

---

## Vancouver Island Health Authority

### *2010 Carbon Neutral Action Report*

#### **Executive Summary**

The past year has been an exciting time for the Vancouver Island Health Authority (VIHA) with the completion of the new Patient Care Centre at Royal Jubilee Hospital in Victoria. This facility not only incorporates state of the art design for health care delivery but has been built to LEED Gold standards. The VIHA has taken every measure to improve health care in the most sustainable methods possible.

The VIHA has met the challenges of providing health care across the island with the same intention – cost effective, conscientious and evidence-based care delivery. Commitment to sustainable health care is a core value and a goal set by the Executive in 2010. “We will plan and deliver services in a way that will be sustainable in terms of human, capital and financial resources required.” Reporting on our carbon emissions ensures that we continue to reduce our emissions and deliver sustainable health care with minimum harm to our environment.

As of 2010 the VIHA’s carbon emissions are 13% below the 2007 carbon emissions. VIHA’s goal is to continue to reduce carbon emissions to meet the 2020 target of being 33% below 2007 emissions. Presently there are \$2.5 million in Public Sector Energy Conservation Agreement (PSECA) III projects specifically targeted at greenhouse gas reductions to help with continued reductions in the coming years. There are also many initiatives underway to reduce travel emissions, paper consumption and electrical consumption.



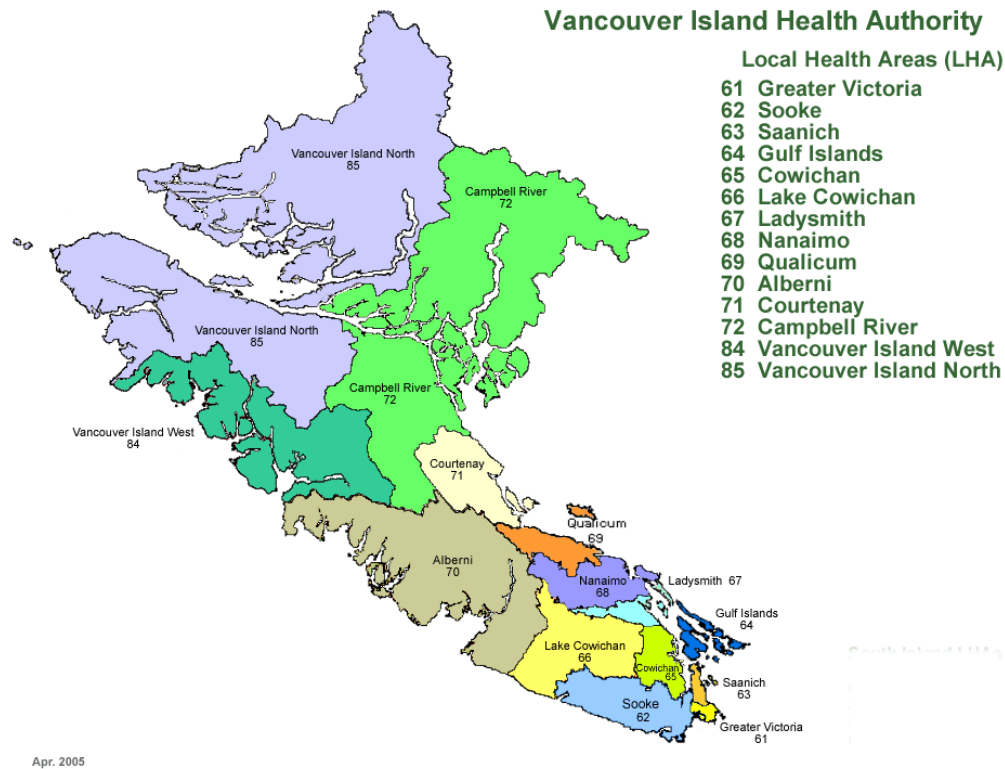
Joe Murphy  
Vice President, Operations & Support Services

## Overview

The Vancouver Island Health Authority (VIHA) provides health care across Vancouver Island from large acute facilities in Victoria and Nanaimo to community hospitals as far north as Port Hardy and as far west as Tofino and health units from Alert Bay to Tahsis.

VIHA serves a diverse and sometimes rugged geographical area of 56,000 square kilometers;

- home of approx 750,000 people or 17% of BC's population,



- in 138 facilities, with 1,485 acute care beds, 1,577 residential and assisted living beds and 930 community addiction and mental health beds,
- served by 17,700 enthusiastic and committed health care professionals and support staff,
- carbon foot print in 2010: – 32,500.55 tonnes tCO<sub>2</sub>e, and
- annual budget of \$1.68 Billion.

## Commitment

To provide services to this large geographic and diversely populated area is challenging.

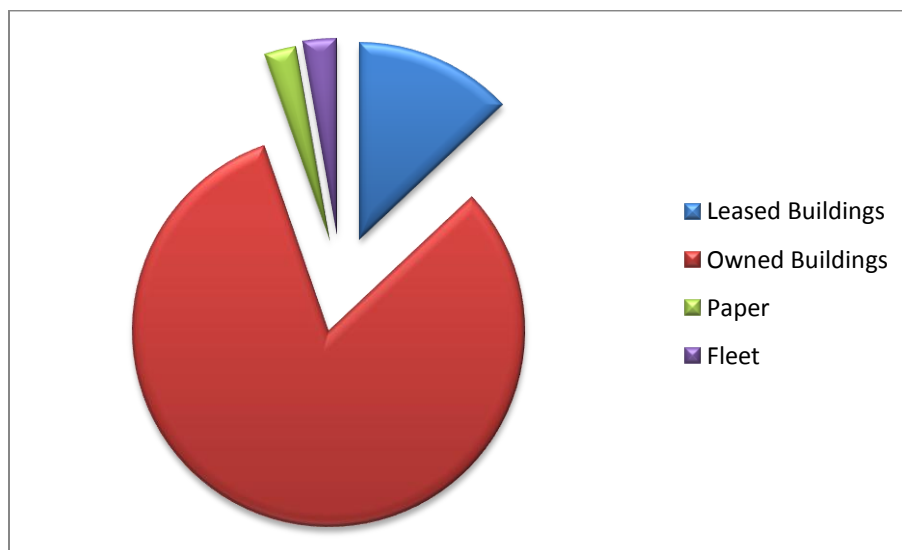
The Executive and the Board of Directors of VIHA (the Board) are fully supportive of energy conservation, carbon emissions reduction and sustainability. The Board has received presentations on Environmental Sustainability each year since 2007.

The *Greenhouse Gas Reduction Target Act* (Bill 44), states emissions should be at least 33% below 2007 emission levels by 2020. As of 2010 the VIHA's emission levels are 13% below 2007 emissions and the VIHA is committed to implement strategies to achieve this target. In partnership with BC Hydro the VIHA is also committed to reduce electrical consumption by at least 2 GWh (Giga Watt hours) each year.

All major capital projects will be designed with energy efficiency as a priority and new facilities to LEED Gold standards (e.g. Royal Jubilee Hospital Patient Care Centre, Nanaimo Regional General Hospital Emergency Department and Psychiatric Intensive Care).

## 2010 Greenhouse Gas Emissions

Internal data collection process and systems are in place to identify all sources of carbon emission as defined by Bill 44. The VIHA has reported on carbon emissions using the BC Government's SmartTool program starting in 2007 with full reporting completed for 2009 and 2010. Total Emissions from all sources for the VIHA for 2010 were 32,559.77 tCO<sub>2</sub>e. Due to usage of BioDiesel 59.22 tCO<sub>2</sub>e were offset exempt. The VIHA purchased offsets for 32,500.55 tCO<sub>2</sub>e from Pacific Carbon Trust in order to be Carbon Neutral. Owned buildings are the primary source of emissions responsible for greenhouse gases accounting for 81.7% of total emissions. Leased buildings account for 13%, fleet 2.7% and paper 2.5% of emissions.



The VIHA has determined it's consumption of fugitive gas (i.e. leaks from pressurized equipment) is less than 1% of the overall emissions and at this time have not collected the data as it is deemed disproportionately onerous to do so. For this reason these gasses have been deemed out of scope.

## Carbon Targets

Bill 44 sets targets for Public Sector Organizations (PSO) to reduce carbon emissions. To date, as per the graph below, the VIHA has reduced emissions by 13% from 2007. The challenge will be to continue to reduce emissions while expanding facilities to meet the growing demands on the health care system.

### GHG Emissions: Actual vs. Target

	Total GHG Emissions tCO <sub>2</sub> e	Target tCO <sub>2</sub> e	
Year			
2007	37,295 <sup>1</sup>	37,295	Baseline
2008	37,696 <sup>1</sup>		
2009	35,836 <sup>2</sup>		
2010	32501 <sup>2</sup>		13% reduction
2011			
2012			
2016			
2020		24,988	33% reduction
2050		7,459	80% reduction

- 1 estimated based on invoices
- 2 based on data from SmartTool

## Net New Space Added since 2007

Victoria General Hospital Emergency Department	2009	1660 sqm
Nanaimo Regional General Hospital Perinatal Department	2008	2050 sqm
Nanaimo Regional General Hospital Renal Department	2010	1109 sqm
Port Hardy Hospital Multilevel Care Beds	2009	499 sqm

## Emissions Reductions Activities 2010

Over the past several years the VIHA has been implementing a number of energy saving strategies to reduce energy consumption focusing mainly on lighting. In 2010 initiatives completed to reduce carbon emission included the following projects:

1. Demand control for kitchen ventilation systems at four facilities.
2. Heat recovery for ventilation systems at Nanaimo Regional General Hospital and Trillium Lodge.

3. Energy upgrade at Ladysmith Health Care Centre including the installation of solar panels for preheating domestic hot water.
4. Lighting upgrades at the Royal Jubilee Hospital, Victoria General Hospital, Lady Minto Hospital and Queen Alexandra Centre for Children's Health.
5. Boiler replacements to more efficient units at Saanich Peninsula Hospital.
6. VIHA has focused on enhancing our Traffic Demand Management program in Victoria and Nanaimo by increasing staff subsidies on BC Transit, increasing bicycle storage units and the frequency of shuttle services. In 2010/11, a three year graduated increase in parking fees, closer to market rates in communities, was initiated.

### **Emission Reduction Activities 2011 -2013**

There are several projects underway that will deliver more reductions in 2011 and 2012 as they are completed. These initiatives include:

1. PSECA III funded project to install demand control for kitchen ventilation at eight sites.
2. PSECA III funded project to install solar thermal systems for domestic water heating at three sites.
3. PSECA III funded projects to implement a bundle of energy conservation measures at three sites. Measures include more energy efficient boilers, controls upgrade, heat recovery chiller, boiler economizers and even more lighting upgrades.
4. Building commissioning at Nanaimo Regional General Hospital.
5. Building re-commissioning projects at twelve other sites across the organization.
6. Implementation of additional smart metering in support of eight more building re-commissioning projects slated to begin later in 2011.
7. Continued efforts to reduce paper consumption include: moving to double sided printing electronic payroll notification and electronic health records.
8. IMIT continues to provide reductions in energy consumption thru server virtualization, power savings on servers, replacement of computers with thin client and installation of video / audio conferencing service to reduce travel for meetings.
9. Housekeeping and infection control have piloted a new cleaning protocol incorporating red and blue microfiber cleaning clothes and buckets. Red for bathrooms and blue for patient rooms. This has reduced the use of throw away clothes and caustic cleaners that were breaking down patient care equipment and building finishes.
10. Recycling in Nanaimo and Victoria has been expanded to include composting as per the Regional District's requirements and service provision.

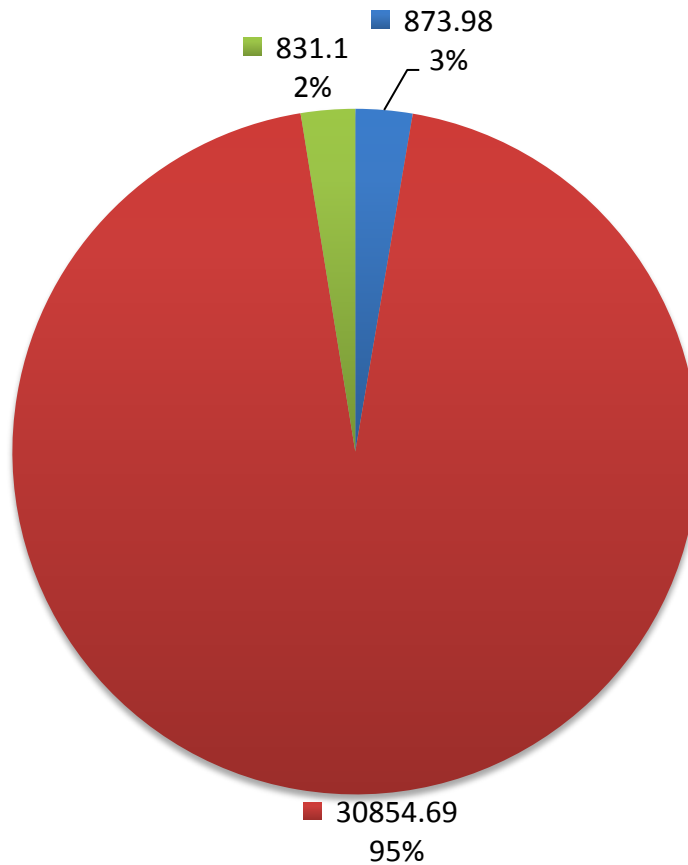
### **Changes to Operations**

- Cowichan Lodge remains minimally occupied. Plans are in progress to reoccupy a portion of the building later in 2011. Most of the HVAC requirements are going to be addressed with electric heat pumps.
- Nanaimo Regional General Hospital Renal Dialysis addition opened in 2010.
- Royal Jubilee Hospital Patient Care Centre opened March 2011. This facility was built to LEED Gold standards.

- 
- There are several small to medium sized building additions underway such as the Chapel and operating room additions at Saanich Peninsula Hospital and new Pharmacy and Island Medical Program at Cowichan District Hospital.
  - The new Emergency Department is under construction at Nanaimo Regional General Hospital and completion is scheduled for 2012. It is being built to LEED Gold standards.

# Vancouver Island Health Authority

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



**Total Emissions: 32559.77**

- 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: **32500.55**. Total offset investment: **\$812,513.75**. Emissions which do not require offsets: **59.22** \*\*

\*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.

# Vancouver Island Health Authority - 2010 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 12/31/10)	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>							
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	10	% of vehicles are fuel- efficient models	Started 2010. Replacement rate is 10% per year.	Continue with 10% replacement rate as funding permits	2009	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	5	% of vehicles down-sized since start year indicated	Include compact size car as a part of the renewal process.	Continue with downsizing.	2009	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	100	% of vehicles are subject to regular maintenance for fuel efficiency	Trucks serviced twice per year as per federal regulation. Cars serviced at a minimum twice per year or as required depending on mileage.	Continue to service vehicles	2009	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)	Ongoing/In Progress			Draft policy developed and accepted. Designated no idle zones on sites.	Plan roll out and implementation and making all sites non idle zones.	2009	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress			Staff have been encouraged to car pool	Continue to promote car pool	2009	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress	20	Riders per day used VGH / RJH shuttle	Shuttles available to staff for attending meetings and also during peak commute periods.	Continue to promote shuttle	2009	No End Date (Continuous)
<b>Other Mobile Fuel Combustion Actions</b>							
Use audio conferencing to minimize travel	Ongoing/In Progress			Installed centralized audio conferencing	Continue with program	2010	No End Date (Continuous)
<b>Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)</b>							
<b>Planning/management</b>							
Reduce office space (square meters) per employee	Ongoing/In Progress			Space Planning follows Ministry of Health Guidelines and makes every effort to optimize space.	Continue to follow Ministry of Health Guidelines	2007	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Ongoing/In Progress	53	% of buildings have a real time metering system installed	Purchased Pulse Metering for 5 additional sites including the 3 largest.	Install Pulse Metering at 7 more larger sites	2009	2012
<b>Owned buildings</b>							
Establish energy performance baseline for owned buildings	Ongoing/In Progress	85	% of owned buildings have an established energy performance baseline	Energy baselines are completed at the majority of the owned buildings. Some small sites have not been included.	Implement water monitoring and baseline for owned buildings.	2009	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	In Development	0	% of owned buildings are certified LEED NC Gold or LEED NC Platinum	Completed construction of the RJH Patient Care Centre (PCC) that was built to LEED Gold standards. NRGH ER was designed to LEED Gold standards and is under construction.	Complete certification for PCC. Continue with construction of NRGH ER.	2008	No End Date (Continuous)



## Vancouver Island Health Authority - 2010 Carbon Neutral Action Report

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
Incorporate integrated design process into new construction or during renovations of owned buildings	Ongoing/In Progress	75	% of buildings built or renovated since start year indicated used the integrated design process	The RJH Patient Care Centre used an integrated design process	Continue to use this process for large new buildings	2009	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress			Continued to use service contractors.	Continue to require this from service contractors	2009	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	30	% of owned buildings have undergone energy retrofits since start year indicated	Boiler replacements, controls upgrades, kitchen demand ventilation, heat recovery, lighting upgrades	Retro-commissioning, solar domestic hot water, heat recovery, energy efficient motors, variable speed drives, synchronus belts.	2009	No End Date (Continuous)
<b>Retrofitting owned buildings</b>							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	15	% of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	Retrofits are reviewed and where feasible energy efficient options are included.	Review all projects for potential retrofits, and rebates, estimate projects with retrofit included.	2008	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	75	% of retrofits since start year indicated had lighting systems upgrades	Ongoing lighting retrofits through out owned buildings	Continue upgrading lighting to achieve optimal efficiency.	2009	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	20	% of retrofits since start year indicated had control system upgrades or adjustments	Where possible control systems are upgraded during retrofits. NRGH and VGH are getting controls upgrades with PSECA III money.	Continue upgrading controls through building renovations, retro commissioning and BC Hydro programs.	2009	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	1	% of retrofits since start year indicated had insulation improvements	When areas are renovated sufficiently that insulation is affected the insulation and or windows are improved.	Upgrade systems as budgets and projects allow.	2009	No End Date (Continuous)
Install an on-site renewable energy demonstration project	Ongoing/In Progress	2	% of retrofits since start year indicated had on-site renewable energy components	Domestic Solar Hot water system was installed at LDH funded by PSECA II.	PSECA III is funding installation of domestic solar hot water systems at VGH, SPH and LMH.	2010	No End Date (Continuous)
<b>IT power management</b>							
Install power management software which shuts down computers outside of regular business hours	In Development	0	% of computers shut down automatically outside of regular business hours	VIHA had planned to implement this year. Desktop services were centralized into HSSBC so any changes will be provided centrally.	Follow up with HSSBC to find out what their plans are for power management.	2009	No End Date (Continuous)
Implement server virtualization	Ongoing/In Progress	45	% of servers have been virtualized since start year indicated	261 virtual servers, 319 physical servers. Demand for physical servers is high.	Continue with virtualization and addressing issues requiring high in demand for actual servers.	2009	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	98	% of computers have auto-sleep settings applied	Desktops power off after 20 mins. (No sleep enabled for CPU). Laptops monitor powers down after 10 mins and hard disk after 15 mins.	Continue with program.	2009	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	In Development	40	% reduction in printers, copiers, and/or fax machines since start year indicated	Overall reduction in print devices by 40% to 2,937 devices.	By 2012 we will reduce print devices to 1,641.	2009	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	In Development	95	% of devices have auto-sleep settings applied	Network printers have auto-sleep	Consolidated device will provide savings. Econo mode and autopower saving mode is default seting on all print devices.	2009	No End Date (Continuous)

## Vancouver Island Health Authority - 2010 Carbon Neutral Action Report

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 computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	99	% of computers are ENERGY STAR rated	All equipment available as Energy Star is purchased under this program.	Continue with program.	2009	No End Date (Continuous)
<b>Appliances and electronic devices</b>							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	50	% of fridges are ENERGY STAR rated	All equipment available as Energy Star is purchased under this program.	Continue with program.	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			All equipment available as Energy Star is purchased under this program.	Continue with program.	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			All new lighting is compact fluorescent	Use compact fluorescents or LED.	2009	No End Date (Continuous)
<b>Behaviour change program</b>							
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Training session with Directors and Managers for Green Team Pilot project. 5 sites targeted.	Rollout Green Teams at 5 sites per year	2008	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Training session with Directors and Managers for Green Team Pilot project. 5 sites targeted.	Rollout Green Teams at 5 sites per year	2008	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Ongoing/In Progress			Training session with Directors and Managers for Green Team Pilot project. 5 sites targeted.	Rollout Green Teams at 5 sites per year	2008	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress			Training session with Directors and Managers for Green Team Pilot project. 5 sites targeted.	Rollout Green Teams at 5 sites per year	2008	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Training session with Directors and Managers for Green Team Pilot project. 5 sites targeted.	Rollout Green Teams at 5 sites per year	2008	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Training session with Directors and Managers for Green Team Pilot project. 5 sites targeted.	Rollout Green Teams at 5 sites per year	2008	No End Date (Continuous)
<b>Other Stationary Fuel Combustion and Electricity Actions</b>							
Moving to Thin Client Computers from Desk Top PC's	Ongoing/In Progress	350	computers changed to thin client	Was rolled out this year and has is being monitored.	Change out all desk top to PC's were applicable and as computers are refreshed.	2010	No End Date (Continuous)
<b>Supplies (Paper)</b>							
<b>Paper Type</b>							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	11	% of total paper purchased contains 30% recycled content	A sustainable procurement policy has been adopted by HSSBC that may provide opportunity to purchase recycled paper.	Sustainable procurement policy ready for approval.	2008	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	1	% of total paper purchased contains 100% recycled content	A sustainable procurement policy has been adopted by HSSBC that may provide opportunity to purchase recycled paper.	Sustainable procurement policy ready for approval.	2009	No End Date (Continuous)
<b>Printer/document settings</b>							
Switch networked printers and photocopiers to automatic double-sided	In Development	0	% of network printers or photocopiers are set to automatic double-sided	Provided with printer centralization program	Forcing of double sided printing for all new printer stations	2009	No End Date (Continuous)

## Vancouver Island Health Authority - 2010 Carbon Neutral Action Report

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
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	In Development	0	% of network printers have 'print and hold' settings applied	Provided with printer centralization program	Continue with program	2009	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	In Development	0		Margins cannot be adjusted for clinical forms. Could be done in software for business documents	Investigate feasibility for changing margins via software	2009	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	10	% of staff workstations with software installed	1243 Microsoft OCS users at this time. The service is free of charge. Approximately 700 people use the service at any given time.	Continue with the program.	2010	No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress			Shared drives are used through out the organization. Electronic distribution of work binders.	Continue with the program.	2009	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			HR forms and IMIT forms are available on the Intranet	Move to paperless charting	2009	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	In Development			Reviewing two options.	Select option and implement program.	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	100	% of staff currently have received collaborative software training	OSC - on demand editing and document share available for all workstations.	Continue with program	2009	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Increase use of electronic files, laptops and projectors has reduced the paper at meetings.	Continue with program	2009	No End Date (Continuous)
<b>Other Paper Supplies Actions</b>							
Use VOIP phone system so that all VIHA sites are on 5 digit dialing.	Completed in 2010	100	% of phones within VIHA	Eliminated long distance charges and replaced with 5 digit dialing takes any barriers out of calling.	Continue with program	2009	No End Date (Continuous)

# Vancouver Island Health Authority - 2010 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 12/31/10)	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>Virtual meeting technology</b>							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	In Development			Software is being made available.	Continue with program.	2009	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	73	% of meeting rooms have access to video-conferencing equipment	Board rooms, telehealth and meeting rooms are getting more equipment for video conferencing.	Continue with program.	2009	No End Date (Continuous)
<b>Behaviour change program</b>							
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress			Live support available on demand.	Continue with program.	2009	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Audio and/or video conferencing is used for regional meetings.	Continue with program. Develop some metrics.	2009	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			Encourage ride share	Continue with program. Develop some metrics.	2008	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Encourage ride share	Continue with program. Develop some metrics.	2007	No End Date (Continuous)
<b>Education, Awareness, and Engagement</b>							
<b>Team-building</b>							
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	In Development	5	Pilot sites.	Had managers and directors at a day long training session in October. Executive, directors and managers support formation of Green Teams. 5 pilot sites selected.	Rollout of program	2009	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	In Development	2	BC Hydro Energy Managers.	Energy Team, BC Hydro and Fortis are supporting formation of Green Teams	Rollout of program	2010	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	In Development			An Education Program will be provided.	Rollout of program	2009	No End Date (Continuous)
<b>Staff Professional Development</b>							
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress			FM&O staff attended BC Hydro Power Smart Forum. Energy Team have attended training on Solar and Carbon.	Continue with education	2009	No End Date (Continuous)
<b>Staff awareness/education</b>							
Provide education to staff about the science of climate change	Ongoing/In Progress	50	Managers and Directors	Facilities staff attended courses on subject. BC Hydro provided course to directors and managers	Continue with education	2009	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	In Development			Green Teams will include education component.	Continue with education	2009	No End Date (Continuous)

## Vancouver Island Health Authority - 2010 Carbon Neutral Action Report

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
Provide green tips on staff website or in newsletters	Ongoing/In Progress	1	Monthly tips provided for staff newsletter	Each month a tip is provided to the staff newsletter. The Green website has a tips page.	Continue with providing tips	2009	No End Date (Continuous)
Provide sustainability education during new staff orientation	Ongoing/In Progress	18	Sessions per year - on average 65 packages given out	Provide package to new employees on alternate transit options	Provide information on other Green Initiatives.	2010	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			For new construction and replacements low flow toilets are used. Where appropriate auto shut off faucets are used.	Continue with replacement program	2009	No End Date (Continuous)
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Ongoing/In Progress			RJH parking for the new PCC and NRGH parking for the new ER have incorporated these strategies.	Continue for new parking areas and new construction	2009	No End Date (Continuous)
<b>Waste reduction/diversion</b>							
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress			Recycling available at most sites dependant on municipal programs.	Add attitional streams.	Started before 1995	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress	100	% Hazardous materials are diverted	Hazardous waste disposal system in place.	Continue with disposal system.	2008	No End Date (Continuous)
<b>Procurement (non-paper supplies)</b>							
Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	In Development	0	No mechanism in place to purchase these items	A sustainable procurement poilcy has been developed by HSSBC.	Sustainable Procurement Policy ready for approval.	2009	No End Date (Continuous)
Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	In Development	0	No mechanism in place to purchase these items	A sustainable procurement poilcy has been developed by HSSBC.	Sustainable Procurement Policy ready for approval.	2009	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	In Development	0	No mechanism in place to purchase these items	A sustainable procurement poilcy has been developed by HSSBC.	Sustainable Procurement Policy ready for approval.	2009	No End Date (Continuous)
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	In Development			For Central North Island, sustainable food is purchased as available through the suppliers.	Continue to look for ways to include these products while staying within budget.	2009	No End Date (Continuous)
<b>Building construction, renovation, and leasing</b>							
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress			LEED Gold construction for new buildings incorporates this. Sites recycle materials when service is available.	Continue with this program	2009	No End Date (Continuous)
<b>Indoor air quality</b>							
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress	100	VIHA policy in place	Continue promoting policy	Continue promoting policy	2007	No End Date (Continuous)
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress			FM&O has been using low VOC materials for maintenance and repairs. Sustainable procurement policy has been developed by SSO that will help with purchase of furniture	Implement sustainable procurement policy	2008	No End Date (Continuous)
<b>Commuting to and from home</b>							



## Vancouver Island Health Authority - 2010 Carbon Neutral Action Report

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
Offer staff a compressed work week	Ongoing/In Progress			Alternate Work Week policy is in place.	Continue with policy	2008	No End Date (Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress	206	Employees on average using Propass	Promote through VIHA website commuting options: Jack Bell Ride Share, BC Transit ProPass	Continue to review and promote	2009	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress			Increasing space at larger sites. Part of new construction.	Continue to improve with new construction.	2009	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress	882	Secure storage for bicycles	Increased bicycle storage from 118 in 2003	Continue to review and increase storage when able.	2009	No End Date (Continuous)
<b>Other Sustainability Actions</b>							
Working with BC Transit to improve routes and service for VIHA staff and clients	Ongoing/In Progress			BC Transit established route #10 specifically for RJH - Dockyard West Route. Route is suited for shift workers and staff commuting - side benefit has been public are using this route as well.	Continue to review routes and barriers.	2009	No End Date (Continuous)
Telehealth Service	Ongoing/In Progress	1	1.6 Million Km's of travel by patients	Telehealth service avoids patient travel. Also genetics consultants are able to avoid travel to sites.	Continue with program.	2009	No End Date (Continuous)