



Manitoba Municipalities: Building a Green Economy

Les municipalités manitobaines : bâtir une économie verte

***Partners for Climate Protection – Municipal Climate Change Action
Training Workshop Wednesday, February 20, 2013 at Inn at the Forks.***

Offered by the Federation of Canadian Municipalities (FCM) and ICLEI Local Governments for Sustainability in partnership with the CDEM (Economic Development Council for Manitoba Bilingual Municipalities).



DESCRIPTION

All across the country, local and regional governments are pursuing strategies to monitor and reduce community greenhouse gas (GHG) emissions using the Partners for Climate Protection framework. This workshop will provide a variety of tools and mechanisms that can assist local governments with local energy and greenhouse gas (GHG) emissions management. Facilitators will share success stories and best practice examples from across the country with a special focus on Manitoba resources and services.

AGENDA

Breakfast and registration: 7:30am to 8:30am

Opening remarks: 8:30am

Lunch and Sponsor Presentations: 12:00pm to 1:15pm

Wine and cheese: 4:30pm to 6:30pm (cash bar)

PRESENTERS

- Muni Ahlawat – Federation of Canadian Municipalities (pcp@fcm.ca)
- Curt Hall – Climate Change Connection (curt@climatechangeconnection.org)
- Jonathan Connor – ICLEI Local Governments for Sustainability (jonathan.connor@iclei.org)
- Dany Robidoux – CDEM's Green Economy Coordinator (drobidoux@cdem.com)
- Lindsay Irwin - Green Manitoba (Lindsay.Irwin@gov.mb.ca)



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PARTENAIRES DANS LA PROTECTION DU CLIMAT

COMMUNITY BACKGROUND & WORKSHEETS

- Sample Community: Welcome to Pointe-de-l'Église
- Map
- Exercise: Local Action Plan
- Sample Reduction Measures
- Sample Implementation Matrix
- Exercise: Implementation Matrix



Welcome to Pointe-de-l'Église

Fast Facts

Originally founded in 1877

Incorporated in 1947

Population: 1 100

Annual growth: 5.5%

Area: 2.6 km²

Unemployment ('06): 2.3%

Median household income ('06):
\$43 776

Community GHG emissions (2011):
21 446 tonnes

Corporate GHG emissions (2011):
105 tonnes

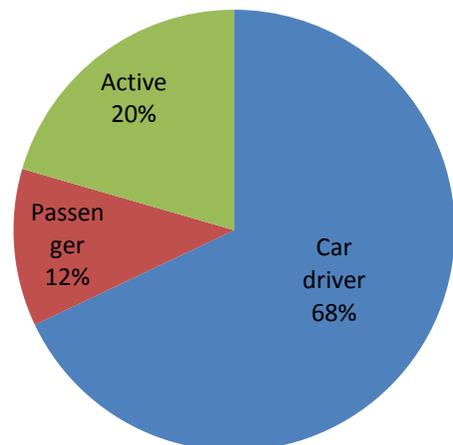
Less than 30 minutes of Winnipeg's Perimeter Highway lies one of the true jewels of rural Manitoba - the picturesque village of Pointe-de-l'Église. Blessed with a beautiful setting along a scenic river, Pointe-de-l'Église represents country living at its best with its special combination of friendly residents, affordable living, progressive attitudes and proud heritage. This is a community where neighbours still look out for one another, where your grocer knows you by name and where children can safely play. It is also a community of industry and enterprise as it serves as the shopping and service centre for one of Manitoba's most fertile and agricultural regions.

Pointe-de-l'Église provides access to the modern services and conveniences today's homeowners expect including community wells, municipal sewer, garbage and recycling pick-up, snow removal, a fire truck with a volunteer fire brigade and ambulance services. But these municipal basics are just a start. An ideal community for raising a family, Pointe-de-l'Église is home to educational institutions of all levels, from preschool through to college. And because Pointe-de-l'Église serves as

both the business centre and bilingual centre of the Region, residents enjoy access to many of the amenities normally associated with much larger communities. These include a full service Health Care Centre (including an acute care hospital), a Bilingual Service Centre (which provides access to federal, provincial and municipal government services), a newly expanded retirement home, a full-service grocery store, an RCMP detachment, a regional public library and broadband/high speed internet services. For sports enthusiasts, the community has an arena with artificial ice, baseball diamonds, a fitness centre, is part of the Trans-Canada Trail and a renowned Provincial Park is minutes away.

Transportation and Commuting

As a smaller, rural community, with lower density than large urban centres there are fewer options for transportation to and from work, as well as a lower likelihood that work is close by. Of 390 adult residents that work, 310 take a car to their employment, while 80 use some form of active transportation. Of the 310 car users, 45 are passengers, indicating that as many as 90 of the car users are car-pooling.



A joint initiative with a neighbouring municipality will soon see a community shuttle in place, to provide a commuter link to the capital region.

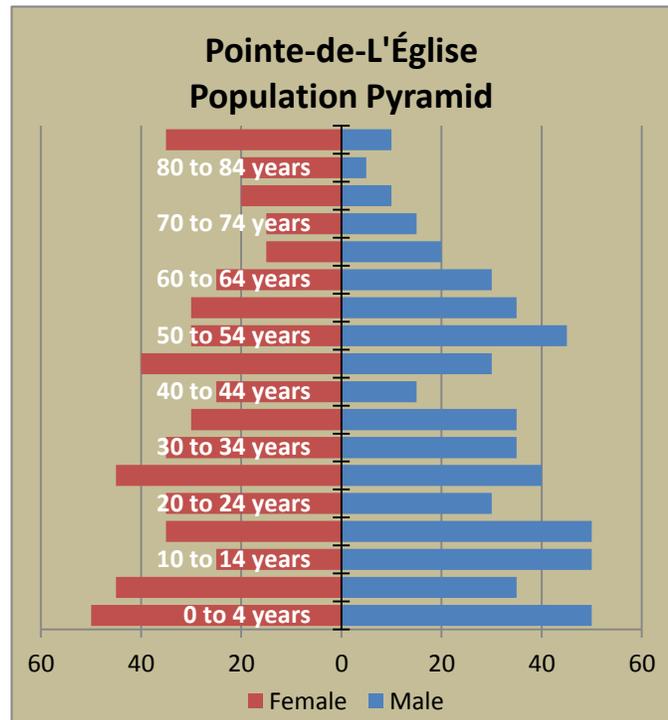
A major highway runs through the village, leading to a popular tourist destination and a border crossing, contributing to a significant amount of through-traffic in the community.

Population and Housing

Pointe-de-l'Église has, since 2006 grown by 31.0%, or 5.5% annually. Primarily settled by Francophones, the proportion of French-at-home speakers has decreased from 48.1% in 2006 to 41.0%, as over 200 new citizens have joined the municipality, while the number of French-at-home speakers has increased.

At 2.6 km², Pointe has a fairly densely packed population: 422.7 people per square kilometre. This compares to 14.8 people per km² for the surrounding region, 402.9 for the nearest town, and 1430.0 for Winnipeg.

Between 2006 and 2011, 85 homes were built. Of the 425 dwellings in Pointe-de-l'Église, 300 are single-detached dwellings, with 90 more units of apartment housing, and the remainder movable dwellings, row houses, and semi-detached units. In 2006, 4.4% of homes were reported as being in need of major repairs.



Economy

The economic landscape in the area is mostly related to the agricultural sector, public sector employment and seasonal influx related to the close proximity to a provincial park.

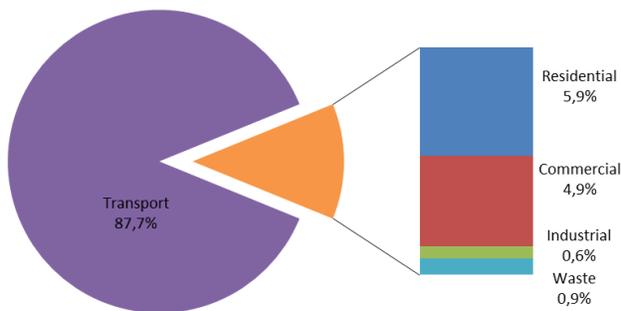
Unemployment of 2.3%, median income is \$20 000, which is below provincial average, but the percentage of people below the low income cut off (LICO) after tax is also lower than the provincial average.

Energy and Greenhouse Gas Emissions

Since 2008 the village has been monitoring its GHG emissions on both the corporate and community sides.

In 2011 it completed its third inventory (2003 was recently quantified). At the community level, the transportation sector was far and away the strongest contributor to GHG emissions – 87.8% of all emissions, or 18 804 tonnes of CO₂ equivalent. Residential emissions were next highest, at 5.9%, followed by the commercial sector, with 4.9%. The industrial sector, despite being fairly substantial, produces just 0.6%, less even than the community’s waste disposal at 0.9%.

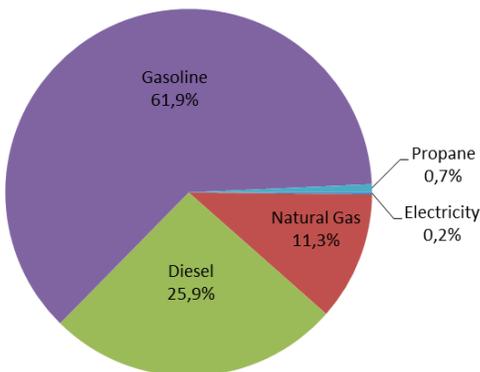
Community GHG Emissions by Sector



Sector	GHGs (t)
Residential	1257,5 (5,9%)
Commercial	1052,7 (4,9%)
Industrial	135,5 (0,6%)
Transportation	18803,8 (87,7%)
Community waste	196,9 (0,9%)
Total	21 446,4

A breakdown of energy use by type is outlined in the table below. Gasoline consumption accounts for nearly half (48%) of all energy consumption, but more than 61% of all GHG emissions. Diesel accounts for just over 20% of energy consumed, but nearly 26% of all GHG emissions. Conversely, consumption of Electricity accounts for 18% of all consumption, but just 0.2% of all GHG emissions, owing to the relatively clean sources of electricity in Manitoba.

Community GHG Emissions by Energy Source



	Energy (GJ)	Total eCO ₂ (t)
Electricity	71680,6 (18,4%)	39,8 (0,2%)
Natural Gas	48954,2 (12,5%)	2405,8 (11,2%)
Diesel	78429,4 (20,1%)	5495,0 (25,6%)
Gasoline	188731,9 (48,4%)	13154,8 (61,3%)
Propane	2524,2 (0,6%)	154,0 (0,7%)
Total	390 320,3	21 446,4

Pointe-de-l'Église



SAMPLE REDUCTION MEASURES

GHG Reduction Activity	Level of Investment
Corporate (Municipal) Operations	
Conduct efficiency retrofits at municipal facilities (lighting, HVAC systems, building envelope and insulation, etc.).	Low - Medium
Construct alternative energy systems (solar hot water, waste heat recovery, etc.) at arenas and community sports facilities.	Medium - High
Promote 'green' fleet management practices, such as vehicle 'right-sizing,' low carbon fuels, or the purchase of hybrid-electric vehicles.	Medium
Provide vehicle operators with driver awareness training programs that communicate fuel-efficiency targets and driving techniques.	Low
Retrofit outdoor public lighting and traffic signals with light-emitting diode (LED) technology.	Medium
Purchase energy-saving appliances and equipment, such as Energy Star® computers and electronics.	Low - Medium
Ensure that new public facilities are constructed to meet high environmental standards (e.g. LEED® certification, etc.).	Medium - High
Implement comprehensive landfill gas recovery systems at city-owned landfills.	High
Replace high-carbon intensive fuels at municipal utilities (e.g. power generation facilities) with renewable and/or low-carbon alternatives.	High
Implement employee energy awareness programs to encourage conservation.	Low
Implement a water conservation plan to reduce the energy needed to distribute potable water and treat wastewater.	Low-Medium
Update procurement policy to include environmental considerations.	Low
Residential	
Promote energy conservation among residents via public outreach and awareness-raising campaigns.	Low
Encourage use of residential rain barrels to limit outdoor use of potable water.	Low
Adopt green building standards for new residential buildings.	Low
Promote smart urban planning and land use by encouraging high-density, mixed-used neighbourhoods.	Low-Medium
Industrial, Commercial and Institutional (ICI)	
Construct a district energy system that supplies efficient heating and/or cooling to industrial, commercial and/or institutional facilities.	High
Transportation	
Adopt an anti-idling bylaw.	Low
Invest in public transit systems.	High
Construct dedicated infrastructure for cyclists (segregated bicycle lanes and bicycle corridors, secure and sheltered bicycle storage facilities, etc.).	Low-Medium
Organize 'Commuter Challenges' that encourage city residents to commute via carpooling, public transit or active transportation, such as walking and cycling.	Low
Promote community car share programs.	Medium-High
Solid Waste	
Implement a curbside recycling program or provide residents with select drop-off locations ("depots") for recyclables.	High
Encourage backyard composting or implement a system for the collection of organic household waste (food scraps, yard trimmings, etc.).	Medium-High



SAMPLE IMPLEMENTATION MATRIX

Goal: Retrofit highest-energy consuming buildings to reduce energy consumption/costs by 25%				
What: Actions		Who: Department(s) and Others Involved		When: Timeline(s)
1. Compile energy use information from electric and heating bills		Finance / Facilities Manager / Local utilities		January 2010
2. Create energy and emission inventories		Climate Change Coordinator / Environment		February 2010 – April 2010
3. Negotiate contract with an energy services company (ESCO) to conduct energy audits and identify highest-energy consuming buildings		Facilities Manager / Public Works / Finance / Legal		February 2010
4. Conduct energy audits		ESCO (overseen by Facilities Manager)		February – March 2010
5. Review findings and report to council, then implement low-cost measures		Facilities Manager		April – August 2010
6. Obtain capital funding and council approval to implement higher-cost measures		Municipal council		September 2010
7. Evaluate measures		ESCO and Facilities Manager, with support of retrofitted buildings' personnel (operations, maintenance staff, etc.)		September 2010 to April 2011 to obtain a full year's data
Resources				
Supporting Policies/Bylaws	Potential Obstacles	Financial Resources Available/Required	Other Resources Available/Required	Performance Measures
Policy approved by Council March 2007 to obtain LEED® Silver accreditation for all new and retrofitted public facilities	Limited number of ESCOs in the municipality Difficulty obtaining historical utility and heating invoices	\$500,000 from capital budget Utility rebate/incentive programs for electricity use Energy savings from these buildings will be reinvested into a revolving fund to pay for future or higher-cost measures	Summer student in the engineering department	ESCO conducts evaluations to determine energy reductions. If 25% goal is not met, ESCO reduces its fee. Refer to ongoing energy and emissions inventories created. Staff conduct evaluations to determine comfort levels, air quality, or operational or maintenance issues Conduct evaluations of higher-cost measures, and determine capital budget and energy savings already available



EXERCISE: IMPLEMENTATION MATRIX

Once the greenhouse gas (GHG) emissions inventory and forecast, reduction target, and Local Action Plan (LAP) have been prepared, the focus turns to implementation of the LAP. While municipal staff will be responsible for putting the plan into motion and maintaining momentum, in-house personnel, non-governmental organizations and private-sector contractors can complete the implementation of specific projects. The approval and support of council, municipal staff and the community are essential to the plan's success.

Roundtable Exercise

Select one or two of the action items you have identified in Step 3. Think about what these actions are contributing towards in terms of the larger action plan of the community. Use the blank implementation matrix provided to fill in some additional details on how to move forward on those actions considering a variety of factors as outlined in the matrix.



NOTES



NOTES



EVALUATION

Thank you for participating in today's workshop. We hope you found the information useful and are able to apply what you learned back in your community. This is the first time we have delivered this workshop in Manitoba. As such we would greatly appreciate your feedback in how the workshop content met your needs and can be improved. Please take a moment to answer a few short questions about the workshop.

1. How informative did you find the **presentations**?

Very Informative Somewhat Already knew

2. How informative did you find the **workgroup exercises**?

Very Informative Somewhat Already knew

3. How would you describe the pace of the workshop?

Too fast Just Right Too Slow

4. Did you find the workshop structure effective?

Yes No Uncertain

5. Will the material you learned today help you in advancing climate change planning or projects in your community?

Yes No Uncertain

6. Would you be interested in a more advanced workshop on these topics?

Yes No Uncertain

If Yes, which ones _____

7. Is your municipality a member of the Partners for Climate Protection Program?

Yes No Uncertain

8. Has your municipality accessed FCM's Green Municipal Fund?

Yes No Uncertain



9. Is there any additional content you would like to see included in the workshop?

10. Any other comments on the workshop?

