

# St. Michael's Centre – 2010 Carbon Neutral Action Report



## Executive Summary

St. Michael's Centre is a 128 bed complex care and 16 bed hospice located on Sussex Avenue in Burnaby. The facility was built in 1981, added on to in 1992 and partially renovated in 2002 for the hospice program. It is an aging facility as much of our building services were installed in 1981 and 1992. It is a denominational care facility with the Anglican, Roman Catholic and United churches as founding churches. These churches continue to shape the facility through their participation on the facility board.

We are committed to working with best possible practices and policies for the health and safety of our residents. We are wholly funded by funds received by our health region and resident co-insurance.

## Overview

### Actions Taken to Reduce Greenhouse Gas Emissions

St. Michael's Centre has been proactive in implementing initiatives in the past 3 years.

Some of our previous implemented items:

- Waste management practices that include a recycling program, and removing obsolete items.
- Continued disposal of hazardous materials and waste.
- Centralizing printer in the past 18 months.
- Encourage carpooling, shared parking.
- New medication dispensing system operational 2011 which reduces paper and waste.
- Set up SharePoint on our network and are moving towards providing policy manuals on line.
- Replaced colour printer with a printer that includes green print.
- Continue to replace old inefficient, fluorescents and ballasts with more efficient products as costs permit.
- We have limited key initiatives in this recorded year due to time constraints and funding available.

## Plans to Continue

While we have not made any major plans we continue to be committed within our available resources and funding to continue to investigate opportunities for change within time constraints and funding available.

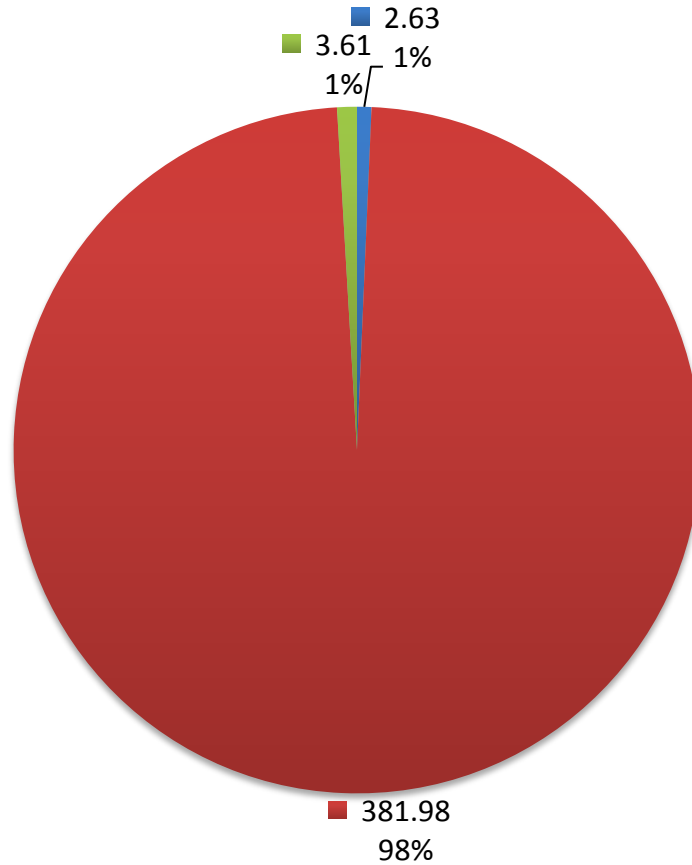
A handwritten signature in black ink, appearing to read 'Helene Elias', is written over a horizontal line.

Helene Elias  
Executive Director

April 2011

# St. Michael's Centre

## Greenhouse Gas Emissions by Source for the 2010 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 388.22**

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion and Electricity (Buildings)
- Supplies (Paper)

### Offsets Applied to Become Carbon Neutral in 2010

Total offsets purchased: **388.14**. Total offset investment: **\$9,703.50**. Emissions which do not require offsets: **0.08** \*\*

\*Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

\*\* Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.

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## 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 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
<b>Mobile Fuel Combustion (Fleet and other mobile equipment)</b>						
<b>Vehicle fuel efficiency</b>						
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress		Regular service contract	Continue with regular service contract	2005	No End Date (Continuous)
<b>Behaviour change program</b>						
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	In Development		Enforced	Maintain current practice	2010	No End Date (Continuous)
<b>Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)</b>						
<b>Retrofitting owned buildings</b>						
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	In Development	20 % of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	Further investigated	Under development	2005	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	50 % of retrofits since start year indicated had lighting systems upgrades	Upgraded florescent lighting to T4s	Continue upgrades with available funds	2006	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	80 % of retrofits since start year indicated had control system upgrades or adjustments	Connecting valves and controls to central building automation system	Continue upgrades with available funds	2006	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	20 % of retrofits since start year indicated had insulation improvements	Increased amount of insulation material in various attic spaces where previously minimal	Continue upgrades with available funds	2010	No End Date (Continuous)
<b>IT power management</b>						
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	100 % of computers shut down automatically outside of regular business hours	Planning initiated in 2009 to implement Desktop Power Management for all applicable desktops	Maintain Practice	2009	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Completed in 2010	100 % of computers have auto-sleep settings applied	All current desktops have auto-sleep settings applied	Maintain Practice	2009	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	50 % reduction in printers, copiers, and/or fax machines since start year indicated	Continued process of removing stand-alone office devices and enhanced central photocopier & electronic fax machine	Maintain Practice	2008	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Completed in 2010	100 % of devices have auto-sleep settings applied	All current electronic office devices have auto-sleep settings applied	Maintain Practice	2006	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Completed in 2010	100 % of computers are ENERGY STAR rated	All computer replacements were Energy Start models	Maintain Practice	2009	No End Date (Continuous)
<b>Appliances and electronic devices</b>						

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Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	60	% of fridges are ENERGY STAR rated	All refrigerator replacements were Energy Start models	Maintain Practice as available funds allow	2009	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 appliances are ENERGY STAR rated	All appliance replacements were Energy Start models	Maintain Practice as available funds allow	2009	No End Date (Continuous)
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Ongoing/In Progress			Maintain Practice as available funds allow	Maintain Practice as available funds allow	2007	No End Date (Continuous)
<b>Behaviour change program</b>							
Help staff reduce personal energy use through "workstation tune-ups"	In Development			Impliment as available funds allow	Continue implementation	2011	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Maintain practice	Maintain practice	2007	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Maintain practice	Maintain practice	2006	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Completed in 2010			Establish practice for residential dishwasher units in kitchens	Maintain practice	2010	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	In Development			Investigated	Further development	2011	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress			Maintain practice	Maintain practice	2008	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Maintain practice	Maintain practice	2009	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Maintain practice	Maintain practice	2007	No End Date (Continuous)
<b>Supplies (Paper)</b>							
<b>Paper Type</b>							
Purchase 30% post-consumer recycled paper	In Development			Investigated	Impliment as available funds allow	2010	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	In Development			Investigated	Impliment as available funds allow	2010	No End Date (Continuous)
<b>Printer/document settings</b>							
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	In Development			Investigated	Implimentation in 2011	2010	No End Date (Continuous)
<b>Electronic media in place of paper</b>							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	25	% of staff workstations with software installed	Investigated and implimented centralized, electronic, shared Master Policy Manuals, Central Room Bookings, etc	Implimentation in 2011	2010	2012
Use electronic document library for filing common documents	Ongoing/In Progress			Investigated and implimented centralized, electronic, shared Master Policy Manuals, Central Room Bookings, etc	Implimentation in 2011	2010	No End Date (Continuous)

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Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Post materials online that were previously printed	Ongoing/In Progress			Investigated and implimented centralized, electronic, shared Master Policy Manuals, Central Room Bookings, etc	Implimentation in 2011	2010	No End Date (Continuous)
<b>Behaviour change program</b>							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	10	% of staff currently have received collaborative software training	Investigated and implimented centralized, electronic, shared Master Policy Manuals, Central Room Bookings, etc	Implimentation in 2011	2010	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	In Development			Investigated	Investigate further and promote	2010	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress			The re-use of scrap paper by staff has always been encouraged	Maintain practice	2010	No End Date (Continuous)

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### 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 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
<b>Business Travel</b>						
<b>Behaviour change program</b>						
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress		Staff are encouraged to use alternate travel to off-site meetings where feasible	Maintain Practice		No End Date (Continuous)
<b>Other Sustainability Actions</b>						
<b>Water conservation</b>						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		Maintain practice	Impliment as available funds allow	2008	No End Date (Continuous)
<b>Commuting to and from home</b>						
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		Established preferential parking spot assignment to carpoolers	Maintain Practice	2009	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress		Shower facilities, change rooms, and locker facilities have been available to staff since the construction of the facility.	Maintain Practice	Started before 1995	No End Date (Continuous)
Provide secure bicycle storage	In Development		Investigating		2010	No End Date (Continuous)