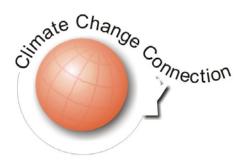
### **PROCEEDINGS** from the

# Steinbach and Area Community Workshop On Climate Change



Tuesday, April 8, 2003 Mennonite Heritage Village, Steinbach

Climate Change. Are you doing your bit?

### **Table of Contents**

I.	Notes from Round Table	. 2
A.	Opening Discussion	2
	Question 1: What kind of people are interested in Climate Change?	
	Question 2: What are their personal interests in coming to a workshop on Climate Change?	
	Question 3: What are some of Steinbach's greenhouse gas problems?	
	Question 4: What are some solutions we could come up with to deal with the greenhouse gas	
	problem?	
	Question 5: Who are the biggest industries in area?	
	Question 6: What would make industry change their greenhouse gas emissions?	3
B.		
	Question 1: What are the problems with transportation pollution in Steinbach?	3
	Question 2: What are some solutions?	3
C	. Agriculture Sector	
	Question 1: What is some of the main concerns with agriculture in the area?	4
	Question 2: What can be done about it?	4
	Question 3: What kind of enforcement?	
	Question 4: What are the problems with enforcement?	
	Question 5: What can the municipalities do to correct the problems?	
	Question 6: With the new rules can you foresee problems for farmers?	
	Question 7: Why do we need large farm operations?	5
II	Notes from Facilitated Discussion of Community Needs and Interes	
A.	Group and Breakout Discussion	
	Question 1: What specific opportunities exist to reduce community greenhouse gas emissions in	
	Steinbach?	7
	Question 2: What barriers, if any, would prevent Steinbach and area from becoming a sustainable, healthy climate-friendly community?	
	Question 3: Who else needs to be involved? How can you involve them and who could be the community climate change champions?	Q
	Question 4: What do community stakeholders need and want in order to be part of the solution?	
	Question 5: What kind of goals can you set to address sustainability?	
	Question 6: Follow up do what and by when	
R	Closing Questions	
D.	Question 1: What was interesting about this workshop?	
	Question 2: What are some of the goals that you came up with?	
	Question 2. What are some of the goals that you came up with:	)
III.	Workshop Participants	10
V.	Community Workshop Evaluation Summary	11
1.0	0 Organization and Design	. 11
	O Presentations	
	1 Basics of Climate Change, Jennifer Duggan	
	2 Understanding Kyoto, Anne Lindsey	
	3 Greening Municipal Operations, Meagan Jamieson	
	9 Facilitated discussion	
4.	0 Feedback	. 12
VI.	Acknowledgements	14
VI	Workshop Programme	15
4 T.	1. 01 van ch 1 1 n 21 amme	ı



# PROCEEDINGS from the Steinbach and Area Community Workshop On Climate Change

### Tuesday, April 8, 2003 Mennonite Heritage Village, Steinbach

### I. Notes from Round Table

### A. Opening Discussion

### Question 1: What kind of people are interested in Climate Change?

- Hydro Representative
- Manitoba Municipalities
- Village Councillors
- Town Councillors
- City Councillors
- Milk Producers and other producer groups
- Reeves
- First Nations People's Representative
- Organic Growers
- Educators
- Conservation Officers

# Question 2: What are their personal interests in coming to a workshop on Climate Change?

- Impact that Hydro has on greenhouse gases
- Conservation
- Impact and implications to the City of Steinbach
- To learn to be proactive when dealing with greenhouse gases
- Issues in dealing with livestock
- How greenhouse gases and climate change will affect the First Nation People and the generations to come
- Learn alternative energy sources to reduce greenhouse gases
- Learn about how other in the community feel about climate change and greenhouse gases
- Find out what priorities are in the local municipality
- Learning about what to expect from the environment in the future



### Question 3: What are some of Steinbach's greenhouse gas problems?

- Agriculture
- Transportation

# Question 4: What are some solutions we could come up with to deal with the greenhouse gas problem?

- Transportation Sector
  - o Car pool
  - Public transportation options shuttle buses
- Agriculture Sector
  - o Canola can be added to feed for livestock to deal with methane
  - o Methane can be capped (scrubbed) and used for electricity production
  - o Digesters for livestock manure management (trials being held in Alberta)
  - Push large producers to be pro-active in dealing with the methane problems in their livestock production
- Landfill the landfill in Steinbach has only 20+ years left of use.

### Question 5: Who are the biggest industries in area?

• Biovail, Loewan Windows, and the feed mills

### Question 6: What would make industry change their greenhouse gas emissions?

• Moral and economic incentives

### B. Transportation Sector

### Question 1: What are the problems with transportation pollution in Steinbach?

- There are at least two cars per family in the rural area
- It is harder for parents in the country to transport their children around
- No public transportation
- Commuters to and from Winnipeg
- Two income families so more people commute

### **Question 2: What are some solutions?**

- Public transportation to Winnipeg
- Promote and create jobs within Steinbach so you live close to where you work
- Promote and provide post-secondary education within the area, such as: Red River Community College, Providence Bible College, Steinbach Bible College, Academy of Learning



• Set up car pool registry for commuters, such as CARPOOL.CA that registers your company, time you work, and personal info and finds a commuting buddy

### Comment by Participant:

People should be educated on the true cost of driving, such as the cost of road construction and maintenance, fossil fuel refineries (heavily subsidized), healthcare impacts (car accidents, respiratory health), insurance, etc.

### C. Agriculture Sector

### Question 1: What is some of the main concerns with agriculture in the area?

- Fertilizer
- Hog operation
- Too much nitrogen in the soil

### **Question 2: What can be done about it?**

- Manure spreading maps
- Enforcement of the laws
- Making municipal laws stronger
- Financial incentive to do things differently

### **Question 3: What kind of enforcement?**

- Soil testing
- Fines for law breakers

### Question 4: What are the problems with enforcement?

- The Conservation department can't be everywhere that spreading occurs
- They are short-staffed and rely on citizen involvement in reporting illegal spreading
- Fines are not enough for large operations
- There are repeat offenders for illegal spreading
- There are no regulations for spreading manure

### Question 5: What can the municipalities do to correct the problems?

- They can create rules on spreading
- Set up financial incentives to do things differently
- Set up other guidelines, like soil testing

### **Comment by Participant:**

Municipalities should be saying "no" to hog barns.



### Question 6: With the new rules can you foresee problems for farmers?

- Smaller farmers are frozen in size because of the spreading laws
- If something happens to the existing barn (like a fire) the farmer faces more laws to replace it

### **Question 7: Why do we need large farm operations?**

 As Canadians we expect cheap food -- the smaller the farm, the more expensive food gets. The policies of the food marketing boards discourage mixed family farms.

### Comments by Participants:

Greenhouse gases are everywhere. We need to start taking care of our natural resources. We should explore simpler lifestyles. Look within the community on how to reduce greenhouse gases in simple ways.

Take the time to look at what products we are buying in the stores. Transportation is one of the biggest greenhouse gases polluters. If we buy local produce we save on our transportation emissions.

How we heat our homes and our water is another GHG savings area. Although hydro is one of the better ways to heat your home there are other environmentally sustainable choices. Some of the other power sources that are being tested are solar panels, wind turbines, earth energy, and methane collection. There are still a lot questions surrounding these energy sources. For example: Where in Manitoba is the best place to put wind turbines? Churchill and the northern regions would be the best but then there is a cost in transporting it back down. Solar power is still an expensive choice. Earth energy is becoming a viable solution in Manitoba. We have good ground with little rock and a good water source.

Methane collection is still in the testing stage. Cold climate anaerobic digesters are being developed in Canada.

### Response from the CCC:

There are currently three Canadian companies that design/build biogas recovery systems, provide technology, and offer consulting services:

### ONR Environmental Systems Inc.

Site 17, Box 2, RR 1 Okatoks, AB T1S 1A1 Ph: 403-540-6541

Ph: 403-540-6541 Fx: 403-938-2715

e-mail: info@onrsystems.com



### Clear-Green Biotechnologies Inc.

13-1724 Quebec Avenue Saskatoon, SK S7K 1V9

Ph: 306-931-2610 Fx: 306-931-6610

e-mail: benv@clear-green.com

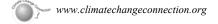
### RENTEC Renewable Technologies, Inc.

342 English Settlement Road Trenton, On K8V 5P7

Ph: 613-849-9199 Fx: 613-475-0361 e-mail: <u>info@rentec.ca</u>

This technology can be used on farm with livestock, or by large producers who want to take an active role in reducing their GHG's. There is a huge payback as well – digesters often produce more energy than the operation needs, allowing the company to sell it to the local power supplier. It is a sustainable practice with huge co-benefits.

Another area of interest in reducing GHG's is carbon management. It was part of the discussion in Kyoto. Some of the ways to achieve this is in agriculture is through crop rotation, retaining or restoring wetlands, reserving part of the farm land for shelter belts and saving forests. However there is some debate surrounding carbon management - depending on the year and weather conditions, trees and crops release GHG's instead of absorbing them.



### II. Notes from Facilitated Discussion of Community Needs and Interests

### A. Group and Breakout Discussion

# Question 1: What specific opportunities exist to reduce community greenhouse gas emissions in Steinbach?

- Better manure management
  - o Increase fat in diet, reduce nitrogen, etc.
  - Anaerobic digesters
  - Spreading laws
- Strategic tree planting (evergreens on north side, leafy on south side)
- Environmental education in school curriculum
- Information and education for tire pressure at gas stations
- Bus between downtown Steinbach and Clearspring Mall
- Reduce stubble burning
- Building standards that address energy-efficiency
- Set back thermostats -- better home-energy practices
- Bylaws for flood-proofing
- Reduce waste stream to landfills
- Zero tillage practices
- Water saver in every toilet
- Composts programs at the household and community level
- Reforestation
- Geothermal (earth energy) promotion
- Media outreach
  - Series of articles in the community newspaper
  - o Radio morning show with discussions

# Question 2: What barriers, if any, would prevent Steinbach and area from becoming a sustainable, healthy climate-friendly community?

- Cost
- Lack of environmental education
- Life styles
- Cheap hydroelectricity
- Climate and extreme conditions
- Cost efficiency
- Indifference
- Lack of awareness by concerned citizen groups
- Focused on other issues



- Solutions to barriers
  - o Learn the economic benefits of change
  - Teach how the emissions affect the world

# Question 3: Who else needs to be involved? How can you involve them and who could be the community climate change champions?

- Industry leaders
- Feed mills
- Community to push for local products
- Chamber of commerce
- School trustees
- Professional associations
- Volunteers
- Communities in Bloom
- Organic growers
- Fire department for tire check

# Question 4: What do community stakeholders need and want in order to be part of the solution?

- View of economical and environmental benefits
- Information that is easy to understand and helpful in decision-making.
- Guidance
- Education about different options for GHG reduction
- Education at community level
- Financial incentives
- Professional pressure
- Recognition
- Partnership with Communities in Bloom
- Funds for supplies and staff at municipal level
- We will lower the GHG's by using the 5 I's: incentive, innovation, information, implantation, and do it immediately.

### Question 5: What kind of goals can you set to address sustainability?

- Be prepared and educated
- Use the tools available
- Be prepared to make mistakes
- Reduce greenhouse gas to below Canadian average
- Community compost
- More strategic tree placement
- Fewer cars on the road
- Van pool/transit bus system in peak hours



### Question 6: Follow up -- do what and by when

- Education youth by 2004 from curriculum project underway now
- Networking
- Community compost
- Build a broader base- be proactive not reactive

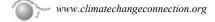
### B. Closing Questions

### Question 1: What was interesting about this workshop?

- Learning
- Comparing global emissions vs. community emissions (every bit counts)
- Provincial break down of emissions by sector
- Earth energy information
- Payback time of environmental investment is 5-7 years, at the worst

### Question 2: What are some of the goals that you came up with?

- Fewer single-occupant vehicles and promote carpooling
- More people could telecommute if a "business centre" was set up in Steinbach. People could go there and send a fax, check e-mail, makes copies, etc. Reduce how many days a week they travel to a Winnipeg office
- Buy local produce
- Community compost
- Tire pressure clinic
- Anti-idling promotion
- Hog farm compost or treatment plant



### III. Workshop Participants

Rod Beckman Board Member, Seine-Rat River Conservation District

Dawn Buchanan Representative, Canadian Organic Growers

Garry Enns Campus Manager, Red River College, Steinbach Campus Kim Fedick Environment Officer, Red River Conservation District

Anne Friesen Councillor, City of Steinbach

Ken Friesen Chairman, Loewan Community Foundation, Earthbound

Environmental (PM)

Tom Garbolinski Business Representative, *Manitoba Hydro* 

Terry Hiebert Instructor, Steinbach Bible College

Les Magnusson Mayor, City of Steinbach

Ken Mantie Reeve, RM of La Broquerie (AM)

Oliver Nelson Representative, Rosseau River First Nation
Randy Reimer Head of Public Works, City of Steinbach (AM)

Albert Toews Councillor, City of Steinbach

David Wiens District #9 Director, Manitoba Milk Producers



### V. Community Workshop Evaluation Summary

#### **NOTE:**

Rating System is out of 5 points. 5 representing "most satisfactory" or "strongest agreement".

1.0 Organization and Design	Score
Overall quality	4.2
The programme – flow of activities	4.13
Workshop documents	4.14
Location and facilities	4.0
Meals and refreshments	4.13

### **Comments:**

- An abundance of information.
- Good facilitated session.
- The workshop was excellent! The speakers and discussions were well placed and well organized. The information was given at a perfect pace.

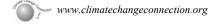
2.0 Presentations	Score
I could hear clearly	4.89
I could see clearly	4.78
Level of comprehension (minimal jargon, explained theories, etc.)	4.67
I could proceed with group work with the information given	4.57

2. 1 Basics of Climate Change, Jennifer Duggan	Score
Provided me with a basic understanding of CC	4.22
Understand impacts of CC	4.33
Understand link between lifestyle, GHG's and CC	4.3

#### **Comments:**

- Good source for evaluation information.
- Excellent.
- Jennifer's presentation was excellent, with great visual aids! A powerful visual aid that was missing was a graph that shows the direct correlation between increasing CO2 levels and increasing temperature.

2. 2 Understanding Kyoto, Anne Lindsey	Score
Provided me with a basic understanding of Kyoto	3.86
Understand how Kyoto will affect Manitoba	4.14



#### **Comments:**

- How do we quantify results? Reduced GHG vs. "new" GHG emissions.
- Did not hear it, wasn't here.
- Could be more.
- Somewhat similar to Jennifer's presentation.

2. 3 Greening Municipal Operations, Meagan Jamieson	Score
Understand role of municipalities in CC	4.38
Understand link between reducing GHG's and economic savings	4.13
Ideas for reducing GHG's in my community from case studies	4.25

### **Comments:**

- My community was in the presentation.
- Good and applicable examples.
- Very interesting examples of towns and cities doing different things.
- Showing the savings examples is great for convincing people it is worth the effort.

3.0 Facilitated discussion	Score
Ideas for educating my network about CC and need for action	4.0
Identify GHG reduction opp's in my community	4.0
Additional reduction opp's (funding, networks, etc.)	4.0
Identify steps for an action plan	3.86

#### **Comments:**

- Good feedback.
- A great deal of thoughts and ideas were exchanged.

### 4.0 Feedback

- 1. What was the most useful part of the workshop?
  - Feedback and groups.
  - Case studies. Kyoto and Manitoba.
  - Facilitated discussion.
  - Discussions.
  - Understanding climate change.
  - Megan's presentation showing savings showing people how much \$\$ they'll save is probably the biggest motivation for town council's, etc.
- 2. What was the least useful part of the workshop?
  - All aspects were of some importance.
  - Can't comment I felt every part was useful.

- 3. What suggestions do you have to improve format and/or content at subsequent workshops?
  - A well-done workshop.
  - Showing direct correlation between increasing CO2 levels and increasing temperature throughout time on a graph is an excellent visual aid. Although Jennifer DID mention that the graph is showing an increase in temperatures throughout time parallels the CO2 graph, people will likely remember the picture better than the description.
  - The Basics of Climate Change presentation was excellent and some wonderful visual aids were used! However, one more minute might have made it clearer to some of the visitors who may not really understand how it all works. I think the question tends to linger "why is it that radiation from the sun can get INTO the atmosphere, past all those GHG molecules but cannot get OUT?" Quickly explaining how the sun's radiation changes from short-wave to long-wave once it is absorbed and re-radiated by the Earth's surface will allow people to visualize how the GHG molecules are getting in the way of the radiation on the way out but not as much on the way in.
  - All of the presentations were excellent and perfectly placed to lead into our discussions. It was an excellent day altogether and I cannot imagine that ANYONE left without learning something and with new ideas of how they can help reduce their GHG production at home or in their community! Excellent job! Thank you for the opportunity to attend.

### 4. Other comments.

- Thank you for the invitation!
- Excellent workshop! I feel it was put forth in such a way that people who perhaps do not know a lot about climate change did not feel alienated or confused all ideas were welcome and the language was not science-heavy. Great job!



### VI. Acknowledgements

The Climate Change Connection would like to acknowledge the following individuals and organizations for their assistance in making the *Steinbach and Area Community Workshop on Climate Change* a success.

**Kim Shukla** at the Steinbach campus of Red River Community College, who helped the Climate Change Connection locate our workshop scribe, Cheryl Woywada.

**Shannon Dueck** from **Golden West Radio** (AM 1250 and 96.7 FM) who took information about our workshop and the issue of climate change to the airwaves.

**The Carillon** for informing the wider community about our event, and about the barriers and opportunities that face municipalities who are actively addressing climate change.

**Tina Portman** for covering the workshop and interviewing participants for an article that will be appearing on our website in June 2003.

**All our participants**, who took time out from their busy schedules to learn about climate change, listen to their fellow community members, and find solutions for a healthier, more sustainable Steinbach.

All presentations and an article about the workshop are provided in PDF format for download under Manitobans and Climate Change on <a href="www.climatechangeconnection.org">www.climatechangeconnection.org</a>. For copies of the handouts on municipal GHG-reduction option please visit the Emissions and Impacts section of the web site. Hard copies can be mailed out upon request to <a href="mailto:climate.connection@mts.net">climate.connection@mts.net</a> or (204) 943-4836.

The workshop programme follows.

Climate Change Connection 2 – 70 Albert St.

Winnipeg, MB R3B 1E7 Tel: (204) 943-4836 Fax: (204) 989-8476



### VI. Workshop Programme

### STEINBACH AND AREA COMMUNITY WORKSHOP PROGRAMME

Tuesday, April 8, 2003 Mennonite Heritage Village

Continental breakfast is provided.

### 9:00 – 9:15 WELCOME from Climate Change Connection

Introduction of local facilitator and explanation of logistics of programme.

Pointing out of scribe and how to order follow-up proceedings.

- Jennifer Duggan, CCC Manager

Who is Climate Change Connection? Brief description of mandate & highlighting of all information tools and services.

Presenter: Rachel Van Caeseele, CCC PEO Coordinator

### 9:15 – 10:15 ROUNDTABLE, chaired by Jennifer Duggan.

Allows everyone present to identify themselves and share:

- 1. Their interest in climate change,
- 2. A question they want an answer to over the course of the day,
- 3. Identify resources available locally,
- 4. Share activities from within the sector they are representing.

### 10:15 - 10:30 BREAK

### 10:30 – 12:15 PUBLIC EDUCATION MODULE

10:30 – 11:45 <u>BASICS OF CLIMATE CHANGE</u>. What is climate change? What are the greenhouse gases (GHGs)? Greenhouse effect? How are human activities involved? What are the potential impacts? Where does Canada fit in internationally? How can we take action and live a more climate-friendly lifestyle. *Presenter: Jennifer Duggan* 

11:45 – 12:15 <u>UNDERSTANDING KYOTO</u>. What is it? What does the Protocol mean for us in Manitoba? Opportunities? Barriers? *Presenter: Anne Lindsey, Executive Director, Manitoba EcoNetwork.* 

### 12:15 – 1:00 LUNCH (provided) & DISPLAYS & INFORMAL NETWORKING

Please bring local information you wish to share.



### 1:00 – 1:45 GREENING MUNICIPAL OPERATIONS

Municipal councils have many opportunities to reduce GHGs and provide their residents with cleaner air and healthier communities, while saving money! Success stories from other jurisdictions across North America will be shared. Examples apply also to school divisions, campuses, and so on.

Presenter: Meagan Jamieson, International Council for Local Environmental Initiatives. ICLEI is an international association of local governments implementing sustainable development. ICLEI's mission is to build and serve a worldwide movement of local governments to achieve tangible improvements in global environmental and sustainable development conditions through cumulative local actions.

# 1:45 – 3:50 FACILITATED DISCUSSION OF COMMUNITY NEEDS & INTERESTS.

Facilitator will draw out participant ideas on:

- 1. How to further educate their sectors and neighbours about climate change and the need for action.
- 1. What GHG reduction opportunities exist in the community (what would really work for Brandon)
- 2. What the community would need/want in order to participate in outside-supported programs, or to generate locally led programs.

### 2:45 – 3:00 BREAK

Breakout groups would do flip charting in response and then feedback into larger session. Action planning for next steps. Invitation for final summary comments on the day from participants.

### 3:50 – 4:00 THANK YOU from Climate Change Connection

Filling out of evaluation forms by participants. Filling out of proceedings request form for later mail-out and joining e-listserv. Any additional business.



Climate Change Connection aims to build awareness and to empower Manitobans to take action to reduce their greenhouse gas emissions, both individually and as a community.

GHG emission reductions achieved by Manitobans will help Canada to meet targets established by the Kyoto Protocol.

The Connection will work to assist Manitobans make the changes necessary to live more sustainable and climate-friendly lifestyles.

Working to reduce GHG emissions enables us to take responsibility for our part in a changing global climate.