

Rural Municipality of Saint-Laurent Local Climate Change Action Plan



Prepared By:

Gisèle Champagne, Dany Robidoux, François Catellier du CDEM et Katy Walsh des Administrations locales

Acknowledgements:

Municipal Council, staff and committee members

Date:

Wednesday, September 15th 2010

Executive Summary

This action plan calls for the following GHG Emissions Reduction:

- 20% below 2003 levels for the municipal corporation
- 6% below 2003 levels for the broader community in the municipality

The strategies selected to achieve this plan are:

- Sustainable Buildings
- Sustainable Energy Utilization
- Waste Management
- Vehicle Emission Reduction
- Landscaping

The R.M. Council will oversee the plan's implementation.

1. Introduction and Background

CLER Program

In 2008, the Province of Manitoba launched the Community Led Emissions Reduction (CLER) program as a four-year (2008-2012) pilot program to support community-led action to reduce greenhouse gas (GHG) emissions.

The CLER program is directly modeled on the Federation of Canadian Municipalities' (FCM) Partners for Climate Protection (PCP) five milestone framework. All CLER participants and their communities are working through the milestones between now and March 2012 and receiving concentrated resources to complete them as follows:

- Establish a GHG emissions inventory.
- Set a GHG emissions reduction target.
- Develop a local climate change action plan with public input.
- Implement GHG emissions reduction projects and activities included in the Council- or Board-approved plan.
- Monitor progress and report results.

Communities that follow the five milestone framework and take action to reduce their GHG emissions will see a number of benefits:

- Short- and long-term cost savings
- Improved health and safety
- Protection of natural resources and habitat
- Local economic stability and development
- Community resilience and adaptability

The goal of the CLER program is to assist municipal governments and not-for-profit community organizations in their locally-driven efforts to reduce GHG emissions and make more sustainable decisions now and in the future. Reducing GHG emissions can provide economic as well as environmental benefits for municipalities, community organizations, businesses and individual residents. CLER assists participating communities in realizing these benefits.

Our Community

The Rural Municipality of Saint-Laurent lies along the shores of Lake Manitoba. Commercial fishing is an important industry and source of employment for the Interlake area. Between 1990 and 2000, Manitoba's commercial fisheries have produced an average of 11.6 million kilograms of fish annually. Lake Manitoba is primarily winter fishery and summer production is strictly for carp and mullet (suckers). Production in winter 1999/2000 was 53% mullet (sucker), 28% pickerel/sauger, 7% pike, and 6% each for carp and perch. (Manitoba Fisheries Branch). The village of Saint-Laurent has a fish packing station for the winter, and fish are sent for processing to the Fresh Water Marketing Corporation in Winnipeg.

The picturesque beaches and stands of trees are the base of economy of Saint-Laurent – tourism. Hotels and restaurants and other businesses provide services for visitors to the area. Skidoo, skiing, and hiking trails connecting to the provincial trails, as well as golf and other sports, Canada Day celebrations and Metis Days are just a few things Saint-Laurent offers visitors to the Interlake.



Bombardiers are a common site in Saint-Laurent during the winter months.

Table 1: 2003 Saint-Laurent community eCO2 Emissions by sector

Sector	Total eCO2 (t)	Percentage
Residential	678	4%
Commercial	157	1%
Industrial	45	0%
Transportation	17 555	94%
Community Waste	160	1%
Total	18 595	100%

Table 2: 2003 Saint-Laurent Corporate eCO2 emissions by sector

Sector	Total eCO2 (t)	Percentage
Buildings	21	19%
Vehicle Fleet	89	81%
Streetlights	0	0%
Water and Sewage	0	0%
Corporate Waste	0	0%
Total	110	100%

Community Vision

The R.M. of Saint-Laurent has a vision to lead Manitoba municipalities with green, sustainable projects. Already two pillars of its Eco-Village concept are in place:

1. École Aurèle Lemoine a LEED building which includes mechanical HCS
2. Geo-thermal heating of the Saint-Laurent Rec Centre and Arena

This LAP is the R.M. of Saint-Laurent’s first formal plan of this type. It has been developed in order to provide a framework for environmental priorities as well as to identify how the municipality can continue moving towards sustainability. The plan will be updated as changes in technology, funding and programming is made available to the municipality. The R.M. of Saint-Laurent’s LAP is based on 5 guiding principles:

Establishing Partnerships

Continue to establish partnerships and alliances with government, private, non-for-profit and community entities by taking a pro-active approach towards contacting and engaging key players. Partnerships are integral in order to achieve environmental objectives as well as to improve on the well being of the municipality and its communities. The ability to build mutually beneficial relationships is crucial to long term growth and sustainability.

Engaging Citizens

Actively involve local residents, stakeholders and community partners by inviting them to take part in the planning and implementation of environmental strategies. Facilitate public consultations and encourage community feedback through activities such as online and in-person surveys.

Focusing on Innovation

Implement environmental best practices and pragmatic solutions by researching and utilizing innovative techniques acquired by other municipal, private and community groups. Maintain a constant balance between economic, social, and environmental considerations.

Leading by Example

Lead by example by putting into practice environmentally responsible projects and initiatives at the municipal level. Foster an environment for capacity building and support community leaders and strategic partners by offering human and financial resources wherever possible.

Tracking Progress

Monitor, evaluate, and report on the activities undertaken through the use of surveys, public consultations and strategic planning sessions. Implement follow up actions and pragmatic solutions wherever necessary.

Target GHG Emissions Reduction

- 20% below 2003 levels for the municipal corporation;
- 6% below 2003 levels for the broader community

2. Community Engagement

CLER Public Consultation Plan

Rural Municipality of Saint-Laurent

May 25, 2010

The R.M. of Saint-Laurent public consultation meeting was held in the new Municipal offices on May 25th 2010 at 7pm to provide the public with the opportunity to learn about the goals of the CLER project, present the municipal and community committees draft of local action plan ideas, to gather feedback and input as well as garner support for the implementation. The information session was advertised on the town Web site, in the local newspaper The Chatterbox and through word of mouth. The public information session drew 12 participants residents. (list in annexe)

Prior to the public consultation the community steering committee the municipal committee composed of, Dany Robidoux of the CDEM and Gisele Champagne project coordinator met with Councillors Marc Chartrand, Hugh Sigurdson, Lance Kennedy, Reeve Earl Zotter and Chief Administrative Officer Corlie Larson to explain the CLER project on November 10th 2009.

The municipal committee made up of CAO Corlie Larson, councillor Marc Chartrand and Reeve Earl Zotter met April 21st and May 19th 2010. The community committee members Audrey Combot, Claudette Rainville and Julien Chartrand met April 20th and May 24th 2010.

Format of public consultation meeting

Corlie Larson welcomed the participants, gave a brief summary of the R.M. 's involvement and decision to move forward with CLER project as to ensure community sustainability and demonstrate leadership, outlined the goals of the CLER project, and gave an overview of the municipal and community draft local action plan. A summary of prior projects completed since 2003 and which can be used in attaining the 2012 goal of reducing by 6% community and 20% municipal GHG emissions was also listed. Dany Robidoux from the CDEM gave an overview and background of the CLER project, explained the goals and milestones, how the GHG inventory was calculated, explained the baseline of municipal and community GHG emissions and the notional and competitive funding processes. A clip on green projects prepared for the CDEMs' AGM was also viewed. Participants were then asked for their emission reduction ideas, followed by a Q & A period. Questions put forth dealt with the accessibility of funds and whether any major organizations /contacts were interested in partnering up to realize some projects.

Ideas collected at the public consultation were as follows:

Transportation

- Look into what can be done to eliminate the doubling up and redundant bus routes used by the school divisions.
- Allow employees, teachers and residents to use school buses as alternative to using their cars.
- Look into route planning for buses and municipal workers to eliminate unnecessary travel and fuel consumption
- Study possibility of carpooling
- License electric bikes and have rebate or incentive on purchases
- Pass by-law allowing golf carts as eco friendly transportation method within town limits.

Green work practices

- Encourage video conferencing versus driving to conferences
- Facilitate access to broadband Internet for the region in order to allow people to work from home

Anti-idling

- Educate public about anti –idling
- Put up signs at strategic areas
- Have eco driving workshop

Waste management

- Build a bio filtration system to reduce septic tank trips, manage and reduce waste particularly in the cottage areas.
- Job creation

Recycling

- Reduce or eliminate use of plastic bags. Aim to be a plastic bag free community
- Host a community wide event where good condition but unwanted items are given/traded instead of thrown out or left cluttering basements
- Continue to promote recycling program

Public education campaign

- Have workshops on alternative and eco lawn care, reduce pesticide and fertilizer use
- Have composting workshop
- Organize green information fair with booths, presentations, demonstrations, films etc
- Need to educate and have awareness campaign about sustainability

- Have employee dedicated to coordination, promotion, and implementation of local action plan to ensure its success particularly on the community level.

R.M. of St-Laurent Public Consultation Attendance

Name	Address/Organization
1. Claudette Rainville	Saint-Laurent
2. Audrey Combot	Saint-Laurent/Chatterbox
3. Julien Chartrand	Saint-Laurent
4. Luc Paul Fontaine	Saint-Laurent
5. Derek Johnson	Oak Point
6. Ray Millar	W.I.P.D.
7. Lina Desjarlais	Comité culturel
8. Frieda Krepan	Saint-Laurent
9. Marc Chartrand	R.M. councillor
10. Corlie Larson	CAO
11. Dany Robidoux	CDEM
12. Gisele Champagne	CDEM

Promotion

Promotion, publicity and contact information for the Public consultation meetings was given to inform the community about the CLER Program and the Local Action Plan. The consultation meeting details were sent out by :

- The Chatterbox - Regional Community News Bulletin
- Word of mouth

St-Laurent Projects done since 2003

Strategy	Project / Activity	Objectives	Lead	Partner	Date	Project Cost	Other benefits
Buildings	Installed Geothermal Heating Saint-Laurent Recreation Center & Arena	Reduce Energy Costs	Council	Rec Centre	2008		Save \$\$\$ in long term
Buildings	Installed artificial ice in arena	Reduce Energy Costs			2009		
Buildings	Installed new energy efficient lighting in R.M. Shop & Fire Hall	Reduce 12% on lighting costs	Council		2009	\$2700.00	Better and Improved Lighting
Buildings	Built LEED school, geothermal mechanical HCS	More energy efficient	DSFM		2008		Improved environment
Buildings	Re-adaptive use of existing facility (bowling alley) for municipal offices	Reduce Energy Costs	Council		2009		Improved & healthier working conditions
Transportation	Fleet truck being replaced	Reduce fuel cost			2009?		
Energy	Replaced all Xmas lights to LED	Reduce energy	Council		2008?		More efficient lighting
Greening	200 trees planted in school yard	Clean air			2008-09		beautification

3. Priority Projects / Activities

3.1 Waste Management Plan

- **Strategy**

Develop a waste management strategy for the R.M. of Saint-Laurent, which begins with a reduction of septic tank trips and diverts organic waste from landfills.

- **Description of Project / Activity**

- Build a bio filtration system to reduce septic tank trips, manage and reduce waste particularly in the cottage areas.

- Develop education campaign / free workshops and education sessions on composting.
- Coordinate eco-themed activities
- Host a community swap event instead of throwing items out in the landfill
- Build a garbage compactor facility and implement roadside garbage pickup of residents

- **Objective**

- Reduce trips taken by septic tank truck
- Create jobs
- Reduce and divert landfill waste, thereby saving the cost of creating new landfills.
- Promote recycling and reduce green house gas emissions with less trips to recycling depot
- Create an awareness Campaign and develop green habits.
- Facilitate participation and ensure success.

- **Leads and Partners**

Council will be the lead. The Community will be invited to partner in on the project.

- **Timelines**

- | | |
|--------------------------------|----------------------|
| ○ Build bio filtration system | Medium term |
| ○ Develop education campaign | Short term & Ongoing |
| ○ Community swap event | Short term & annual |
| ○ Garbage compactor | Short & Medium term |
| ○ Paperless system for council | Short / Medium term |

- **Estimated GHG emissions reduction potential**

If 10% of the RM's population (117) practices composting, the resulting savings in GHG will be **15.3T eCO2**.

117 x 2.04 kg waste / person / day x 365 days x 12.7% kitchen organic waste x 1 tonne / 1000 kg x 0.066 tonnes of methane x 21 (methane has 21 times the global warming potential as CO2) = 15.3T eCO2.

- **Additional benefits expected**

Prolong life of landfill.

Reduce third party garbage collection costs

Reduce septic tank service fees

Save dollars on reduced trips to recycling facility

Reduce residents' trips to West transfer site

Reduce municipality's trips to the city for garbage disposal

- **Budget**

Bio filtration system	= \$ _____
Education campaign	= \$ 1,000
Cost per workshop	= \$ <u>500</u>
Truck for residential garbage pick-up	= \$ _____
Building	= \$ <u>69,900</u>
Hydro hook-up	= \$ <u>28,000</u>
Compactor	= \$ <u>32,000</u>
2 bins needed for compactor	= \$ <u>18,000</u>
Total:	= \$ _____

- **Monitoring and Reporting**

- Estimate of diverted waste (organic and recycled) by adding up scale tickets before and after the implementation of the program
- Calculate on methane emission avoided by diverting waste
- Number of people assisting the workshops and education sessions
- Odometer readings on septic truck prior to and after installation of bio-filtration system
- Number of residents participating in roadside garbage service

- Number of trips to Winnipeg by the municipal employees to drop-off garbage
- Number of people dropping off garbage at the transfer station

3.2 Energy Conservation Plan

Strategy:

- Encourage sustainable building practices in current and future municipally owned buildings
- Sustainable Energy Utilization Project targeting municipal staff

- **Description of Project / Activity**

- Remove old municipal building
- Move R.M. office to existing retro fitted heated building located in Recreation Centre (Bowling Alley)
- Install new insulation, new energy efficient windows, lighting appliances and low flush toilets (Rec centre/R.M Office complex?)
- Develop and implement an energy reduction program for municipal staff

- **Objective**

- Reduce the municipality's Hydro costs
- Re-adaptive use and upgrade of existing space
- Develop green habits in the R.M
- Facilitate participation and ensure success.

- **Leads and Partners**

Council will lead this project in partnership with the recreation Centre.

- **Timelines**

- Remove old municipal building Immediate

- Move office to retro fitted space in rec centre Immediate
- Install new insulation, energy-efficient windows, lighting and install low flow toilets Immediate
- Develop and implement energy reduction program for municipal staff Immediate

- **Estimated GHG emissions reduction potential**

The 2003 baseline electricity used for the municipal buildings created 21 tonnes eCO₂. If these activities reduce electricity consumption by 10% the resulting GHG emission reduction would be **2.1 tonnes eCO₂**.

- **Additional benefits expected**

- Save Money on operating the R.M. Office
- More comfortable and productive work environment
- The R.M. will lower their long-term operating expenses while upgrading its buildings at the same time.
- Longer-lasting light fixtures and appliances in municipal buildings
- Reduced water for flushing toilets

- **Budget**

Rec Centre improvements	= \$386,000
Insulation, windows, lighting and low flow Toilets	= <u>\$100,000</u>
Total	= \$486,000

- **Monitoring and Reporting**

Overall GHG emissions reduced and water used: these will be measured by comparing Hydro and water bills before and after the retrofits.

3.3 Landscaping, Green Canopy Plan

- **Strategy**

- **Additional benefits expected**

- Cleaner air
- Community beautification
- Wind management

- **Budget**

Trees	= \$ _____
Landscaping rest stop	= \$ _____
Total	= \$ _____

- **Monitoring and Reporting**

Key indicators will be:

- The number of trees planted
- M² of lawn replaced
- GHG emissions reduced over time as a result of the landscaping project

3.4 Vehicle Emission Reduction Plan

- **Strategy**

Reduce the amount of GHG emissions generated by vehicles in the community.

- **Description of Project / Activity**

- Promote car-pooling through development of municipal website
- Encourage school divisions to share bus routes
- Promote the use of electric golf carts and electric bicycles in the community
- License electric bikes and have rebate or incentive on purchases
- Provide access to videoconferencing thereby reducing transportation to Winnipeg
- Get Broadband Internet into the region to allow people to work from home

- Place anti-idling signs at strategic areas
- Have an eco-driving workshop

- **Objective**

- Reduce vehicle use, GHG emissions, and save fuel.
- Reduce transportation to Winnipeg

- **Leads and Partners**

The R.M., through its CDC will be the leads. Partners to encourage the use of videoconferencing will be Manitoba Hydro and MTS. Partners for providing local high-speed internet will be broadband internet service providers, and MTS.

- **Timelines**

- | | |
|---|----------------------|
| ○ Website to encourage car-pooling | Short to Medium term |
| ○ Discuss with school divisions to share bus routes | Immediate |
| ○ Look into existing acts and bylaws allowing golf carts within town limits | Immediate |
| ○ Pass by-law allowing golf carts within town limits | Short Term |
| ○ Promote electric vehicles in town | Short to Medium Term |
| ○ Anti-Idling Signs | Short to Medium term |
| ○ Meet with MTS and broadband providers for high-speed internet options | Immediate |
| ○ Provide access to videoconferencing | Short to Medium Term |
| ○ Eco-Driving Workshop | Timeline |

- **Estimated GHG emissions reduction potential**

According to NRCan, the average Canadian idles 5-10 minutes a day. Reducing idling by 5 min/day saves 0.00036 tonnes eCO₂ / day per person. Therefore, 0.00036 tonnes eCO₂ / day x 365 days = 0.13 tonnes per year/person.

Assume 50% of current population (1,172) drives daily

$$0.13T \times 586 = 76T \text{ eCO}_2 \text{ saved/year}$$

Could also include a calculation based on assumption that SOV travel will be reduced as a result of all other initiatives in addition to anti-idling initiatives.

Assume a 1% reduction in emissions from gasoline-powered vehicles.

11,961T emissions from community transportation for gasoline-powered vehicles in the R.M. of Saint-Laurent (2003 data)

$$11,961 \times 0.01 = 119.61T \text{ reduced}$$

$$76 + 119.61 = \mathbf{195.61T} \text{ eCo}_2 \text{ saved/year}$$

- ***Additional benefits expected***

- Local families will save on fuel and vehicle wear and tear.
- Highways to Winnipeg will last longer
- Residents will save time by videoconferencing instead of driving to Winnipeg

- ***Budget***

Website	= \$3,000
Rebate/incentive program on electric bikes	= \$ _____
Anti-idling signs: 6 signs x \$25	= \$ 150
Eco-Driving workshop	= \$ 500
Fast connection and videoconferencing equipment	= \$ _____
Total	= \$3,650

- ***Monitoring and Reporting***

- Monitor decreased vehicles on the highway as a result of car pooling, before and during the program
- Number of hits on the R.M.'s Website.

Summary of Actions

Corporate Actions								
Strategy	Project / Activity	Objectives	Lead	Partner	Term (immediate, short, med or long)	Estimated GHG Emission Reductions	Total Project Cost	Other benefits
Waste Management	Bio Filtration System	Reduce septic tank truck trips; Create jobs	Council			Will depend on bio-filtration system capacity	Will depend on bio-filtration system capacity	Reduce septic tank service fees
Sustainable Building	Move R.M. office into sustainable building	Reduce R.M.'s hydro costs	Council	Rec Centre	Immediate		\$486,000	Save on operating expenses of R.M. Office: More comfortable and productive work environment Reduced water for flush toilets
Sustainable Energy Utilization	Develop & implement energy reduction program for municipal staff	Reduce R.M.'s hydro costs: Develop green habits	Council		Immediate	2.1T eCO ₂		Longer-lasting light fixtures and appliances in municipal buildings
Landscaping	Continue & expand tree planting: Landscape rest stop	Reduce GHG: Increase community green canopy	Council	Public Works	Immediate, Short term & Ongoing	Will depend on number of trees planted and m ² of lawn replaced	Will depend on number of trees planted and m ² of lawn replaced	Cleaner air: Community beautification; Wind Management

Community Actions								
Strategy	Project / Activity	Objectives	Lead	Partner	Term (immediate, short, med or long)	Estimated GHG Emission Reductions	Total Project Cost	Other benefits
Waste Management	Landfill waste reduction	Reduce & divert landfill waste	Council	Community	Short term & ongoing	15.3T eCO2	\$1,500	Prolong life of landfill; Reduce garbage collection costs; Save money and time on reduced trips to recycling facility
Vehicle Emission Reduction	Promote carpooling: Encourage school divisions to share buses; Promote electric cars: Provide access to videoconferencing; Provide Access to High-speed internet: Eco-Driving workshop	Reduce vehicle use, GHG emissions and save on fuel: Reduce transportation to Winnipeg	Council	Manitoba Hydro; MTS: Broadband internet providers: School divisions;	Immediate to Medium-term	195.61T	\$3,650	Local families savings on fuel and wear and tear on vehicles; Highways to Winnipeg will last longer

NOTE:

Immediate term = 0-6 months
Short term = 6 months - 1 year
Medium term = 1 - 5 years
Long term = >5 years

4. Implementation Strategy

The overall strategy to implement the R.M. of Saint-Laurent's local climate change action plan will hinge on:

- Waste management
- Sustainable building
- Sustainable Energy Utilization
- Landscaping
- Vehicle Emission Reduction

Council will oversee its implementation. An advisory committee made up of Council and its partners will meet annually to go over the plans objectives and annual results. The role of this committee will be to provide input on checks and adjustments needed to keep the climate change action plan on track.

Projects for immediate implementation include:

- 4.1.1 Council will move its R.M. office into a sustainable building
- 4.1.2 Council will develop and implement an energy reduction program for municipal staff
- 4.1.3 Council will look into existing acts and bylaws allowing golf carts within town limits
- 4.1.4 Council will meet with MTS and Broadband service providers for Broadband Internet service in the area

Projects for implementation in the next 6 months to one year include:

- 4.2.1 Landfill waste reduction
- 4.2.2 Tree planting

5. Monitoring Progress and Reporting Results

Project reporting will occur in September 2010 and again upon program completion. Results from all projects and activities done by those dates will be compiled, including those not funded by CLER (such as by-laws which need no funding, or activities funded through other sources).

Project reporting will include:

- Whether the GHG emissions reduction target was met or exceeded
- Estimated total tonnes of GHG emissions reduced as result of implementing the action plan

- Estimated tonnes of GHG emissions reduced per project implemented.
- Cost savings and for whom
- Funding levered
- Environmental benefits in addition to GHG emissions reductions.
- Economic development opportunities (ex. New business, new product)
- Other benefits (ex. Health, safety, support for low-income families)

Appendix