

# **Rural Municipality of Taché Local Climate Change Action Plan**

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*Council, staff and committee members*

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## Executive Summary

This action plan calls for GHG Emissions Reduction by the Year 2010 :

- 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
- Energy Efficiency
- Waste Reduction and Management
- Transportation Demand Management, and
- Fleet Management

The RM Council will oversee this plan's implementation.

## 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.

## 1. Our Community

Taché is located along highway(s) 1 and is approximately 61 kilometres south east of Manitoba's capital city (Winnipeg) and is 110 kilometres to a 24 hour U.S. border crossing at Emerson. The Rural Municipality of Taché is located in eastern Manitoba, approximately 61 kilometres southeast of the capital city, Winnipeg. Taché finds itself sitting at the beginning of the rich fertile prairies that characterizes the eastern border of the Canadian Shield. The scenic Seine River meanders throughout the municipality. Lorette and Landmark are the municipality's largest centres, while Dufresne, Ste Geneviève, Ross, Linden and Oak Island Settlement are other significant centres.<sup>1</sup>

**Table 1: 2003 Taché community eCO2 Emissions by sector**

<b>Sector</b>	<b>Total eCO2 (t)</b>	<b>Percentage</b>
Residential	7 131	11%
Commercial	2 173	3%
Industrial	2 707	4%
Transportation	50 806	77%
Community Waste	2 890	5%
<b>Total</b>	<b>65 707</b>	<b>100%</b>

**Table 2: 2003 Taché Corporate eCO2 emissions by sector**

<b>Sector</b>	<b>Total eCO2 (t)</b>	<b>Percentage</b>
Buildings	233	79%
Vehicle Fleet	56	19%
Streetlights	0	0%
Water and Sewage	4	1%
Corporate Waste	1	1%
<b>Total</b>	<b>557</b>	<b>100%</b>

### Community Vision

Population and employment forecasts illustrate upward trends in the municipality over the coming years. The Town of Lorette, one of the major centres in the R.M. has a vision

<sup>1</sup> <http://www.communityprofiles.mb.ca/cgi-bin/csd/index.cgi?id=4602069>

to assist the rigorous real estate market with a 55+ centre and homes for first time buyers. It also has a vision to build a light industrial park. Therefore, in order for the RM's communities to remain viable, it is important that actions be undertaken to ensure sustainability. These include the development of local action plans as well as the implementation and monitoring of strategic activities and best practices.

This LCCAP is the RM of Taché'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 RM of Taché's LCCAP 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 Taché March 10<sup>th</sup>**

The RM of Taché public consultation meeting was held at the Centre Jubinville in Lorette March 10<sup>th</sup> 2010 at 7pm.

The public consultation meeting was presented to the public to provide them with the opportunity to learn about the proposed projects and provide an opportunity for feedback. Prior to the public at large consultation the community steering committee held meetings February 1<sup>st</sup>, February 9<sup>th</sup> and March 1<sup>st</sup> 2010. The Municipal advisory committee held meetings October 22<sup>nd</sup> 2009 and February 10<sup>th</sup> 2010. A joint meeting was held January 27<sup>th</sup> 2010.

## **Format**

Dave Audette, community committee chair prepared an excellent PowerPoint presentation outlining the CLER Project, its goals, how the community steering committee fits into those goals, the RM's participation and an overview of the local action plan. This was followed by a Q & A period. A number of discussion items that arose from the community meetings as well as a film clip [www.eatrealeatlocal.ca](http://www.eatrealeatlocal.ca) were the catalysts for discussion.

The steering committees' primary goal was to get feedback from the community and felt that it was too early in the process to bring in the other groups or presenters. However the committee felt that organizations such as Climate Change Connection, MB Eco-network, Resource Conservation MB could play an important role in educating the public in the near future and help with ideas when time to implement the action plan.

Suzanne Moore and Debra Mitosinka also collaborated with Dave Audette on the PP presentation, securing hall rental, promotion and publicizing event. Another member of the committee researched specific actions related to waste management

## **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 to:

- the Société franco manitobaines' (SFM) community calendar web site
- La Liberté Weekly French newspaper community events billboard,
- CBC French television community announcements billboard
- French Radios CKSB and ENVOL community announcements,
- CBC English Radio Noon community bulletin
- RM web site
- The Regional Community News Bulletin
- E- News to members of the Local community, municipal advisory board , local organization and residents

- Posters placed on the RM website and at various retail and government buildings in the RM
- Posters were distributed to the schools in Lorette and Landmark for inclusion in their March Newsletters
- Article included in the March edition of the Dawson Dispatch
- Word of mouth
- CBC French TV crew was present for the meeting and interviewed Gisele Champagne, project coordinator.
- La Liberté French newspaper published article re: CLER project in their March edition

The Public consultation meeting was attended by 12 people most consisting of the CLER Committees. Despite the low numbers, the first steps of a long journey towards sustainability have been taken and as one participant stated “if everyone talks about this project with a few friends, we could have a larger audience. We aim to make a difference one action at a time and with each success build momentum and awareness.”

Two major themes that came from the meeting were the need of a public education campaign as well as the importance and necessity of having an employee dedicated to coordinating and implementing local action plan to ensure its success particularly on the community level. Feedback from the meeting was noted and incorporated if not already included into draft local action plan.

French TV was present at the meeting and Gisèle Champagne, CLER coordinator for Manitoba’s bilingual municipalities gave an interview to explain the CLER process and the participation of the 5 bilingual communities. The interview aired the next day during the French supper time local news.

## RM Taché

### Past projects What's done since 2003

Sector	Action	Details	Date	Lead	Partners	Estimated cost	GHG reduction
Waste management	Leachate management	Waste is collected and treated locally eliminated hauling to Winnipeg savings 43,000\$ (2008)	ongoing since 2003				
Green practices	Recycle used oil	Landfill recognized as ecosite for using municipality used oil storage container used for containers available to deposit used oil deposited into and transported once full	Ongoing since 2003				
Buildings/energy	Upgraded building	Built new attendant's shed	2004	Public work			
Buildings/energy	Upgraded building	Built new firehall in Landmark	2004	Public work			
Transportation/energy	Readaptation of existing facility	Used school to house municipal library eliminating travel to Wpg /Steinbach for books, construction, cut down on heating, energy	2005	council	Seine River School Division		

Transportation/energy	Implemented electronic payment	Implemented electronic payment – reduction in traffic/ paper waste	2005				
Fleet/energy	Upgraded equipment	purchased new Challenge tractors w/multiple displacement engines	2006	Public work			
Energy	Purchased LED holiday lights	Xmas lights replaced to efficient LED in Lorette and Landmark	2007	Public work	MB Hydro		
Buildings/energy	Updated lighting	Installed energy efficient lighting in Landmark arena	2007	Public work			
Building/Energy	Updated heating source to high efficient boiler a& H2) tanks	Replaced heating mechanism in Landmark arena	2007	Public work			
Water conservation/energy	Upgraded washroom facilities	installed 2 waterless urinals , low toilets and autoshut taps in Lorette CC	2007	Public work	MB Hydro		
Corporate waste/energy	Updated office equipment & program	Electronic bill paying introduced, reduce traffic, paper, technology more energy efficient	2007-2008	council			
Buildings/energy	Updated lighting	Installed energy efficient lighting in Lorette arena	2008	Public work	MB Hydro		
Transportation/energy	Reduce travel/energy consumption –	Purchased Cascade System for	2008	Public work			

		Fire Dept reducing from 4 to 0 trips to LaBroquerie for replenishing					
Buildings/energy	Updated building	Built new firehall in St Genèvieve	2009	Public work			
Buildings/energy	Heat recovery in Lorette Arena	Heat recovery unit off of ice compressor	2009 In progress	Public work			
Buildings/energy	Purchased high efficiency bulbs	Bulbs changed in Lorette workshop to compact fluorescent 23 watts from 80 watt	2009 ongoing as bulbs burnout	Public work	MB Hydro		
Buildings/energy	Temperature policy	Heat tuned down in municipal offices	2009 On going	council			
Buildings/energy	Upgraded building	Re-insulated Landmark public works building with P 2000	2009	Public work			
Transportation	200,000 litre tank bought to store batches of dust reduction fluid	Reduce # of trips to supplier in RM of St Andrews needed to replenish	2009	Public work			
Waste diversion		Sold 25 composters, composting brought to central site in land fill	2009	council			
Transportation/fleet	Anti idling protocol	Anti-idling implemented at landfill for	2009	council			

		workers					
Water & waste/energy	Purchased natural Bio bricks	Purchased Bio bricks increase pump efficiency eliminating monthly Roto-Roter	2009				
Green practices	Replenish O2 around landfill	Trees planted around landfill site to increase CO2	2009 On going				
Waste/energy	Recycling program implemented	Curbside and municipal recycling pick up		Public works			
Green practices	Adopted best practices for landfill	Implanted zero tillage around trees at landfill	2009 Ongoing				
Green practices /energy	Adopted best practices	Switched to Spraying cattails with eco products thus reducing # of cuts	2009				
Fleet	All new equipment being purchase is being considered for high fuel efficiency/Right size truck	Replaced 7 pieces of equipment	2003-present				
Fleet	Equipment upgrade right size	Purchased 2 electric Major Olympia ice resurfacing equipment for Arena 200,000\$	2010	Public work			
Green projects	green canopy expansion		2003-ongoing				

### 3. Priority Projects / Activities

#### 3.1 Energy Conservation Plan

##### 3.1.1 Sustainable Building Strategy

- Strategy

Encourage sustainable building practices in current and future municipally owned buildings.

- ***Description of Project / Activity***

- Conduct energy thermal imaging of municipal building envelopes.
- Convert heat/air to geothermal for municipal office and LUD Lorette shop.
- Construction of new LEED municipal office and library.
- Change to low-volume toilets and urinals.
- Install 4 air hand dryers.
- Retrofit 2 shops (LUD Lorette and LUD Landmark) by putting P2000 on outside shell and new overhead door for Landmark

- ***Objective***

- Reduce the municipality's water, gas and electrical consumption (costs).
- Reduce GHG emissions from building.
- Reduced GHG emissions.

- ***Leads and Partners***

Public Works will lead the energy thermal imaging. Manitoba Hydro and the Federal Government will be approached to partner in the conversion to geothermal. The Province will be asked to partner on the low-flow toilets.

- **Timelines**

The energy thermal imaging audit will provide the information needed to determine the timeline.

- Contact consultant to arrange for the energy thermal imaging: Immediate
- Review the imaging report with the RM council with SNC Lavalin: Short term
- Pass a resolution to implement appropriate recommendations in the 201\_ fiscal year Short term
- Get estimates from consultant on converting municipal office and LUD Lorette shop to geothermal: Short to Medium term
- Build a new LEED municipal office and library. Fall 2011
- Install low-flow plumbing appliances Immediate

- **Estimated GHG emissions reduction potential**

The GHG emissions reduction potential for converting the municipal shop to geothermal heat/cooling is:

eCO<sub>2</sub> emissions for municipal shop 2003 = 11T  
eCO<sub>2</sub> coefficient for geothermal = 0T  
**11T eCO<sub>2</sub>** reduced compared with 2003 levels (taken from Tache's baseline inventory Municipal Buildings spreadsheet page, line W29)

- **Additional benefits expected**

- Increased occupancy comfort.
- The RM will lower their long-term operating expenses while upgrading its buildings at the same time.
- Improved air quality.
- Controlled moisture and condensation.
- Reduced water and chemical usage for flushing toilets and cleaning towels.

A single household toilet replacement to a low-flush, high-efficiency model saves, on average, 41,062.5 liters of water per year, therefore, a single high-use corporate retrofit should save double, or 82,125 liters per year. The replacement, or retrofit, of RM Taché 4 toilets and 1 urinal would result in approximate saving 410625 liters per year.

- **Budget**

Geo-thermal for Municipal building:	= \$ _____
Geo-thermal for Lorette LUD shop	= \$ 600,000 _____
LEED Municipal office and library building	= \$ 1.5 – 3 M (Federal Funding)
Low Flush Toilets 4 x \$200	= \$ 800
1 Low Flow urinal	= \$ 800 _____
Hand Dryers 4 x \$ 400 _____	= \$ <u>1,600</u>
Total	= \$ 2.1 M - 3.6 M _____

- **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.

Cost savings for operating the municipal buildings: as above

### 3.1.2 Energy Efficiency

- **Strategy**

Sustainable Energy Utilization

- **Description of Project / Activity**

- Change lights in Spirit Park to solar or LED.
- Look into converting lighting standards to LED.
- Develop education campaign / free workshops and education sessions on Manitoba Hydro's Power Smart Program and Geothermal Conversion Programs.
- Develop and implement an energy reduction program for municipal staff.
- Hire a CLER Coordinator to develop a comprehensive education campaign for the Sustainable Energy Initiative Campaign.

- Develop themed days.
- Scan existing tool kits and resources in themed days.
- Investigate other promo materials and workshops.
- Develop a Climate Change website, which includes:
  - Information about Manitoba Hydro’s Power Smart Program
  - Information and Geothermal Conversion and Programs

- **Objective**

- Reduce energy usage through lighting.
- Create an awareness campaign and develop green habits for electricity consumption, lighting and heating homes in the RM.
- Facilitate participation and ensure success.
- Reduce GHG emissions

- **Leads and Partners**

The Council will approach Manitoba Hydro about converting to more efficient lighting. The RM, the Community and the CLER Coordinator will be the leads. The Coordinator will work with Manitoba Hydro to promote residential and commercial energy programs and incentives. Other partners will include Non-Profit Organizations and Schools.

- **Timelines**

Convert lighting	Immediate to Medium Term
Hire CLER Coordinator	Immediate to Short Term
Initiate education campaign:	After hiring CLER Coordinator

- **Estimated GHG emissions reduction potential**

This will depend on the type of lighting selected for Spirit Park. If Spirit Park goes to solar lighting, the estimated GHG emission reduction potential will be:

kilowatts of electricity currently used to light the park X GHG Emission factor /  
kilowatt = \_\_\_\_\_ eCO2 tonnes

Converting the light standards in the RM to LED lighting will result in:

Kilowatts of electricity saved x GHG Emission factor / kilowatt = \_\_\_\_\_ eCO2  
tonnes

If the residents in town reduce their electricity consumption by 10%, the resulting GHG  
emission reduction will be:

2,188 tonnes eCO2 produced (2003 baseline) x 10% = **218.8 tonnes eCO2**

- ***Additional benefits expected***

- With proper signage and media coverage of the switchover, the RM will be recognized for its leadership in Climate Change.
- Energy savings for the RM and the community from creating awareness campaign and developing green habits with residents and staff.

- ***Budget***

Budget to convert lighting in Spirit Park:	= \$ _____
	(Waiting on info from Debbie M.)
Budget to convert light standards to LED lights:	= \$ _____
	(Waiting on info from Debbie M.)
Cost per workshop	= \$ 500
CLER Coordinator: 1/3 x \$33,000	<u>= \$ 11,000</u>
Total:	= \$ 11,500 _____

- ***Monitoring and Reporting***

- Overall GHG emissions reduced.
- Cost savings for the new lighting, by comparing the Hydro bills before and after installation.
- Number of people filling seats at workshops and education sessions.
- Number of hits on the RM's Climate Action Website.

## 3.2 Waste Management Plan

### 3.2.1 Waste Reduction and Management Strategy

- **Strategy**

Develop a waste management strategy for the R.M. of Taché, which begins with an organic waste diversion program and a redirection of waste to proper channels thereby extending the life of landfills and reducing the materials that lead to methane creation.

- **Description of Project / Activity**

- Purchase and sell composters (earth machines) at rebate through school fundraiser.
- Establish an exchange program for reusable items
- Organise a community swap day
- Investigate with SNC Lavalin if a Methane recovery or organic waste diversion program to the local composting cooperative would be feasible.
- Purchase a weigh scale and build a scale house to measure diverted waste.
- Purchase a wood chipper with screener for the landfill.
- Hire a CLER Coordinator to develop a comprehensive education campaign for the Waste Reduction Management Campaign.
- Develop education campaign / free workshops and education sessions on composting.
- Promote backyard gardening and alternative landscaping.
- Develop themed days.
- Scan existing tool kits and resources in themed days.
- Investigate other promo materials and workshops.
- Develop a Climate Change website, which includes:
  - Information about the Waste Reduction Management Campaign
  - Composting tips
  - News and Upcoming Events

- **Objective**

- Reduce and divert landfill waste, thereby saving the cost of creating new landfills.

- Create an awareness Campaign and develop green habits.
- Facilitate participation and ensure success.
- Reduce GHG emissions

- ***Leads and Partners***

Public Works, the CLER Coordinator and the RM Council are the leads. Partners include the school, a Composting Cooperative, and G. Dubé Consulting. The Federal Gas Tax Revenue is another potential partner.

- ***Timelines***

- Purchase and sell composters through school  
Exchange program: Spring 2011
- Community Swap day: To be determined
- Pass a resolution at Council to establish a waste  
diversion program: Spring 2011
- Implement and coordinate waste diversion program Long Term  
(Talks to be pursued with G. Dubé Consulting and other communities)
- Budget for weigh scale and scale house: Long Term
- Build / install scale and scale house Long Term
- Budget for a wood chipper : 2011 budget  
(Andy looking into costs)
- Purchase and run wood chipper: 2011
- Hire CLER Coordinator Immediate to Short  
Term
- Initiate education campaign: After hiring CLER  
Coordinator

- ***Estimated GHG emissions reduction potential***

Monitor tonnes of re-directed organic waste:

Tonnes organic waste x methane production factor x eCO2 factor = \_\_\_ tonnes CO2e reduced

6,000T waste sent to landfill in Tache (2003 data)  
2,890T eCO2 in 2003 from waste

Assume:

- 24% of total waste is organic (ICLEI)
- These initiatives combined will reduce total waste by 5%

6,000T x 0.05 = 300T waste diverted

300T x 0.24 = 72T of waste diverted is organic

72T x 1.39 (methane coefficient) = **100.08T** eCO2 reduced

- ***Additional benefits expected***

- Reduced tipping fees at third party landfill site.
- Prolong life of landfill.
- Supply free community compost material.
- Job creation:  
Recycling 14,000 tonnes of waste creates 9 jobs, composting 7 jobs
- More land available for other uses.
- Refines from wood chipping can be used to enhance composting program.

- ***Budget***

Composters:	200 x \$35	=\$ 7,000
Scale:		=\$125,000
Scale House		=\$100,000
Wood chipper		=\$__ 10,000__
Cost per workshop		=\$ 500
CLER Coordinator: 1/3 x \$33,000		<u>=\$ 11,000</u>
Total:		=\$244,500_____

- ***Monitoring and Reporting***

- Measure diverted waste thanks to scale house.
- Calculate on methane emission avoided by diverting organic waste.
- Number of people filling seats at workshops and education sessions.
- Number of hits on the RM's Climate Action Website.

## 3.3 Vehicle Emission Reduction Plan

### 3.3.1 Transportation Demand Management

- **Strategy**

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

- **Description of Project / Activity**

- Pilot project on carpooling for municipal workers, teleworking, teleconferences.
- Pass policy to not reimburse mileage where carpooling was feasible.
- Establish on-line carpooling website
- Organise a commuter challenge.
- Acquire and install Anti-Idling signs at strategic locations in the community, including arenas, restaurants, credit unions / banks, grocery stores (and municipal sites).
- Establish park and drive site
- Continue and expand network of existing walking/bike paths in the municipality.
- Purchase Bike Racks
- Develop local food map thereby reducing commute for groceries.
- Hire a CLER Coordinator to develop a comprehensive education campaign for the Transportation Demand Management Campaign.
- Develop themed days.
- Investigate other promo materials and workshops.
- Scan existing tool kits and resources in themed days.
- Develop a Climate Change website, which includes:

- Online carpooling
- Promotion of Park and Drive site
- Anti-Idling Policy
- Local Food Map

- **Objective**

- Reduce vehicle use, GHG emissions, and save fuel.
- Encourage active lifestyle.

- **Leads and Partners**

The RM, the CLER Coordinator and Public Works will be the leads. Partners to encourage an active lifestyle and greater use of bike and walk paths would be a health or sport organisation.

Local Business will be the partners for the Park and Drive site.

The Business community offices and institutions will be the partners for the anti-idling signage.

MAFRI will be approached to be included in existing local food suppliers' inventories on website

- **Timelines**

- Pass a resolution to implement a car-pooling pilot project for Municipal employees and Council: Summer 2011
- Install anti-idling signs: Fall 2010
- Expand walking / bike paths: Summer 2010, Summer 2011
- Purchase Bike Racks Summer 2010
- Develop website Fall 2010
- Hire CLER Coordinator Immediate to Short Term
- Initiate education campaign: After hiring CLER Coordinator

- **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 eCO<sub>2</sub> / day per person. Therefore, 0.00036 tonnes eCO<sub>2</sub> / day x 365 days = 0.13 tonnes per year/person.

Assume 50% of current population (9,000) drives daily

$$0.13T \times 5850 = 585T \text{ eCO}_2 \text{ saved/year}$$

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.

34,644T emissions from community transportation for gasoline-powered vehicles in Tache (2003 data)

$$34,644 \times 0.01 = 346.44T \text{ reduced}$$

$$346.44 + 585T = \mathbf{931T}$$

- **Additional benefits expected**

- Local families will save on fuel and vehicle wear and tear.
- Thanks to the car-pooling policy, the RM will save on mileage claims.

- **Budget**

Phase 1 (2010)

Climate Change website	= \$ 3,000
Walking / Bike Paths	= \$70,000
Bike Racks	= \$ 3,100
Anti-Idling Campaign:	
Signage Cost: 20 signs x \$25	= \$ 500
Human resources for sign installation	

	4 hours x \$25	= \$ 150
	Miscellaneous Materials (screws, brackets)	= \$ 200
	Paper to print anti-idling business cards	=\$ 50
	CLER Coordinator: 1/3 x \$33,000/2	<u>=\$ 5,500</u>
	Total	=\$82,500

#### Phase 2 (2011)

	Walking / Bike Paths	=\$50,000
	CLER Coordinator: 1/3 x \$33,000/2	<u>=\$ 5,500</u>
	Total	=\$55,500

- **Monitoring and Reporting**

- Monitor effectiveness of anti-idling campaign (number of business size cards handed out to those idling).
- Number of anti-idling signs posted.
- Monitor savings to RM from increased car-pooling of staff and council, based on municipal fleet records
- Number of hits on the RM's Climate Action Website.

### 3.3.2 Fleet Management

- **Strategy**

Reduce the amount of GHG emissions generated by the RM of Taché's fleet of equipment and vehicles.

- **Description of Project / Activity**

- Conduct internal fleet audit using Fleet Management Fact Sheet developed by SNC Lavalin. . Prioritize recommended changes and potential savings, implementation costs and required human resources. Changes that can bring immediate results include:
  - Rationalizing travel

- Reduction of trips – encourage councillors and employees to carpool
- Develop an anti-idling policy for municipal fleets
- Retire older equipment and right size with more work, energy and fuel efficient equipment
- Implement Smart Fleet, Idle Smart, Drive Smart and maintain Smart programs for municipal workers. (These Smart programs can also target the community and local businesses).
- Run fleet on bio-diesel.

● **Objective**

- Reduce emissions and energy consumption from municipal vehicles.
- The objectives related to the Smart programs are to prolong vehicle use, educate staff, optimize worker productivity and to create awareness.

● **Leads and Partners**

The leads will be the RM Council and Public Works. Not for Profit Organisations and Natural Resources Canada will be the partners for the Smart programs. Andy Chartrand, a technician with the Vehicles and Equipment Management Agency (VEMA) will be the partner for the fleet audit. Andy B. with the Ste Anne Co-op is looking into supplying the biodiesel.

● **Timelines**

Conduct fleet audit:	Summer 2010
Pass resolution to implement changes recommended in fleet audit:	Fall 2010
Add cost of replacing older equipment in future budgets.	
Replace 1 grader and truck:	2010
Replace 2 <sup>nd</sup> grader:	2011
Purchase bio-diesel for fleet:	Medium Term
Implement Smart Programs for Municipal staff:	Summer 2010

● **Estimated GHG emissions reduction potential**

2003 emissions from fleet = 56T. If as a result of the activities, the emissions are reduced by 10% this equals **5.6 T eCO<sub>2</sub>**.

- ***Additional benefits expected***

- Cost-savings to RM for operating right-size, modern and energy-efficient equipment
- With proper vehicle signage and media coverage of the switch to biodiesel, the RM will be recognized for its leadership in Climate Change
- Increased Municipal staff pride for playing a leadership role in Climate Change
- Reduced fuel consumption from Smart programs.

- ***Budget***

1 grader & truck                    = \$ \_\_\_\_\_ Andy waiting for quotes.

2<sup>nd</sup> grader:                            = \$ \_\_\_\_\_ Andy waiting for quotes.

Total                                    = \$ \_\_\_\_\_

Rest of budget will depend of fleet audit and recommendations.

- ***Monitoring and Reporting***

- Monitor improved efficiencies of new equipment.
- Monitor staff compliance to Smart programs, by comparing odometer readings and fuel consumption before and after the implementation of the programs.
- Attendance at smart driving workshops
- New equipment purchased

## 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
Sustainable Building	Geothermal for LUD Shop and R.M. Office	Reduced GHG Emissions; Reduce RM's energy consumption costs	Public Works	MB Hydro Federal Government	Medium	11T eCO2 (municipal shop)	\$2.1 – 3.6 M	Lower operating Expenses; Increased Occupancy Comfort
Energy Efficiency	Convert lights in Park: Convert Light Standards	Reduce Energy Usage through lighting	Council	MB Hydro	Immediate - Medium	Will depend on type of lighting selected for Spirit Park.	Will depend on type of lighting selected.	Energy Savings to RM: RM recognized as leader
Waste Reduction & Management	Waste Diversion Program	Reduce/Divert landfill waste	Public Works	Federal Government (Gas tax revenue)	Long	100.08T eCO2	\$244,500	Reduced tipping fees; Prolong life of landfill; Job Creation
Transportation Demand Management	Pilot Car-pooling project for municipal workers	Reduce vehicle use & GHG emissions; Save Fuel	R.M.:		Short			Reduced mileage claims
Fleet Management	Retire older equipment & right size: Smart Fleet Program for municipal workers; Switch to bio-diesel	Reduce GHG emissions and energy consumption;	RM Council; Public Works	SNC Lavalin: Not for Profit Organisations : Natural Resources Canada: VEMA: Ste-Anne Co-op	2010-2011	5.6 T eCO2	Will depend on actions taken after fleet audit	Cost-Savings RM recognized for leadership in Climate Change Action; Reduced Fuel Consumption

Community Actions								
Strategy	Project / Activity	Objectives	Lead	Partner	Term (immediate, short, med or long)	Estimated GHG Emission Reductions	Total Project Cost	Other benefits
Energy Efficiency	Education Campaign	Create green habits for electricity consumption	CLER Coordinator; Community	MB Hydro; Non-Profit Organisations; Schools	Short	218.8 T eCO2	\$11,500	Energy Savings to Community
Waste Reduction & Management	Composting Campaign	Reduce/divert landfill waste	CLER Coordinator;	School: Composting Co-op: Consulting Company	Short			
Transportation Demand Management	Pilot Project Tele-working, teleconferencing; Car-Pooling and Anti-Idling Campaign	Reduce vehicle use; Reduce GHG emissions; Save Fuel;	CLER Coordinator: Public Works	Health or Sport Organisation; Local businesses & Institutions	Short - Medium	931T eCO2	\$138,000	Local family savings on fuel and vehicle wear and tear

**NOTE:**

*Immediate term = 0-6 months*

*Short term = 6 months - 1 year*

*Medium term = 1 - 5 years*

*Long term = >5 years*

## 4. Implementation Strategy

*Outline the overall strategy to implement the local climate change action plan. Focus in particular on prioritizing projects for immediate and short-term implementation.*

The overall strategy to implement Taché's local climate change action plan will hinge on:

- Energy efficiency
- Waste reduction and management
- Transportation Demand Management

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 meet with MB Hydro to receive information about converting to more efficient lights
- 4.1.2 Council will meet SNC Lavalin to arrange for an energy thermal imaging analysis. Working with SNC Lavalin, Council will get estimates on converting the municipal office and the LUD Lorette shop to geothermal

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

- 4.2.1 Council will hire a CLER Coordinator who will develop and coordinate energy efficiency, anti-idling and waste management education campaigns targeting the RM's citizens
- 4.2.2 Council will initiate the pilot car-pooling project for municipal workers.
- 4.2.3 The CLER Coordinator will initiate a pilot project for tele-working and teleconferencing

## 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 shall 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