

# Interior Health

## 2010 Carbon Neutral Action Report

### Executive Summary

On behalf of Interior Health, I am pleased to submit the third annual Carbon Neutral Action Report. This report provides an overview of the environmental actions that have been accomplished or initiated in the 2010 calendar year.

We are fortunate to live in a province with a wealth of beauty and natural resources. The residents of British Columbia have an abundance of clean air and water, and we are responsible for protecting those resources by minimizing our impact on the environment and taking action to improve where possible.

Health care has an ethical duty to “do no harm”. As we model sustainable behaviour within our communities and take a leadership role in environmental initiatives, we further live up to this principle. For Interior Health this means measuring and reducing our environmental footprint for the benefit of our staff, patients, clients and the people living in our communities.



Interior Health’s environmental actions have a positive impact on the environment and our communities. These actions also make good financial sense. Interior Health has received provincial and national recognition for our environmental accomplishments and we continue to make strides in this area.

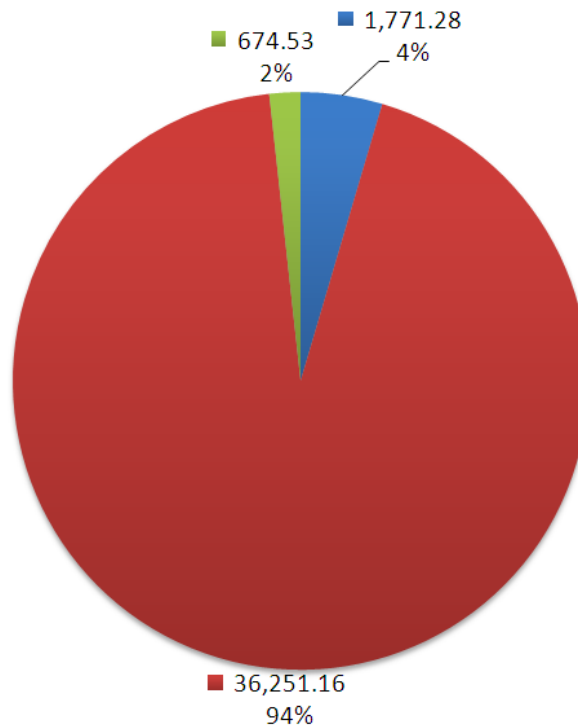
As health-care professionals, we know that the health of our environment and the health of our population are connected. Environmental contaminants have been associated with compromised human health outcomes such as cancer, birth defects, respiratory and cardiovascular illness and gastrointestinal ailments. Interior Health’s primary goal is to protect and promote the health and wellness of our population. By understanding the link between the environment and population health, we are committed to taking initiatives to protect and promote a healthy and sustainable environment.

A handwritten signature in black ink, appearing to read 'R. Halpenny', written in a cursive style.

Dr. Robert Halpenny  
President & Chief Executive Officer

## 2010 Greenhouse Gas Emissions

By Source for the 2010 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 38,696.97**

- 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: 38,635.64.
- Total offset investment: \$965,891.00.
- Emissions which do not require offsets: 61.33 \*\*

\*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.

## Emissions Reduction Activities

### Actions Taken to Reduce Greenhouse Gas Emissions in 2010

Interior Health provides services across a vast geographic region to an aging and growing population. Interior Health's operations are very complex and vary from large urban cities such as Kelowna and Kamloops to smaller rural communities such as Chase and Sparwood. The climate also varies within Interior Health's 216,000 square kilometre region from the southern interior of the Province to the Cariboo Chilcotin to the Rocky Mountains to the Canada – US border. A considerable amount of travel, numerous buildings and related infrastructure are required to provide high quality care to a region of this scale.

#### Interior Health Quick Facts

- ❖ Area Population: 742,000
- ❖ Acute Beds: 1,255
- ❖ Employees: 17,869
- ❖ Physicians: 1,337
- ❖ Annual Budget: \$1.7 billion
- ❖ 58 Municipalities & 95 Unincorporated
- ❖ 53 First Nation Communities
- ❖ 7 Regional Hospital Districts
- ❖ 6,115 Residential Assisted Living Beds and Supportive Housing Units

A large effort was undertaken to determine Interior Health's footprint. Utility tracking software was purchased to get a more accurate sense of the utility consumption of Interior Health buildings. The majority of the emissions are derived from the consumption of natural gas for heating purposes. Due to the milder climate in 2010, energy consumption was less than anticipated.

Interior Health "Green Teams" carried out many initiatives and campaigns to help embed sustainability within our culture. Many volunteers now wear a unique lanyard to identify themselves as Green Team Champions. Green tips and articles were shared with staff via newsletters and the IH Sustainability website.

Energy conservation has also been a focus for Green Team Champions, Plant personnel and the stakeholders that occupy our facilities. Through a very competitive process, Interior Health was fortunate to receive funding from Public Sector Conservation Agreement (PSECA) for 140 solar thermal panels at Penticton Regional Hospital and Summerland Health Centre. The solar panels will be used to pre-heat the incoming cold city water feeding the domestic hot water system. This reduces the amount of natural gas required by reducing the load on the boilers. These solar thermal panels are the first to be installed at any hospital within B.C.



## Plans to Continue Reducing Greenhouse Gas Emissions 2011 – 2013

Interior Health's Environmental Sustainability department has several significant initiatives that it plans to implement in the upcoming years. These sustainability initiatives include:

- Rethinking how bio-waste is disposed off by finding greener alternatives to current practices.
- Embedding sustainability into our Food Services portfolio.
- Enhancing staff engagement by getting more staff involved in the sustainability journey.

Interior Health will be opening its LEED Gold certified Patient Care Towers in Kelowna and Vernon. These are large projects that signal Interior Health's commitment to building green. Planning and design work is also underway for a new Cardiac Tower in Kelowna, scheduled to open in 2016. This facility will be designed to LEED Gold standards.

More attention and resources will be allocated to real-time monitoring and benchmarking of energy consumption and demand, allowing for the optimization of control programs and related mechanical equipment. This information will provide Interior Health with a greater level of detail about our energy consumption over time and will help identify future projects.

During the last five years, Interior Health has taken many positive initiatives that should be shared and replicated in other parts of the Province. A great example is the painting of stairwells at East Kootenay Regional Hospital in Cranbrook. As part of an effort to encourage staff and public to use the stairs and shift away from the elevator, all stairwells were painted with murals to make them more visually appealing. As a result, the hospital increased traffic in the stairwells and has seen a happier and healthier workforce.



## Interior Health - 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 <i>Greenhouse Gas Reduction Targets Act</i> .							
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	24	% of vehicles are fuel- efficient models	Plans were in place to purchase 25 new fleet including hybrids and "right-sizing" the fleet. Capital funding challenges dealyed purchases.	Will be purchasing 42 new fleet and replacing old inefficient vehicles. The purchase will include 16 hybrid vehicles.	2002	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress			Plans were in place to purchase 25 new fleet including hybrids and "right-sizing" the fleet.Capital funding challenges dealyed purchases.	Will be replacing five (5) larger vehicles with smaller ones. Will continue to update fleet and ensure appropriate models are being utilized.	2002	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress			All fleet vehicles were regularly maintained, which included inspections of various components of the vehicle.	Continue to maintain fleet to ensure fuel efficiency is optimal and ensure fleet has a long life.	2002	No End Date (Continuous)
<b>Behavior change program</b>							
Provide fleet driver training to reduce fuel use	In Development				Select target groups based on historical fuel consumption efficiency and provide information/training to enhance fuel mileage.	2011	No End Date (Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	In Development			Have received promotional material (stickers, signs, etc)	Work with green team champions and fleet stewards to get messaging out to staff and to put sticks in side of fleet.	2011	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress			Encouraged staff who travel to internal education events to share vehicles by carpooling. Majority of staff carpool when attending meetings in different communities due to large geographic region.	Continue internal messaging and reminders to departments to carpool. This will include using our website and other tools to get the message out.	2008	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Rolled out campaigns and competitions to encourage alternative transportation. IH has enrolled in the "Pro Pass" program offered by the City of Kelowna and BC Transit. Additional messaging and support is provided towards national events such as "Bike To Work Week" and the "Commuter Challenge".	Continue historical efforts and expand into other IH communities.	2009	No End Date (Continuous)
<b>Other Mobile Fuel Combustion Actions</b>							
Use Bio-Fuel in logistics trucks	Ongoing/In Progress			IH now uses bio-fuel in 4 of its 9 large logistic trucks. Biodiesel is a bio-degradable, clean burning, non-toxic fuel that works in any diesel engine without modifications. It is made from sustainable locally grown crops, reducing the need to buy imported oil. A great example of IH putting the community first by switching to clean air fuel.	Continue to use and monitor performance of bio-fuel. Expand in other trucks when opportunity arises.	2008	No End Date (Continuous)
Sysco Collaboration	In Development			Held meetings with Sysco to identify opportunities of mutual benefit. Areas of interest that need to be further investigated include: reducing food delivery to sites from 5 days per week to 4, where possible, share logistic fleet to ship goods, IH provided its routing schedules of its logistics truck to Sysco who then feed that information into their modeling software to identify opportunities.	Continue strengthening partnership with Sysco.	2010	No End Date (Continuous)
Fleet Reduction	In Development			Conducted a review of IH's fleet utilization and removed 17 vehicles. Moreover, fleet with low usage were redistributed. With the advancement of technologies (video conferencing) the goal is shift behavior and practices and reduce fleet where possible.	Annual evaluation and monitoring of fleet utilization.	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
Purchase more ec-H2O Auto-Scrubber for cleaning floors	Ongoing/In Progress			IH currently has 7 ec-H2O auto-scrubbers and will be purchasing 7 more in 2011. The auto-scrubbers do not use any chemicals, instead they only use water. The water goes through a oxygenation chamber which then applies a electric charge that changes the water by creating alkaline and acidic streams which is converted to water that attacks dirt. The end process is dirty water.	Purchase seven units for Kelowna and Vernon hospitals.	2010	2011
<b>Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)</b>							
<b>Planning/management</b>							
Enroll in a building energy benchmarking program (e.g., GREEN UP)	Ongoing/In Progress			Eleven (11) of IH's thirteen (13) largest sites in BC Hydro territory have been identified as candidates for enrolment in the BC Hydro Continuous Optimization 'Campus Portfolio'. This will provide real-time monitoring and benchmarking of energy consumption and demand.	Plans include four of the eleven sites will be metered in 2011. These sites will have energy audits on the feasibility of optimizing DDC algorithms, sequences and scheduling over a 3 year period.	2010	No End Date (Continuous)
Reduce office space (square meters) per employee	Ongoing/In Progress			Reduce office space requirements per employee (i.e. sq ft) through consolidation of office locations	Development of strategies to take advantage of opportunities is ongoing.	2009	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development			Formally signed agreement with BC Hydro. Completed evaluation of proposed Energy Management Information System (EMIS) vendors	Real-time metering will be implemented in 11 facilities to allow for benchmarking and energy auditing to optimized Building Automation System controls.	2010	No End Date (Continuous)
<b>Owned buildings</b>							
Establish energy performance baseline for owned buildings	Ongoing/In Progress	100	% of owned buildings have an established energy performance baseline	Historical billing information was collected and manually inputted into MS Excel. These baselines and "BEPis" were added to the Strategic Energy Management Plan" and shared with internal stakeholders.	Continue using building information and develop baselines, targets and benchmarks for performance. Site with similar characteristics within the same geographic location/climate will then be compared against each other.	2008	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress	1	% of owned buildings are certified LEED NC Gold or LEED NC Platinum	LEED Gold is the target for these buildings.	Construction is underway for LEED Gold certification. The Vernon site will be opening in the fall of 2011 and the Kelowna site will be opening in spring 2012.	2008	No End Date (Continuous)
Incorporate integrated design process into new construction or during renovations of owned buildings	Ongoing/In Progress	100	% of buildings built or renovated since start year indicated used the integrated design process	All new construction and major renovations follow this process. IH has been approved to build a \$430 million expansion to Kelowna General Hospital for a cardiac tower. Planning work is taking place, which include certification for LEED Gold. Energy Manager was consulted and provided recommendation for sustainability and energy efficiency.	This is IH's standard procedure for P3 projects.	2008	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress			All plant maintenance personnel are aware of the legislative requirements regarding refrigerant capture/containment and the importance of early leak detection. All units over 5 tons are to undergo annual testing.	This requirement will continue.	2008	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	3	% of owned buildings have undergone energy retrofits since start year indicated	Five (5) buildings have had energy retrofits in 2010.  These projects include lighting retrofits at the Golden District Hospital (GDH), Elk Valley Hospital (EVH).  Lighting retrofits along with VFD drives, premium efficiency motors, and building envelope sealing were completed at Queen Victoria Hospital (QVH).  Solar Thermal hot water heating was added to Penticton Regional Hospital (PRH) and Summerland Health Center (SHC).	Three (3) buildings will complete extensive energy retrofits in 2011. These projects include Queen Victoria Hospital (QVH) in Revelstoke, South Okanagan General Hospital (SOGH) in Oliver and Royal Inland Hospital (RIH) in Kamloops.	2010	2011
<b>Retrofitting owned buildings</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
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	20	% of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	Mechanical upgrades have been undertaken at Queen Victoria Hospital (QVH) which included installation of VFDs on Air Handling Units and piping systems, along with building automation systems optimization.	Planned mechanical upgrades include VFD installation, boiler upgrades, hybrid gas/electric heating systems and heat recovery at: - Royal Inland Hospital (RIH) - South Okanagan General Hospital (SOGH) - Queen Victoria Hospital (QVH)	2010	2011
Upgrade lighting systems during retrofits	Ongoing/In Progress	100	% of retrofits since start year indicated had lighting systems upgrades	Lighting upgrades have been undertaken in all retrofit (i.e. Golden District Hospital (GDH), Elk Valley Hospital (EVH), Queen Victoria Hospital (QVH), Royal Inland Hospital (RIH), and South Okanagan General Hospital (SOGH). These measures include retrofitting existing T-12 fluorescent luminaries with T-8s, replacing incandescent lamps with CFLs and replacement of old yellow HPS lamps with ceramic Metal Halides.	Lighting upgrades are being completed at: - Royal Inland Hospital (RIH) - South Okanagan General Hospital (SOGH).  These measures include retrofitting T-12s with T-8s, replacing incandescent lamps with CFLs and replacement of old yellow HPS lamps with ceramic Metal Halides.	2010	2011
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	20	% of retrofits since start year indicated had control system upgrades or adjustments	Optimization and upgrades have been undertaken at Queen Victoria Hospital (QVH). These measures include optimization of algorithms, scheduling and temperature resets.	Optimization and upgrades will be completed at: - Royal Inland Hospital (RIH) - South Okanagan General Hospital (SOGH).  These measures include optimization of algorithms, scheduling and temperature resets. Additionally, the South Okanagan General Hospital (SOGH) site removing its old pneumatic control system and getting its first Building Automation System.	2010	2011
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	40	% of retrofits since start year indicated had insulation improvements	Thermal window replacement has been undertaken in the intensive care unit at Royal Inland Hospital (RIH).  Building envelope sealing has been completed at Queen Victoria Hospital (QVH).	Building envelope sealing is been completed at Royal Inland Hospital (RIH). These measures include sealing cracks and penetrations and replacing weather-stripping.	2009	2010
Install an on-site renewable energy demonstration project	Ongoing/In Progress	40	% of retrofits since start year indicated had on-site renewable energy components	Solar thermal heating of Domestic Hot Water (DHW) at the following two (2) sites: - Penticton Regional Hospital (PRH) - Summerland Health Center (SHC).	Revisit the five completed solar thermal and biomass studies to develop implementation strategy. As energy prices increase and system prices decrease, renewable energy technology will be continuously revisited.	2009	No End Date (Continuous)
<b>Leased buildings</b>							
Establish energy performance baseline for leased buildings	Ongoing/In Progress	60	% of leased buildings have an established energy performance baseline	Historical billing information was collected and manually inputted into MS Excel.  Utility Management Software (FAME Asset Management) was purchased to assist in tracking energy consumption. This will allow IH to more accurate manage lease utilities and develop baselines.	By using the FAME software, in addition to developing baselines, the utility consumption will be able to be analyzed. Weather data will be incorporated into the analysis which will normalize the consumption for better comparison.	2008	No End Date (Continuous)
Develop a green lease policy that requires green features to conserve energy be included in all lease negotiations	In Development				Planning to work with provincial health authorities on developing sustainability leasing requirements.	2011	No End Date (Continuous)
<b>IT power management</b>							
Install power management software which shuts down computers outside of regular business hours	In Development			Currently IH is encouraging approximately 45% of PC users to shutdown their PC manually at the end of the work day. In 2010, the responsibilities of IT desktops was shifted to the Health Shared Services BC (HSSBC), IH has shared their plans and expectation with HSSBC.	Due to the fact that this is one of the single most simple and effective solutions at decreasing energy consumption there is a high likelihood, that HSSBC will employ a DPM solution.	2009	No End Date (Continuous)
Implement server virtualization	Completed in 2010	100	% of servers have been virtualized since start year indicated	This initiative started in 2006 and was completed in 2010. As new servers are on boarded, they will be on virtual servers as applicable.		2006	2010
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	100	% of computers have auto-sleep settings applied	All of IH monitors have this setting. Staff are advised not to change settings as the settings help decrease power consumption and extend life monitors.	Will continue to purchase monitors with this setting.	2001	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
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	80	% reduction in printers, copiers, and/or fax machines since start year indicated	IH has removed private and stand-alone devices and shifted towards multi-function (copy, fax, print, scan). Not only does this reduce IH's capital requirements and frees up space but it decreases energy usage from "idling".	Continue to replace stand-alone equipment with multi-purpose when the opportunity arises. HSSBC will be evaluating the 'print and hold' strategy.	2006	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress	100	% of devices have auto-sleep settings applied	Majority of IH's printers, copiers and fax machines have the auto sleep setting applied.	Will continue to purchase devices with this setting	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	All computer are Energy Star compliant. Furthermore, IH has taken steps to shift desktops to Ultra Slim Desktops (USDTs) which employ the lowest wattage power supplies.	Will continue to purchase ENERGY STAR rated devices and replace older desktops with USDTs.	2001	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	100	% of fridges are ENERGY STAR rated	100% of all new refrigerators purchased are Energy Star rated. Existing refrigerators will be replaced at the end of their life cycle.	All new refrigerators are to be Energy Star rated.	2001	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			100% of all new appliances purchased are to Energy Star rated, if available.	Appliances will be replaced as they wear out and funding is made available.	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			With the federal phase-out of incandescent lamps, energy-efficient CFLs and halogens will be used as replacements.	Incandescent lamps will be phased-out entirely for most equipment. Certain specialty equipment will still employ incandescent lamps due to required functionality constraints or inability to source a low energy alternative. Examples of these include OR lamps, projector bulbs and other specialty equipment.	2008	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			Messaging started in 2009 and continued to 2010 to educate staff on IH's energy consumption and request that staff unplug various electrical equipment when not in use. Posters have been developed and distributed along with stickers for light switches that remind staff to turn off the lights.	Green Teams and the sustainability department will continue to get this messaging out and use innovative techniques and campaigns to influence staff behavior. For instance, incentives will be used to reward staff that turn off electric equipment after business hours.	2009	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			At some sites, small reminder notes have been posted near blinds.	Continue to identify barriers and empower staff that they can make changes, such as closing the blinds.	2008	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress			Stairwells were painted at Cranbrooks hospital (East Kootenay Regional Hospital) to encourage staff to use the stairs. Beautiful paintings of the ocean, fish and landscape cover the stairs walls. Feedback from hospital users has been very positive.	Planning to promote walking in a number of acute care settings, with posters for awareness and perhaps personal recognition by Green Team Champions to those that use the stairs.	2010	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Posters were created and posted indicating the amount IH spends on energy along with visual pictures that help reinforce the message.	Continue to post the posters in appropriate places.	2009	No End Date (Continuous)
Promote hot water conservation	In Development			Ideas on how to save Domestic Hot Water through an awareness campaign has been talked about. Some ideas are as simple as 'if the water doesn't warm up by the time you're finished using it, then only use cold water'. Effective cleaning has to be considered in the scope of infection control.	Ideas will be consolidated into feasible measures to recommend and then place posters in appropriate places.	2010	No End Date (Continuous)
<b>Other Stationary Fuel Combustion and Electricity Actions</b>							
Ultra Slim Desktop (USDT) PCs.	Ongoing/In Progress			IH has installed approximately 705 ultra slim desktops in 2010, which brings IH's total to 2,393. These ultra slim desktops use significantly less energy, require less GHG and physical footprint.	IH will continue to upgrade its desktops over the next few years as older machines reach their targeted life span.	2008	No End Date (Continuous)
Replace two dishwashing machines from Vernon and Kamloops.	In Development			Two dishwashing machines are Vernon and Kamloops are reaching the end of their life, they are approximately 18 years old.	IH has approved their replacement with 2 new energy star dishwashers which will be purchased in 2011.	2010	No End Date (Continuous)
<b>Supplies (Paper)</b>							
<b>Paper Type</b>							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress			IH purchased a portion of its total paper as 30% recycled. In addition, IH purchased FSC (Forest Stewardship Council) approved paper. FSC-certified paper contributes to conservation, responsible management, and community level benefits for people near the forests that provide paper.	Continue to purchase 30% recycled paper and FSC certified paper.	2005	No End Date (Continuous)



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Purchase 100% post-consumer recycled paper	Ongoing/In Progress			Although a small portion of our total consumption, IH does purchase 100% recycled paper. Over time, IH will increase its proportion of 100% recycled paper.	Continue to purchase some 100% recycled paper.	2007	No End Date (Continuous)
<b>Printer/document settings</b>							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress			Majority of corporate printers have been defaulted to duplex printing. In some of IH's clinical setting we are unable to duplex print because of the various software systems, report formats, and behavior change.	Continue to default printers to duplex when the opportunity arises. Replace old printers with newer models that have capability to duplex.	2006	No End Date (Continuous)
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	In Development			IH ran a pilot in 2010. A few challenges arose that require further investigation.	IH supports the "print and hold" concept and will continue to pursue this opportunity in 2011.	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	100	% of staff workstations with software installed	IH adopted SharePoint to enhance collaboration among team members and increase efficiency for retrieving documents and making decisions. IH has approximately 371 Intranet sites and 559 SharePoint teams, these efforts have significantly reduced paper consumption.	Continue to use SharePoint and other technologies as needed to carry out business.	2007	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			There is a lot of focus within IH to reduce paper. IH's new InsideNet allows for departments, teams and various programs to post material online. With enhancements for navigation completed in 2010, more and more IH staff are posting information online.	Continue to educate staff and department on using the IH InsideNet and making it easier to find information.	2010	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Ongoing/In Progress			Staff received their payroll stubs electronically for many years. In July 2008, staff were able to receive payroll information on "I-Site", however an email via "Mox" was still being sent to employees. Some staff would print these emails. Effective Nov 2010 the "Mox" emails were eliminated and staff can only view payroll information on "I-site" where it cannot be printed. This action will save a lot of paper for IH.	Continue to provide payroll information on "I-site" which restricts staff from printing paper	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			IH encouraged staff and departments to put common documents and information on its Intranet. Many staff have been trained to edit IH's Intranet. Not only have these staff helped improve IH's productivity but they have put a large dent in IH's paper consumption.	Continue promoting SharePoint and the IH InsideNet to staff.	2005	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			IH's Senior Executive Team along with other key managers and all Board Director Members were provided with small laptops in order to decrease paper and increase productivity. Staff adapted to the laptop and have taken steps to minimize paper usage.	Continue to change staff behaviors through education, and empowerment.	2008	No End Date (Continuous)
<b>Other Paper Supplies Actions</b>							
Support Services switched to a more environmentally paper towel for all of IH sites.	Ongoing/In Progress			Researched alternative paper towel, performed product testing and evaluation. Selected a more environmental friendly paper towel that includes a higher recycled content and rolled out to all sites.	Continue to monitor performance and feedback from clients.	2010	No End Date (Continuous)

## Interior Health - 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>Policy and budgeting</b>							
Create a low-carbon travel policy or travel reduction goal	Ongoing/In Progress			IH created a Green Travel Policy in 2009. IH's finance departments produces travel expense reports, which are shared with various key leaders.	Continue to educate staff on policy. Planning to update the policy in near future to evaluate what's working and for the purpose of adding more green language.	2008	No End Date (Continuous)
<b>Virtual meeting technology</b>							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	100	% of computers have web-conferencing software installed	Majority of computers have the ability to web conference. The primary software that is used and promoted within IH is MS Live Meeting.	Continue to encourage staff to use MS Live Meeting.	2008	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress			Many staff have ordered web-cameras and are using them for meetings. IH's IMIT department supports the use of web-cameras and provides authorization to staff who order web-cameras.  With more and more staff wanting more flexibility in their work and signaling a preference to work from home, there is a shift taking place with staff switching their desktops to laptops. All of the laptops have built in web-cameras.	Continue to implement and expand personal web camera's where applicable.	2008	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress			Due to IH's large geographic region, video conferencing technology has been placed in meeting rooms. Staff are continually encouraged to video conference to save money and provide a better work life balance.	Continue to add video conferencing technology in meeting rooms when feasible and appropriate.	2003	No End Date (Continuous)
<b>Behavior change program</b>							
Train staff in web-conferencing	Ongoing/In Progress			IH's IMIT education department took a leadership role in pushing this web-conferencing technology to staff.	Continue to educate and train staff to use web-conferencing.	2008	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress			Trained staff to operate video conferencing technology. IMIT provides dedicated technical support for all video conferencing.	Continue to educate and train staff to use web-conferencing.	2005	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Managers encouraged staff to utilize teleconference or video conference for meetings instead of travel.	Continue to encourage staff to use teleconferencing or video conference to decrease travel cost and enable better work life balance.	2007	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			Encouraged staff who travel for internal education to share vehicles. Majority of staff carpool when attending meetings in different communities due to large geographic region.	Continue to educate staff on the use of MS Live Meeting.	2007	No End Date (Continuous)
<b>Other Business Travel Actions</b>							
Carpooling to and from work	In Development			Researched various carpool programs within BC and national. Developed IH's standards for participation in the carpooling program. Consulted with various internal departments and stakeholders. Created a promotion strategy.	Plan to roll out the carpooling program for Kelowna General Hospital in spring of 2011. Will conduct a evaluation of the program and if successful will roll out carpooling program to other communities.	2010	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	Ongoing/In Progress			In 2010, IH had seven green teams throughout various communities. During the fall 2010, plans emerged to combine the site based green teams to a regional green team. The seven green team chairs endorsed the plan.  An eighth green team for support services was created to focus on opportunities within Laundry, Food Services and Housekeeping, this committee will continue to operate.	Efforts will be focused on combining the existing green teams, selecting chairs and bringing the team together.	2008	No End Date (Continuous)

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Provide resources and/or dedicated staff to support teams	Ongoing/In Progress		The Manager Environmental Sustainability and the Energy Manager are dedicated resources that work with the Green Teams and support the organization's sustainability efforts. When required IH does hire co-op students and did hire a student for the summer of 2010.	Continue to provide corporate resources to ensure Green Teams are successful and IH meets it provincial requirements.	2008	No End Date (Continuous)
<b>Awards/Recognition</b>						
Establish a sustainability/green awards or recognition program	Ongoing/In Progress		Staff appreciation and recognition is important. It is even more important when staff are volunteering their personal time to green the organization. In June 2010, IH's Chief Financial Officer sent a thank you letter to all the green teams and a separate letter was sent to each of the green team chairs.	Continue to recognize outstanding achievement. Although no formal programs exists internally, IH does apply for external awards.	2010	No End Date (Continuous)
<b>Staff Professional Development</b>						
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress		Energy Manager training includes the following: Completion of an Okanagan College course to be a certified 'Sustainable Building Advisor' through the CaGBC; IH courses include 'Workplace Environment' training and the 'Foundation for Management and Leadership' course; APEGBC courses include 'Tender and RFP Law'; BC Hydro courses/workshops include 'Energy Change Management', 'LGS Rate Design workshop', 'Energy Manager Forum', '2009 Power Smart Forum', 'Energy Management in Commercial and Institutional Buildings', 'Energy Manager Education Series workshop'; other courses include a 'Solar Thermal Heating' seminar, a 'SolarBC Workshop', a 'Energy Efficiency and Conservation' lunch-n-learn by Stantec, 'District Energy Systems' workshops with the City of Kelowna, Philips 'Lighting seminar and factory tour'.	Future Energy Manager training will include the following BC Hydro courses/workshops at the 'Energy Manager Forum', the '2010 Power Smart Forum', and the 'Energy Manager Education Series' workshops; other courses provided by APEGBC will be attended as a part of P.Eng. requirements.	2009	No End Date (Continuous)
Include green options in employee performance measurement system	In Development		Some of the green team chairs incorporated sustainability goals within their individual performance management.  Green sustainability objectives are included in IH's accountability framework with responsibilities assigned to various leads.	Pan to work with Human Resources to determine if it is possible and how to incorporate into IH's performance management system for excluded staff.	2010	No End Date (Continuous)
<b>Staff awareness/education</b>						
Provide education to staff about the science of climate change	In Development			Plan to invite Angela Reid who is one of 250 Canadians personally trained by Former Vice President All Gore to deliver "theclimatoproject" to IH staff.  In 2009, Angela provided IH staff an overview of the latest climate science and how climate change is impacting BC, Canada, and the entire planet. She then focused on solutions relevant to the Okanagan Valley and beyond. Green Teams invited local experts on water conservation to educate staff and to help change staff behavior.	2010	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		Emails and other correspondence are shared with staff with respect to energy conservation. During Green Team meetings, IH's Energy Manager provides updates and answers staff questions. More and more staff are becoming aware of the need to conserve energy and other scarce natural resources.	Continue to educate staff and patients.	2009	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress		The IH newsletter is a very effective channel to spread sustainability information as the newsletter reaches a broad segment of IH's employees. Many articles and tips were inserted in IH's newsletter in 2010. IH now has a dedicated page on its website for sustainability.	Planning to create a separate newsletter for sustainability. Also will continue to explore all opportunities to increase staff awareness about sustainability, through tips and suggestions.	2008	No End Date (Continuous)

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Provide sustainability education during new staff orientation	Ongoing/In Progress		In the spring of 2010, IH rolled out is new online orientation program which includes a section for environmental sustainability. Staff are provided a high level overview of the program and encouraged to go to IH's sustainability website and to be part of the green team.	Plan to update the sustainability content for the regional orientation in Jan/Feb.	2009	No End Date (Continuous)
<b>Client/public awareness/education</b>						
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		In 2010, a few opportunities arose where sustainability messaging was shared with stakeholders via, radio, newspapers and television. The media are a great channel to get messaging out.	Will continue to use media and do interviews for the purpose of educating the broader public.	2009	no End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress		IH does have a sustainability website that is accessible by the public. The website contains many great tips, and links to green websites.	Will continue to maintain and update the sustainability website.	2009	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	In Development		Over the last few years approximately 450 toilets were replaced from the traditional 12 litres per flush to 6 litres per flush. Low-flow units are being specified for all replacement fixtures, including new construction and large renovations.	IH will continue to seek all opportunities to reduce water consumption.	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		The Royal Inland Hospital cooling tower in Kamloops was replaced in 2009 with a low-energy, low-water consuming unit.	IH will continue to seek all opportunities to reduce water consumption.	2006	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	In Development		Reviewed foam cup usage at Kelowna General Hospital and Royal Inland Hospital (Kamloops). The practices in Kamloops cafeteria use 100% foam cups.  Additionally reviewed the foam cups used in patient wards at Kelowna General Hospital. Held a few meetings with various user groups to determine alternatives.	For Royal Inland Hospital - Planning to remove majority of the foam cups by providing discounts to those that use paper cups or re useable mugs.  For Kelowna General Hospital - Planning a pilot on a few wards to use reusable water jugs, delivered by volunteers to patients as a substitute to foam cups currently being used.	2010	No End Date (Continuous)
<b>Procurement (non-paper supplies)</b>						
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	In Development		IH switched to environmental friendly dish washing chemicals at four sites as a pilot to determine if product performance meets IH standards. The four sites where: Penticton Regional Hospital, Kelowna General Hospital, South Okanagan Hospital (Oliver), and Summerland Health Centre.	Work with purchasing department to ensure future contract tenders include environmental specifications.	2010	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		All new construction is being built to LEED Gold standards. This entails the minimization of landfill waste and proper handling and segregation recycled materials. The City of Vernon waste handling department has given IH glowing remarks about the proper handling of these streams in the construction of the Vernon Jubilee Hospital tower expansion.	This procedure will continue.	2008	No End Date (Continuous)
<b>Indoor air quality</b>						
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress		All new construction is being built to LEED Gold standards. This entails the minimization of VOC containing solvents, paints, flooring and furniture.	This procedure will continue.	2008	No End Date (Continuous)
<b>Commuting to and from home</b>						
Introduce telework/work from home policy	In Development		IH has rolled out a pilot for excluded staff to participate. A number of staff are working from home and will provide details of their experience at the end of the pilot.	Complete the pilot evaluation and incorporate feedback from participants to create new policy and program for teleworking. Plan to seek executive approval for rollout region wide.	2010	No End Date (Continuous)

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Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		Staff are reminded and encouraged to use alternative transportation when commuting. IH participated in both the 'Bike to Work Week' and 'Commuter Challenge' programs.	Continue to educate staff and influence behavior change to decrease green house gases and parking demand at IH sites.	2008	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress		IH has a few sites that provide locker facilities and showers. Where possible considerations are being made to provide showers. For instance, when selecting a lease site, this is one of the considerations.	Continue to find opportunities to build the infrastructure to allow staff to cycle to work.	2007	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress		Added in bike cages in in Revelstoke and Kelowna. Many of IH sites have a secure bicycle storage. It is key to getting staff out of their cars. Through expansion of sites or selection of new lease sites, bicycle storage is considered.	Add secure bicycle storage where possible.	2004	No End Date (Continuous)
Modify parking fees or parking availability for staff/students	Ongoing/In Progress		IH has developed a parking strategy that seeks to meet future demand with future supply. One of the components of the plan is to get staff out of their vehicles and cycle, walk, or use local transit where applicable.  Paid parking is being added to new sites, and parking rates are being increased at some sites. Both of these actions influence staff to use alternative transportation options. At some sites, dedicated parking stalls are being provided for those that carpool.	Continue to find innovative solutions to meet staff parking needs.	2008	No End Date (Continuous)
<b>Other Sustainability Actions</b>						
Working with regions water suppliers to develop long-term water system improvement plans that maximize system efficiency and sustainability.	In Development		Further defining the importance of urban runoff management to protect drinking water sources and integrating demand-side management as a key element for large water supply systems operations	Strengthen partnerships with suppliers and embed sustainability principals into their long-term plans.	2005	No End Date (Continuous)
Working with local governments to incorporate health outcomes into sustainability plans and regional growth strategies, including official community plans.	In Development		Review of local government's long range planning to help support inclusion of health outcomes into the planning process	Continued development of working relationships with local governments around health outcomes and the planning process	2008	No End Date (Continuous)
Transportation Demand Management (TDM) Strategies to reduce vehicle dependency, improve air quality and active transportation options	In Development		Working with local governments on TDM strategies within Kelowna. Held a few meetings with City of Kelowna and UBC Okanagan to determine options for decreasing vehicle traffic to Kelowna General Hospital.	Continue working with stakeholders on developing TDM plan for Kelowna General Hospital.  Plan to expand TDM planning for Vernon, Kamloops and Nelson.	2010	No End Date (Continuous)
Supported "Safe Routes to School" to encourage active transportation for children to walk to school.	Ongoing/In Progress		Safe Routes to School plans are complete for three elementary schools in Vernon. This initiative will decrease the number of vehicles on the road and increase physical activity levels for children.	IH's Healthy Community Environment portfolio will be supported the rollout of two more elementary schools in Vernon.	2010	2012
Initiated two workshops to increase partnership among local governments and health authorities for the purpose of linking health to the built environment.	Ongoing/In Progress		In Feb 2010, IH held a workshop with Common Ground.	Planning a conference called: Collaborative Planning & Action for Community Wellness. Will draw on the importance of health professionals and planners working collaboratively.	2010	2011
Member of healthy built alliance to develop policy and action for initiatives related to the built environment	Ongoing/In Progress		Participated in numerous teleconferences to develop strategies and resource tools for health professionals and local governments	Introducing a PHSa resource to local governments to link planning and health outcomes.	2009	No End Date (Continuous)
Green Purchasing	In Development		Initiated discussions with other health authorities of the need to incorporate green purchasing. In the fall 2010, this messaging was shared with Health Shared Services BC, who is responsible for purchasing for all six health authorities.	Hope to continue this conversation and place further pressure onto Health Shared Services BC.	2010	No End Date (Continuous)
Changed Packing Material for Dinners at Home	Ongoing/In Progress		With IH's Dinners at Home program approximately 35,000 meals were sent to clients. The lids were made from hard plastic and were switched to saran wrap material seal dinner.	Continue to monitor performance and feedback from clients.	2010	No End Date (Continuous)
Collaboration with local, provincial, and federal partner agencies to establish sustainable land-use practices that protect drinking water sources and reduce energy used for treatment	Ongoing/In Progress		Further defining the importance of urban runoff management to protect drinking water sources and integrating demand-side management as a key element for large water supply systems operations	Continue to build partnerships and collaborations with key stakeholders.	2006	No End Date (Continuous)

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Green Team Promotions	In Development		In 2010, many initiatives were rolled out by green teams, including: <ul style="list-style-type: none"> <li>- Use stairs as opposed to elevator,</li> <li>- promotion of local transit,</li> <li>- bike to work week,</li> <li>- Reduction of foam cups in cafeteria</li> <li>- Earth Hour (turn off the lights)</li> <li>- Reducing signature lines length on emails</li> <li>- Earth Day events (green potluck, etc)</li> <li>- Green Consultants "how to make your green teams work"</li> <li>- Energy Audits at select sites</li> <li>- Battery Recycling</li> <li>- Ditch your Drive campaign</li> <li>- Video Screening of sustainability videos</li> </ul>	Continue to engage staff and rollout more initiatives across IH.	2008	No End Date (Continuous)