

# **Menno Place - 2009 Carbon Neutral Action Report**

### **Executive Summary**

The Greenhouse Gas Reduction Target Act, passed in November 2007, tasked British Columbians to take solid actions to reduce provincial emissions. As part of the act Menno Place has taken steps to reduce emissions, and will continue to work towards being Carbon Neutral by 2010.

At Menno Place, a large part of our emissions is from natural gas fired boilers and electricity. We continue to take steps in reducing emissions through preventative maintenance and energy efficient equipment replacement.

Menno Place is committed to doing its part in an effort to reduce emissions for future sustainability of the environment.

#### **Overviews**

#### Actions Taken to Reduce Greenhouse Gas Emissions in 2009

In 2009 Menno Place has taken advantage of BC Hydro's Product Incentive Program by replacing old inefficient lights in an effort to reduce electrical consumption. Menno has also replaced some of the boiler equipment and has had success in reducing the gas consumption for 2009.

#### Plans to Continue Reducing Greenhouse Gas Emissions 2010 – 2012

Future plans to reduce emissions at Menno Place include:

- More staff awareness regarding turning off lights;
- Completion of our product incentive program through BC Hydro, which consists of replacing of old inefficient lights;
- Looking at building automation to control lights and other pieces of equipment to further decrease hydro usage;
- Replacement of old equipment placed with high efficient models;
- Integration of products received by Material Management so there are fewer vendor deliveries.

### Menno Home and Hospital - 2009 Carbon Neutral Action Report

# **Actions Towards Carbon Neutrality**

The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act.

Action	Status (as of 12/31/09)		Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year		
Mobile Fuel Combustion (Fleet and other mobile equipment)									
Vehicle fuel efficiency									
Replace small maintenance vehicles with more fuel-efficient models	Complete	30	% of small maintenance vehicles are fuel-efficient	Purchased a small maintenance vehicle to replace use of tractors for transportation around the site. 75% savings in fuel consumption.		2009	2009		
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)									
Planning/management									
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development				Investigating equpment and cost to install a metering system	2010	2012		
Owned buildings									
Establish energy performance baseline for owned buildings	In Development				Investigate how to establish an energy performance baseline	2010	2010		
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress			Our refrigeration contractors follow regulations	Continue to control refrigerant fugitive emissions with contractors.  Demand service report and copy of refrigeration charging order form.	2005	No End Date (Continuous)		
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	85	% of owned buildings have undergone energy retrofits since start year indicated	Boiler retrofits in 2009 were replaced with energy efficient boilers	We will continue to replace equipment with efficient units	2003	No End Date (Continuous)		
Retrofitting owned buildings									
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress			Boiler retrofits in 2009 were replaced with energy efficient boilers	HVAC systems are evaluated periodically to capitalize on new energy efficient equipment.	2008	No End Date (Continuous)		
Upgrade lighting systems during retrofits	Ongoing/In Progress	85	% of retrofits (captured above) had lighting systems upgrades	BC Hydro Product Incentive Program was implemented	We plan on completing this project in 2010	2009	2010		
Upgrade/adjust control systems during retrofits	Ongoing/In Progress			Aging nuematic control actuators were replaced with electrical actuators for more accurate control of outdoor air into the building	Continue to budget and schedule further upgrades to similar equipment to reduce energy costs	2009	No End Date (Continuous)		
IT power management									
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	0	% of computers have auto-sleep settings applied	All monitors have sleep settings	CPU Auto sleep application under review as per training requirements needed prior to deployment.	2010	No End Date (Continuous)		
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	15	% reduction in printers, copiers, and/or fax machines since start year indicated	Completed installation of MFDs at workspaces able to engage these machines	Continue to evaluate ability to deploy MFDs as per location	2008	No End Date (Continuous)		
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress	95	% of devices have auto-sleep settings applied	All new devices since 2008 have Auto-Sleep ability and this is set on as standard.	Practice to continue	2008	No End Date (Continuous)		

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Action	Status (as of 12/31/09)		Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	100	% of computers are ENERGY STAR rated	In 2009 we replaced computers with ENERGY STAR rated	All new computers purchases or replacements will be ENERGY STAR rated.	2005	No End Date (Continuous)
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	75	% of fridges are ENERGY STAR rated	As old equipment needs replacement only energy efficient appliances are purchased	Continue replacing all non energy efficient appliances and equip.	2000	No End Date (Continuous)
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	50	% of other appliances are ENERGY STAR rated	As old equipment needs replacement only energy efficient appliances are purchased	Continue replacing all non energy efficient appliances and equip.	2000	No End Date (Continuous)
Behaviour change program							
Ask staff to unplug electrical equipment or switch off power bars when not in use	In Development				Find a ways to educate staff. Messages, training, inservices, etc	2010	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	In Development				Find a ways to educate staff. Messages, training, inservices, etc	2010	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	In Development				Find a ways to educate staff. Messages, training, inservices, etc	2010	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	In Development				Reseach tips and then educate staff	2010	No End Date (Continuous)
Encourage use of stairs instead of elevators	In Development				Create signage to post in the elevators	2010	2010
Provide reminders for turning off lights (e.g., signs, stickers, messages)	In Development				Find a ways to educate staff. Messages, training, inservices, etc	2010	2010
Promote hot water conservation	In Development				Find a ways to educate staff. Messages, training, inservices, etc	2010	2010
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	In Development				We will be exploring the different options of 30% or 100% recycled paper. And what they will cost.	2010	2010
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Electronic media in place of paper			'				
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In Development			aquired evaluation software (Teaming & Conferencing)	test implementations and evaluation	2009	2011
Use electronic document library for filing common documents	In Development			under discussion	develop a plan for management approval	2009	2010
Post materials online that were previously printed	In Development			under discussion	plan to implement testing apon aproval	2008	2010
Behaviour change program							
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	In Development				Train staff to hold paperless meetings	2010	2011
Encourage re-use of scrap paper	In Development				Encourage scrap paper use	2010	No End Date (Continuous)

### Menno Home and Hospital - 2009 Carbon Neutral Action Report

#### **Actions to Reduce Provincial Emissions and Improve Sustainability**

The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the Carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act.* Public sector organizations can optionally use this section to report on actions that will help British Columbia meet its provincial greenhouse gas reduction targets, engage the public, and improve environmental sustainability across all aspects of their organization.

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year		
Business Travel								
Virtual meeting technology								
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Complete		Web conferences are used consistantly		2007	2009		
Behaviour change program								
Train staff in web-conferencing	In Development			continue to train and promote web conferencing	2008	No End Date (Continuous)		
Encourage carpooling to meetings	Complete		carpooling is always encouraged		2007	2009		
Other Sustainability Actions								
Water conservation								
Put in place a potable water management strategy to reduce potable water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features	In Development			Plans to explore cooling tower/chiller to reduce water usage on water cooled cooling units.	2010	2012		
Indoor air quality								
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	In Development			Low VOC's products are considered when purchasing	2006	No End Date (Continuous)		