

St. Michael's Centre – 2011 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 implementing initiatives for the past 5 years.

Some of our previous implemented items:

- Waste management practices including a recycling program and redeploying obsolete items.
- Continued disposal of hazardous materials and waste.
- Centralizing printing and data sharing in the past 18 months.
- Encourage carpooling, shared parking.
- New medication dispensing system operational 2011 which reduces paper and waste.
- Using SharePoint on our network and 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.

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 be the initials 'AA' with a long horizontal stroke extending to the right.

May 2012

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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 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equipment)						
Behaviour change program						
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Ongoing/In Progress		Enforced	Maintain current practice	2010	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)						
Retrofitting owned buildings						
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	25 % 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	Continue upgrades with available funds	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)
IT power management						
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	50 % 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)
Implement server virtualization	In Development		Investigated server virtualization	Further investigation	2011	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)
Appliances and electronic devices						
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	70 % 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	All appliance replacements were Energy Start models	Maintain Practice as available funds allow	2009	No End Date (Continuous)

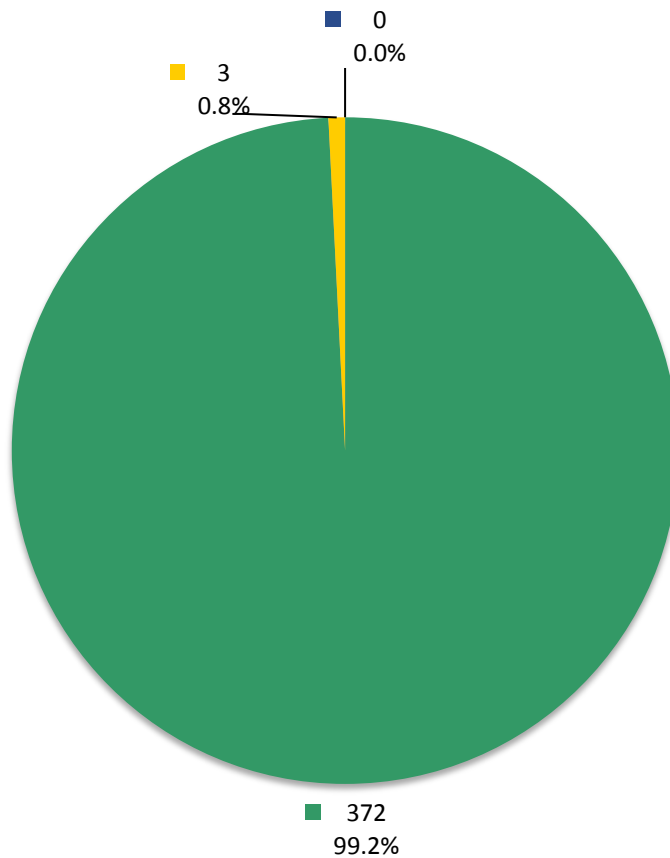
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Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Ongoing/In Progress			Maintain Practice as available funds allow	Maintain Practice as available funds allow	2007	No End Date (Continuous)
Behaviour change program							
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)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Ongoing/In Progress			Maintain practice	Maintain practice	2011	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress			Maintain practice	Maintain practice	2008	2014
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)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress			Investigated	Impliment as available funds allow	2010	No End Date (Continuous)
Purchase 40% 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)
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	In Development				Review practice	2011	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	In Development			Investigated	Review practice	2011	No End Date (Continuous)
Electronic media in place of paper							
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	Continue to expand	2011	No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress			Investigated and implimented centralized, electronic, shared Master Policy Manuals, Central Room Bookings, etc	Continue to expand	2011	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			Investigated and implimented centralized, electronic, shared Master Policy Manuals, Central Room Bookings, etc	Continue to expand	2011	No End Date (Continuous)

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Behaviour change program						
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress		Investigated and implimented centralized, electronic, shared Master Policy Manuals, Central Room Bookings, e	Investigate further and promote	2010	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress		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)

**St. Michael's Centre
Greenhouse Gas Emissions by Source
for the 2011 Calendar Year (tCO₂e*)**



Total Emissions: 375

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2011 (Generated May 18, 2012 10:59 AM)

Total offsets required: **375**. Total offset investment: **\$9,375**. Emissions which do not require offsets: **0** **

*Tonnes of carbon dioxide equivalent (tCO₂e) 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.