

Mount St. Mary Hospital - 2011 Carbon Neutral Action Report

Executive Summary

Mount St. Mary Hospital is committed to reducing its carbon footprint, and is dedicated to the health of its residents, employees, their communities and the global environment. We strive to create a healthy environment that embraces safer building products, clean air, reduced toxins, safe working practices, energy and water efficiency, education, and a commitment to public health.

We will be developing an employee awareness campaign on environmental sustainability that will focus on the energy consumption in our facility. As a relatively newer building, there will be some limitations to the type of improvements that will be found, that will greatly reduce our GHG emissions.

Mount St. Mary Hospital is using the SmartTool software program to measure, aggregate, and report GHG emissions. Internal data collection processes/systems are in place to identify all sources of carbon emission as defined within Bill 44.

Offsets Applied to Become Carbon Neutral in 2011

Total offsets purchased: 476.00. Total offset investment: \$13,300.00.

Outstanding offsets for 2010: 31.0. Outstanding offsets for 2011: 1.0.

Total outstanding offset investment: \$896.00.

Emissions Reduction Activities

Actions Taken to Reduce Greenhouse Gas Emissions in 2011

The majority of our emissions come from our hydro and natural gas consumption, and that will be the area we will be focussing on to look for opportunities for reduction. A variety of steps were taken in 2011 to reduce greenhouse gas emissions:

- All paper purchased with 30% recycled content.
- Some lighting ballasts were replaced.
- Some lighting ballasts were removed from multi-light fixtures.
- New energy-saving exterior light fixtures were installed.
- Continued staff awareness to reduce the use of unnecessary electricity.
- "Idle Free B.C." placards were placed in visible locations.

Plans to Continue Reducing Greenhouse Gas Emissions 2012 – 2014

Mount St. Mary Hospital will continue to reduce our carbon footprint by looking at various initiatives:

- Tracking the carbon emissions through the use of SmartTool.
- Education awareness campaign for employees.
- Reduction of paper use – purchase paper with higher recycled content.
- Reduce boiler outputs to low-fire during warmer season.
- Investigate programs for potential lighting retrofits and energy saving devices.
- Investigate opportunities to convert natural gas boilers to solar heating.

Executive Signature:



Title: Director Finance & IT

Date: June 5/2012

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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)							
Vehicle fuel efficiency							
Perform regular fleet maintenance specifically to improve fuel-efficiency	Ongoing/In Progress	100	% of vehicles are subject to regular maintenance for fuel efficiency	Annual service/maintenance performed on both vehicles. CVIP is performed on bus annually.	Continue with established maintenance schedule throughout 2011-2012.	2009	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	100	% of current drivers are trained	All drivers are trained by an ICBC-approved instructor, and provided with an annual "tune-up" to update/refresh their skills.	Any new drivers hired between 2010-2012 will be provided with this training.	2009	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Bus is used for local resident outings only. Pickup truck is used minimally and only for local travel.	Continue to promote alternatives for fleet vehicle travel, where possible.	2009	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
IT power management							
Install power management software which shuts down computers outside of regular business hours	In Development				Identifying options available and deciding on next step.	2010	2013
Implement server virtualization	Ongoing/In Progress	45	% of servers have been virtualized since start year indicated	Implemented Phase 1 of server virtualization.	Additional server virtualization will be employed as servers are life cycled and if applications support that technology.	2011	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Completed in 2011	100	% of computers have auto-sleep settings applied	Continued application of power management configurations.	Continued application of power management configurations.	2009	2011
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress			Continued to evaluate options.	Will look at streamlining further.	2009	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Completed in 2011	100	% of devices have auto-sleep settings applied	Continued application of power management configurations.	Continued application of power management configurations.	2009	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	100	% of computers are ENERGY STAR rated	Life cycled last remaining non Energy Star rated computers.	Life cycle computers with Energy Star certified units.	2009	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	100	% of fridges are ENERGY STAR rated	All replacement appliances purchased had ENERGY STAR rating.	Continue to only purchase models with ENERGY STAR rating.	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			Any replacement appliances require an ENERGY STAR specification.	Continue to only purchase models with ENERGY STAR rating.	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			Some lamps have been replaced with energy saving compact fluorescent bulbs.	As incandescent bulbs will no longer be able to be purchased, we will be replacing all bulbs with compact fluorescent ones.	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
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress	100	% of current staff have completed a workstation tune-up	Annual maintenance is performed on all systems.	Have staff continue to reduce personal energy use through "workstation tune-ups".	2009	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Educated staff to unplug any unused equipment, and to power down computer systems during off-hours.	Educate staff through various articles printed in monthly Newsletter.	2009	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Educated staff to close blinds during off-hours and during hot, seasonal weather.	Educate staff through various articles printed in monthly Newsletter.	2009	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	In Development				Add energy "tip column" in monthly Newsletter.	2009	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress			Staff are encouraged to use stairs. Due to building configuration, there are times when this is not recommended, due to the additional traffic and disruption through the North Houses.	Continue to encourage stair use, where applicable.	2009	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Staff are very aware of excessive use of lights. Most often, corridor lights are only on "night mode". Offices and Ground Floor areas are shut down during off-hours.	Continue to promote only essential light use during daylight hours.	2009	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Staff are encouraged to use cold or warm water when processing resident clothing in domestic machines. High-temp dishwashing sanitizers use extremely low water levels.	Investigate additional hot water conservation initiatives.	2009	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	100	% of total paper purchased contains 30% recycled content	All paper being purchased contains 30% recycled content.	Continue to look at options to purchase paper with higher recycled content.	2010	No End Date (Continuous)
Purchase 40% post-consumer recycled paper	In Development				Investigate potential purchasing of 40% recycled content paper.	2011	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	In Development				Will be looking at products that contain 100% recycled content.	2010	No End Date (Continuous)
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	35	% of network printers or photocopiers are set to automatic double-sided	Identified any additional units that could be switched over.	As printers are replaced, we will look at carbon neutral options.	2010	No End Date (Continuous)
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Ongoing/In Progress			Currently have networked photocopier with "print and hold" settings.	Will look at possibility of expanding to some printers.	2010	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress			Have a standard template that encourages maximized print area.	Addressed as new templates are developed.	2009	No End Date (Continuous)
Electronic media in place of paper							
Use electronic document library for filing common documents	Ongoing/In Progress			Have created common directories for users to share common files.	Will continue to be ongoing.	2008	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
Post materials online that were previously printed	Ongoing/In Progress		Developed an intra-site for users.	Will be ongoing and expanded as needed.	2009	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	In Development		Started discussions with payroll vendor	Upgrade payroll program.	2010	No End Date (Continuous)
Behaviour change program						
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	In Development			Educate staff and encourage staff to reduce paper usage.	2009	No End Date (Continuous)

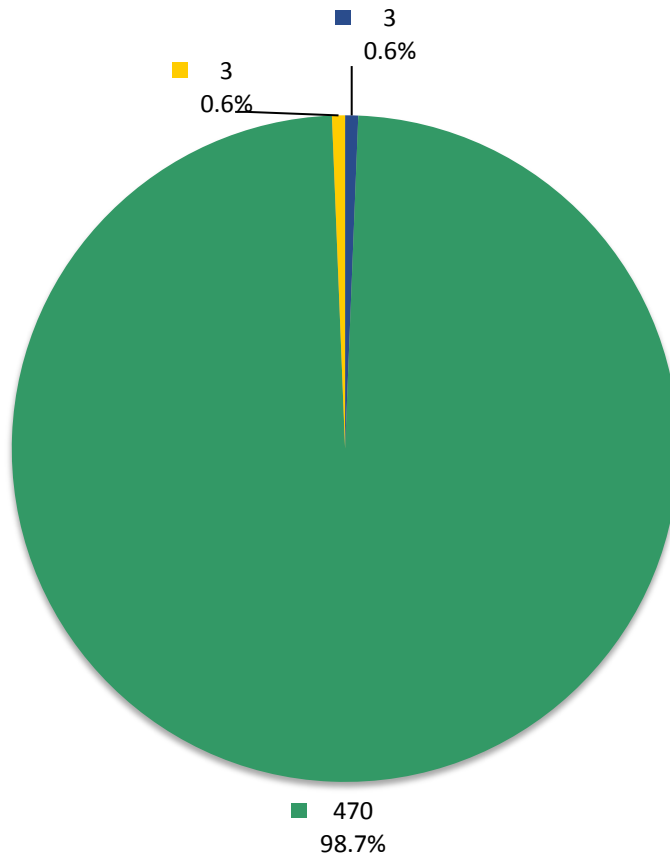
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Actions to Reduce Provincial Emissions and Improve Sustainability

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 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Education, Awareness, and Engagement						
Staff awareness/education						
Provide sustainability education during new staff orientation	In Development			Plan to add topic to new staff orientation.	2012	No End Date (Continuous)
Other Sustainability Actions						
Water conservation						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		All replacement water closet fixtures were low-flush models.	Any fixtures in need of replacement will be low-flush models.	2009	No End Date (Continuous)
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	Ongoing/In Progress		Landscape irrigation system on timers and adhering to CRD watering bylaws.	Shutting down irrigation system during periods when watering is not required.	2009	No End Date (Continuous)
Waste reduction/diversion						
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress		Hazardous waste material is collected and stored in appropriate containers, and transported off site by a registered contractor.	Continue with current system.	2009	No End Date (Continuous)
Procurement (non-paper supplies)						
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress		Purchased "green" cleaning chemicals and paper goods for Housekeeping Department.	Continue to look at additional "green" products.	2010	No End Date (Continuous)
Indoor air quality						
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress		Placards placed at entrances and throughout facility to remind staff and visitors that we are a "scent-free" facility.	Continue to enforce scent-free policy.	2005	No End Date (Continuous)
Commuting to and from home						
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		Encourage staff to get involved with "Bike To Work Week" activities. Additional bike racks purchased.	Continue to offer sign up to staff for B C Transit ProPass. This may be paid through payroll deduction.	2007	No End Date (Continuous)

**Mount St. Mary Hospital
Greenhouse Gas Emissions by Source
for the 2011 Calendar Year (tCO₂e*)**



Total Emissions: 476

- 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 10:54 AM)

Total offsets required: **476**. Total offset investment: **\$11,900**. 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.