

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

NOTES:

Example: The Algonquin Hotel.

QUEST

