

Executive Summary

The Vancouver Island Health Authority is committed to not only reducing its carbon footprint but has a vision of a healthy healthcare system - a system in which an environmentally engaged healthcare community is dedicated to the health of patients, employees, their communities and the global environment. We envision a system where patients and staff interact in a healthy environment that embraces safer building products, clean air, reduced toxins, safe working practice, energy and water efficiency, education, and a commitment to public health.

The Executive and the Board of Directors of VIHA are fully supportive of energy conservation and sustainability. The Board has received presentations on Environmental Sustainability in both 2007 and 2008.

Healthcare is under tremendous pressure - seemingly an infinite demand for services, increased technology improvements with associated increased costs and ultimately a fixed budget. However, environmental responsibility makes good sense. Energy efficiency, recycled product use, procurement of environmentally friendly products, capture of containments at the source, all contribute to long term savings, decreased garbage and contaminants, and reduces gas emissions. It is an investment in our employees and communities long term health and well being.

VIHA has focused on partnerships with BC Hydro and PESCA to decrease our energy consumption. The primary areas for improvement in 2008/09 were lighting replacement and environmental controls. The current construction of the Patient Care Centre on the Royal Jubilee Hospital campus is being built to LEED gold standards and will allow the deconstruction of three existing wings of the current hospital. The recently announced approval of the Nanaimo Regional General Hospital Emergency Department will also be built to LEED gold standards.

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.

An employee awareness campaign on environmental sustainability was launched in 2008/09 and carries on into the foreseeable future. An excellent website has been developed, local green teams established and energy awareness engagement of staff has occurred. The Chemainus Green Team has reduced the energy consumption in their building by 23%.

VIHA has taken the lead on behalf of the HAs to work with the Climate Action Secretariat to develop the SmartTool for health use. The SmartTool is a web based software program provided by government to all public sector organizations to measure, aggregate, and report ghg emissions. Internal data collection processes/systems are in place to identify all sources of carbon emission as defined within Bill 44.

Part 1: Actions Taken to Reduce Greenhouse Gas Emissions in 2008

VIHA has two energy managers focusing on energy consumption reductions. They have also assumed a lead role in coordinating environmental sustainable activities. VIHA's philosophy is that for a program to be successful it must be embraced by the individual employees and has placed a major focus on staff awareness of environmental sustainability.

VIHA has programs in place for energy conservation through light retrofits, DTC controller upgrades, recycling/waste management streaming, alternative transportation methods, decreased paper consumption and heat recovery systems.

Business processes have been and will continue to be modified that will not only decrease our carbon footprint but make VIHA a more efficient organization. Examples include increased use of administrative video conferencing, decreased reliance of paper reporting achieved by the completion of an electronic health record (including ordering and results reporting) and the initiation of telemedicine. Linen utilization studies have demonstrated opportunity to decrease laundry volumes.

All major renovations include review to minimize energy consumption. This ranges from complete lighting and mechanical/ventilation upgrades to replacement of single pane glass windows in older facilities.

All major capital projects have been designed with energy efficiency as a high priority (e.g.. VGH ED project) and many will be to LEED gold standard (e.g.. RJH PCC project).

In addition to these activities the implementation and tracking of carbon emissions through the use of SmartTool will occur in 2009/10. Tenders for service providers such as food will contain sections on environmentally friendly products and reuse. The elimination of non-networked printers and conversion to double sided printers will also be completed.

VIHA will continue to work with its private sector partners, other HAs and the government to reduce our carbon footprint.

Areas of continued focus in 2009 include:

1. Installation of desktop management software to decrease energy consumption of idle desktop computers. This will be done in partnership with BC Hydro.
2. Completion of PESCA grant projections.
3. Development of local green teams activities to gain sustainable grass roots support.
4. Participation in the provincial HA Environmental Sustainability Technical Team committee and with the MoHS.
5. The establishment of a VIHA wide Environmental Sustainability Leadership Team.

1.1 Mobile Fuel Combustion

| Action | Action Taken | Outcome/Performance Measure | Notes Clarifying Action Taken |
|--|--------------|--|---|
| Replaced # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid | Complete | Reduce ghg emissions | Leased a Toyota Prius Hybrid. 4.78l/km compared to 5.77l/km on average Health Authority vehicles. Will track using SmartTool. |
| Provided driver training to reduce fuel use | | Reduce ghg emissions/ measured using SmartTool | |

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| Implementation of the TeleOncology & TeleThoracic Patient Consults | Complete | Reduce ghg emissions/ measured using SmartTool | Implementation of the TeleOncology & TeleThoracic Patients Consults. Timeframe: 2008/2009 - on-going Success Indicator/outcome: Recording of usage through the video conferencing department and tracking of fuel consumption using the SmartTool. Proven #1000 Kg of green house gas emissions saved = 99.4 |
| Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups) | In progress | Reduce ghg emissions/ measured using SmartTool | |
| Established anti-idling behaviour change program (e.g. signs, stickers, messages) | In progress | Reduce ghg emissions/ measured using SmartTool | |
| Encouraged car pooling in fleet vehicles | In progress | Reduce ghg emissions/ measured using SmartTool | |
| Encouraged use of public transit/active transportation | In progress | Reduce ghg emissions/ measured using SmartTool | VIHA Travels Smart - Many times it's not just the choice of one method of travel to and from work, but the decision to choose a variety of travel methods. It is these choices that can help all of us reduce traffic congestion and better manage the availability of parking at VIHA hospitals. It is VIHA's goal to help create a "paradigm shift"; a new way of thinking and an awareness of the variety of travel methods available to use. The goal of VIHA Travels Smart is to significantly increase the awareness and use of other travel options such as walking, bicycling, using transit, ride sharing and carpools. The TDM Coordinator has established an ongoing monitoring program of the travel methods (the method of transportation used by staff traveling to the site) and will conduct a travel survey every 2 to 5 years. Further surveys will be prepared and conducted to determine the level of participants in the TDM initiative. |
| Encouraged alternatives to travel in fleet vehicles – bicycles, scooters, electric carts | In progress | measured using survey and SmartTool | |
| Changed from gas to electric lawn maintenance equipment | In progress | Reduce ghg emissions/ measured using SmartTool | |
| Changed to manual lawn and yard maintenance equipment | In progress | Reduce ghg emissions/ measured using SmartTool | |

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| Established travel reduction goals | In progress | Reduce ghg emissions/ measured using SmartTool | |
| Adopted a travel policy | In progress | Reduce ghg emissions/ measured using SmartTool | |
| 1.2 Stationary fuel combustion and electricity | | | |
| Action | Action Taken | Outcome/Performance Measure | Notes Clarifying Action Taken |
| Undertaken Monitor turn-off challenge | | electrical savings/measured using SmartTool | |
| Replaced # computers with EnergyStar models | In progress | electrical savings/measured using SmartTool | |
| Asked staff to close blinds daily | In progress | electrical savings/measured using SmartTool | |
| Encouraged staff to use stairs | In progress | electrical savings/measured using SmartTool | |
| Turned off lights in unused rooms | In progress | electrical savings/measured using SmartTool | |
| Replaced Refrigerators (EnergyStar rated appliance) | In progress | electrical savings/measured using SmartTool | |
| Replaced other appliances (with EnergyStar rated appliance) | on-going | electrical savings/measured using SmartTool | |
| Installed multi-function devices (and removed stand-alone printers/faxes) | In progress | electrical and paper savings/measured using SmartTool | |
| Replaced standard bulbs with CFLs | In progress | electrical savings/measured using SmartTool | |
| Installed motion activated lights | In progress | electrical savings/measured using SmartTool | |
| Undertaken lighting retrofit | In progress | Reduce electrical consumption / measured using SmartTool | Lighting upgrade project replacing all T12 lighting to T8 25W technology for four VIHA Central/North facilities. This leaves 2 minor sites to be converted for all of VIHA Central/North Estimated savings: 1.2 G/yr Total savings from all facility upgrades: 2.3Gw/yr |
| Implemented server virtualization | complete | electrical savings/measured by BC Hydro | electrical savings-400,000 KW/hrs |
| Utilized desk-top power management settings on computer | complete | electrical savings/measured using SmartTool | settings are implemented in South Region |
| Initiated corporate computer shut-down/wake-up for maintenance | Planned | electrical reduction/measured and verified by BC Hydro and consultant | potential savings are 6 GW/Hr-10GW/Hr. Will depend on number of computers that will be implemented with the software |
| Unplugged unused equipment | In progress | electrical/gas savings/ measured using SmartTool | This is implemented using the VIHA Green website |

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| Undertaken building energy audit at LOCATION(s) | In progress | electrical/gas savings/ measured using SmartTool | 95% of owned facilities in Central/North have been energy audited and 60% in the South region |
| Initiated or completed a building energy retrofit | In progress | electrical/fuel saving/measured and verified by BC Hydro and utility tracking | This has been implemented at various facilities. Overall savings in electricity - Central/North 2.97 GW/Hr of electricity and 3077 GJ of fuel. South - 1.5GW/hr of electricity. There are projects in progress. |
| Hired an additional Energy Manager for South Island | Complete | Reduce electrical consumption; Utility tracking using the SmartTool | Same roles and responsibilities of Central/North Energy Manager |
| Performing an Energy Manager Assessment with BC Hydro and identifying key goals for each Energy Manager for a one year term | In progress | Quarterly reporting to BC Hydro with performance indicators; Energy surveys, measurement and verification at test locations, and utility tracking. | |
| Participating in the BC Hydro Awareness Program Pilot for the Central/ North region | In progress | Energy surveys, measurement and verification at test locations and utility tracking. | This program funds the implementation of an Energy Awareness Campaign. Phase 1 of the campaign will be for Central/ North Island. Phase 2 will be for South Island. Some of the contests will include all of VIHA. The website will highlight activities across the island. Key Elements: <ul style="list-style-type: none"> • Intranet Web Site • Volunteer Energy Champions • Education • Contests • Advertising |
| Creating and implementing tracking systems for all utilities at all owned sites. | In progress | Track ghg emissions | This system allows Facilities Maintenance and Operations and the Energy Managers to track usage and ghg usage and looks for out of tolerance conditions within the facilities. Track electrical usage and ghg usage and looks for out of tolerance conditions within the facilities. This system will now be used for inputting data into the SmartTool. Utilized the information to pilot the SmartTool for the Health Authority. |

1.3 Supplies

| Action | Action Taken | Outcome/Performance Measure | Notes Clarifying Action Taken |
|--|--------------|---|--|
| Committed to use 30% recycled paper | In progress | Reduce paper consumption/measured using SmartTool | |
| Committed to use 100% recycled paper | In progress | Reduce paper consumption/measured using SmartTool | |
| Initiated automatic double sided printing | In progress | Reduce paper consumption/measured using SmartTool | |
| Changed document template margins | In progress | Reduce paper consumption/measured using SmartTool | |
| Committed to hold paperless meetings | In progress | Reduce paper consumption/measured using SmartTool | |
| Developed document library (online and one printed copy) for large documents | In progress | Reduce paper consumption/measured using SmartTool | |
| Used collaborative software to edit on-line | In progress | Reduce paper consumption/measured using SmartTool | |
| Re-used non-confidential scrap paper | In progress | Reduce paper consumption/measured using SmartTool | |
| Cerner Project | Complete | Reduce paper consumption/measured using SmartTool | Cerner Project Central/North Island. This programs enables patients charts to be view on-line rather than printing clinical charts |
| Used laptops/tablets | In progress | Reduce paper consumption/measured using SmartTool | |
| Restructured a process to use less paper | In progress | Increase printing efficiencies; | <p>Hewlett Packard (HP) has been selected as our preferred provider, and a regional contract for printing devices and related services is now being developed. VIHA and HP are committed to reducing inefficiencies and waste, supporting our carbon footprint and 'green' commitments, and increasing service levels for print devices.</p> <ul style="list-style-type: none"> • Elimination of non-networked print devices and a significant reduction in networked print devices. • Printers in individual offices will be eliminated unless specific criteria are met. • Set default print parameters to duplex (two-sided) printing. • Set default print parameters to black and white printing. • Use of post consumer recycled paper |

| Actions on non-paper related supplies: | | | |
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| Purchased cradle to cradle goods | In progress | Reduce paper consumption/measured using SmartTool | |
| Chose "Green" items from Distribution Centre | In progress | Reduce paper consumption/measured using SmartTool | |
| Encouraged re-use of furniture and equipment | In progress | | |
| Printing Device Strategy | In progress | Reduce paper and electrical consumption/measured using SmartTool | |
| VIHA requires detailed specification development for both tender and final contract documents when services are contracted out | In progress | Defined conditions of service | |

1.4 Travel

| Action | Action Taken | Outcome/Performance Measure | Notes Clarifying Action Taken |
|--|---------------------|--|--|
| Set a X% Travel reduction goal | In progress | Reduce travel/measured using SmartTool | |
| Trained staff in the use of Live Meeting (or other desktop collaborative software) | Complete | Reduce travel/measured using SmartTool | |
| Installed Video Conferencing facilities | Complete | Reduce travel between sites | Installation of 8 additional video conferencing rooms. Recording of usage through the video conferencing department and tracking of fuel consumption using the SmartTool |
| Initiated Travel Policy | In progress | Reduce ghg emissions | |
| Mandated car pooling to government meetings | In progress | Reduce ghg emissions/ measured using SmartTool | |
| Supported alternative travel (bike/skateboard/walk/transit) for meetings | In progress | Reduce ghg emissions/ measured using SmartTool | |

1.5 Employee Engagement

| Action | Action Taken | Outcome/Performance Measure | Notes Clarifying Action Taken |
|--|---------------------|------------------------------------|---|
| Provided climate change education | In Progress | Reduce ghg emissions | All education is done using the VIHA Green intranet site . |
| Provided conservation education | In Progress | Reduce ghg emissions | All education is done using the VIHA Green intranet site , lunch and learn sessions and |
| Held contests to change behaviour/make pledges | In Progress | Reduce ghg emissions | |
| Held contests/support to generate ideas | In Progress | Reduce ghg emissions | Received over 1000 Green Ideas submissions using on-line forms |
| Developed Green Teams | In Progress | Reduce ghg emissions | Call for volunteers VIHA Green intranet , over 100 submissions |
| Supported Green Teams (resources) | In Progress | Reduce ghg emissions | |
| Provided green tips | In Progress | Reduce ghg emissions | Green tips page on VIHA Green intranet |
| Supported professional development | In Progress | Reduce ghg emissions | |

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| Added green work goal to performance management | In Progress | Measured using performance spreadsheet | |
| Staff Training | In Progress | Waste is stored, disposed correctly | Housekeeping staff and other staff members receive waste separation training. This training is consistent for handling bio-hazardous material and sharps. |
| Implementation of pilot site "Green Volunteer Team". | In Progress | Challenges other sites to participate | One site was chosen, and this green team was then asked to form the outline of what they would like to see as the role for the team. The team was successful in identifying areas for savings, and implemented the findings which resulted in over 23% in electrical reductions. |

1.6 Sustainability Actions (others)

| Action | Action Taken | Outcome/Performance Measure | Notes Clarifying Action Taken |
|---|--------------|---|---|
| Took water conservation measures – low flow showers or toilets, fix leaks | In progress | measured using water tracking system | |
| Ran dishwasher only when full | In progress | measured using water tracking system | |
| Reduced/replaced bottled water with filtered or refrigerated water | In progress | measured using water tracking system | |
| Improved recycling measures | In progress | measured tracking quantity of waste | |
| Supported composting | In progress | measured tracking quantity of waste | |
| Used re-usable dishes | In progress | measured tracking quantity of waste | |
| Purchased green cleaning products | In progress | | |
| Used green (low-e paints) | In progress | measured tracking quantity of waste | |
| Supported sustainable procurement practices | In progress | ghg reductions | |
| Adopted low-carbon contracting practices | In progress | ghg reductions | |
| Installation of heat recovery systems at three facilities | Complete | Estimated electrical savings: 300 Kw/yr Estimated gas savings: 1095 Gj Measurement and verification and utility tracking using the SmartTool. | Installed on units that run 100% outside air. |
| Linen Usage Monitoring | In progress | Monitoring linen usage, in terms of total poundage per day or site, or pounds used per patient or resident day, also provides information on trends on consumption. Monitoring creates opportunities for improvement. | Outcomes from reports are shared with other programs and published in newsletter and posted to web sites to keep staff informed. |
| Provincial Environmental Tech Team | In progress | ghg reductions | VIHA participates in the Provincial Technical Team for Energy and Environmental conservation. This team works on carbon foot print implementation and ghg reduction strategies. |

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| Provincial Technical Team for Housekeeping | In progress | Constantly reviews procedures and implements best practices. Standard practices across the province. Higher standards maintained. | VIHA participates in the Provincial Technical Team for Housekeeping. Housekeeping participates in Provincial audits, standards and surveillance for Environmental standards. |
| Infrastructure Evaluation and Prioritization | In progress | Corrective action when appropriate | Given the large number of sites within VIHA, the age of the infrastructure and funding available to meet the increasing demand, the Environmental Support Services Team strives to meet all of the organization's environmental needs. Serious risks, hazards and problems are given highest priority and are met or reduced to manageable proportions. |
| Environmental Support Services contract Specifications | In progress | Reduced chemical use | It is anticipated that any new or renewed Environmental Support Services contract will specify environmentally friendly chemicals and systems. i.e. microfiber. |

Part 2: Plans to Continue Reducing Greenhouse Gas Emissions 2009 -- 2011

2.1 Mobile Fuel Combustion

| Action | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken | Timeframe |
|--|----------------|---|--|---|
| Replace # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid | Planned | Standard practices across the province. | Utilizing the BC Government's Vehicle Acquisition Contract on all future purchases or leases of fleet vehicles | Currently there are no new capital equipment replacements in place for 2009/2010. |
| Provide driver training to reduce fuel use | Planned | ghg reductions/measured using SmartTool | | |
| Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups) | In progress | ghg reductions/measured using SmartTool | | |
| Establish anti-idling behaviour change program (e.g. signs, stickers, messages) | Planned | ghg reductions/measured using SmartTool | | |

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| Encourage car pooling in fleet vehicles | In progress | ghg reductions/measured using SmartTool |
| Encourage use of public transit/active transportation | In progress | ghg reductions/measured using SmartTool |
| Encourage alternatives to travel in fleet vehicles – bicycles, scooters, electric carts | In progress | ghg reductions/measured using SmartTool |
| Change from gas to electric lawn maintenance equipment | In progress | ghg reductions/measured using SmartTool |
| Change to manual lawn and yard maintenance equipment | In progress | ghg reductions/measured using SmartTool |
| Establish travel reduction goals | In progress | ghg reductions/measured using SmartTool |

2.2 Stationary Fuel Combustion (including electricity)

| Action | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken | Timeframe |
|--|----------------|---|---|-----------|
| Undertake workstation tune-ups to help staff understand what they can do to reduce personal energy use | In progress | electrical reductions/measured using SmartTool | | |
| Supply power bars – to turn off power to non-essential items when not in use (e.g. phone chargers) | In progress | electrical reductions/measured using SmartTool | | |
| Undertaken Monitor turn-off challenge | Planned | electrical reductions/measured using SmartTool | | |
| Replace # computers with EnergyStar models | In progress | electrical reductions/measured using SmartTool | | |
| Ask staff to close blinds daily | In progress | electrical reductions/measured using SmartTool | | |
| Encourage staff to use stairs | In progress | electrical reduction/measured using SmartTool | | |
| Turn off lights in unused rooms | In progress | electrical , fuel reductions/measured using SmartTool | | |
| Replace Refrigerators (EnergyStar rated appliance) | In progress | electrical reductions/measured using SmartTool | | |
| Replace other appliances (with EnergyStar rated appliance) | In progress | electrical , fuel reductions/measured using SmartTool | | |
| Install multi-function devices (and remove stand-alone printers/faxes) | In progress | electrical reductions/measured using SmartTool | | |
| Replace standard bulbs with CFLs | In progress | electrical reductions/measured using SmartTool | This is done with lighting retrofits or as part of maintenance replacements | |
| Install motion activated lights | In progress | electrical reductions/measured using SmartTool | | |
| Undertake lighting retrofit | In progress | electrical reductions/measured using SmartTool | Planned lighting retrofits will have an electrical savings of 1.2 GW/hrs. | |

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| Implement server virtualization | Complete | <p>Measurement and verification and utility tracking using the SmartTool; reduce electricity consumption.</p> <p>Objective: The purpose of this report is to detail and verify the cost benefits and energy savings of VIHA's server virtualization project. VIHA has currently or soon will be virtualizing at least 119 servers and is submitting the results of this virtualization to BC Hydro as part of their Power Smart Incentive Program for Server Virtualization. These figures will show that VIHA meets the BC Hydro guidelines for eligibility as it pertains to the Server Virtualization Program which includes at least 100,000 kWh/yr of power savings. Expected Savings: 400,000 kWh</p> | <p>Undertaking a major Server Virtualization project as part of ongoing efforts to allow for future server growth, increase efficiency and resiliency and to reduce their overall energy and cooling footprint. As a world leader in energy conservation through innovation and technology, BC Hydro recognizes the energy and cost savings by incenting customers to undertake a project such as this. Working in close contact with BC Hydro, LNC Consulting Inc. will show how VIHA meets the eligibility requirements for the Power Smart Server Virtualization Incentive Program.</p> | 2009 |
| Utilize desk-top power management settings on computer | Planned | electrical reduction/measured and verified by BC Hydro and consultant | <p>Studying and implementing of desk top power management software for all VIHA computers. This software enables computers to shut down when not in use and start up when updates have to download. Expected Savings: 4-6 G/hr/yr</p> | 2009/2010 |
| Unplug unused equipment | In progress | | | |
| Undertake building energy audit at LOCATION(s) | Planned | <p>Expected Savings: to be determined; Ongoing monitoring and modification of processes.</p> | <p>Performing a detailed energy study for Nanaimo Regional Hospital's mechanical and heating systems. Looking at the BC Hydro Building Optimization Program on the future expansions to Nanaimo Regional Hospital. Using this study to apply for PSECA funding.</p> | 2009/2010 |
| Initiate or complete a building energy retrofit | In progress | electricity/fuel reduction/ measured using SmartTool | future project will be dependant on funding sources | |

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| Construction of a new P3 Patient Care Center at Royal Jubilee Hospital | In progress | Measurement and verification and utility tracking using the SmartTool. | Cost: \$348.6 million, Area: 37,000 square meters, Height: 8 Stories = 32m (4m per floor), Mechanical Penthouse: 10m Total height: 42m, Number of beds: 500, Percent of single rooms: 83%, A 'Gold' Certification level guarantees that the new building meets or exceeds the requirements for: Water and energy efficiency; Materials and resource suitability; Site sustainability, and; Atmospheric standards and innovation. | Completion deadline: December 31, 2010. • Expected date of occupancy: February 15, 2011 (actual date is subject to the construction company - on 6 months notice) |
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2.3 Supplies

| Action | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken | Timeframe |
|--|----------------|---|--|-----------|
| Committed to use 30% recycled paper | In progress | Reduce paper consumption/measured using SmartTool | | |
| Committed to use 100% recycled paper | In progress | Reduce paper consumption/measured using SmartTool | | |
| Initiated automatic double sided printing | In progress | Reduce paper consumption/measured using SmartTool | Tracking of paper consumption with SmartTool | |
| Changed document template margins | In progress | Reduce paper consumption/measured using SmartTool | | |
| Committed to hold paperless meetings | In progress | Reduce paper consumption/measured using SmartTool | | |
| Developed document library (online and one printed copy) for large documents | In progress | Reduce paper consumption/measured using SmartTool | | |
| Used collaborative software to edit on-line | In progress | Reduce paper consumption/measured using SmartTool | | |
| Re-used non-confidential scrap paper | In progress | Reduce paper consumption/measured using SmartTool | | |
| Used laptops/tablets | In progress | Reduce paper consumption/measured using SmartTool | | |
| Restructure a process to use less paper | In progress | Reduce paper consumption/measured using SmartTool | | |
| Actions on non-paper related supplies: | | | | |
| Encourage re-use of furniture and equipment | In progress | | | |

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| Staff Training in Professional Practice and SharePoint | Planned | Tracking of paper consumption with the SmartTool | VIHA is in the process of clarifying the use of the professional practice and SharePoint shared drives, and building staff competencies in using both. This work should increase confidence in archiving and business environment capacity, therefore drastically reducing the need for paper. VIHA will be able to measure the impact through reduced paper and printer expenditures. | 2009 |
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2.4 Travel

| Action | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken | Timeframe |
|--|----------------|------------------------------|-------------------------------|-----------|
| Install Video Conferencing facilities | | Refer to 1.4 Travel | | Completed |
| Initiate Travel Policy | | Travel restrictions in place | | Completed |
| Support alternative travel (bike/skateboard/walk/transit) for meetings | | Refer to 1.4 Travel (TDM) | | Completed |

2.5 Employee Engagement

| Action | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken | Timeframe |
|----------------------------------|----------------|--|--|-----------|
| Provide climate change education | Planned | Increase awareness of environmental impact of behaviour. | The following are sessions that are being scheduled to educate VIHA Central/North Staff: <ul style="list-style-type: none"> • Energy Booths co-facilitated with BC Hydro • “Lunch ‘n Learn” programs with site volunteers • Tips on website and Scrap Book Coffee Mugs • Workshops with various departments on energy conservation | 2009 |

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| Provide conservation education | Planned | Increase awareness of environmental impact of behaviour. | <ul style="list-style-type: none"> • There is on-going advertising throughout the year. Posters are being printed when a major contest begins. In order to reduce paper usage, news bulletins will be e-mailed or posted on the Intranet Web Site. • Bulletin boards at each site show on-going activities and calendars for events and utility savings. • Scrap Book Coffee Mugs will have on-going energy tips. • Memorabilia will be passed out at various Green functions i.e. flashlights, key chains, memory sticks, etc. |
| Hold contests to change behaviour/make pledge | Planned | Increase awareness of environmental impact of behaviour. | <p>The following are various contests that are being held throughout the year:</p> <ul style="list-style-type: none"> • Energy Mascot (Island Wide) - children of staff will be asked to submit ideas for an Energy Mascot for VIHA. Example: light bulb with a nurse's cap. • Green Ideas Draws (Island Wide) – the names of staff that submit green ideas were entered in a monthly draw for a prize. After 6 months there was a grand prize draw. • Department Ideas (Central/North) - Departments at chosen sites that submit energy saving ideas will be scored on the number of realistic ideas submitted and then will be scored on ideas implemented. A prize will be awarded to one department per pilot site and will be recognized on the Intranet Web Site. The Central/North department with the highest score at the end of the year will win a staff barbecue. |
| Implementation of Green Awareness program | Planned | Increase awareness of environmental impact of behaviour. | Update VIHA Intranet Web Site, including online form asking Central/North staff to volunteer their time to become Green Champions. |

2.6 Sustainability Actions (others)

| Action | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken | Timeframe |
|---|----------------|--------------------------------------|-------------------------------|-----------|
| Took water conservation measures – low flow showers or toilets, fix leaks | In progress | measured using water tracking system | | |
| Ran dishwasher only when full | In progress | measured using water tracking system | | |
| Reduced/replaced bottled water with filtered or refrigerated water | In progress | measured using water tracking system | | |
| Improved recycling measures | In progress | measured tracking quantity of waste | | |
| Supported composting | In progress | measured tracking quantity of waste | | |
| Used re-usable dishes | In progress | measured tracking quantity of waste | | |
| Purchased green cleaning products | In progress | | | |
| Used green (low-e paints) | In progress | measured tracking quantity of waste | | |
| Supported sustainable procurement practices | In progress | ghg reductions | | |
| Adopted low-carbon contracting practices | In progress | ghg reductions | | |

Additional items taken or planned:

| | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken | Timeframe |
|--|----------------|--------------------------------|--|-----------|
| Sustainability Actions- Enhanced Recycling | In progress | Lower waste levels to landfill | <p>There is a contract in place across VIHA for the following waste and recycling opportunities: All paper & cardboard, Hard plastic 1-7, cans, and Unbroken glass. Waste separation units exist at: The Priory, Saanich Peninsula Hospital, Victoria General Hospital, Aberdeen Hospital, Royal Jubilee Hospital.</p> <p>Organic solid food wastes are recycled at Saanich Peninsula Hospital, Victoria General Hospital, Nanaimo Regional General Hospital, Royal Jubilee Hospital and Aberdeen Hospital.</p> <p>Cumberland Laundry is exploring the use of a plastic recycling service when it becomes available in the region. Energy saving lamps are in use there, and a more efficient gas fired dryer was recently purchased. Boiler exhaust gas emissions are regularly tested every two months. Biohazard waste is disposed of through the medical waste company Stericycle. The grounds of the laundry facilities are regularly maintained. Laundry waste-water effluent is cooled and filtered to remove linen and reclaim heat to preheat hot water supply.</p> | |

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| <p>Sustainability Actions- Royal Jubilee Hospital Waste Management Investigation</p> | <p>Complete</p> | <p>Removal of some waste items to recycling stream.</p> | <p>Royal Roads University conducted a project 2009 investigating waste management at the Royal Jubilee Hospital. Assessments to include all waste disposed in the appropriate waste stream and promoting recycling wherever local availability allows. Biohazardous waste is segregated and disposed of appropriately. It is anticipated that recommendations will be made for cost savings initiatives and efficiencies.</p> |
| <p>Sustainability Actions- Food Services – contracted services recycle tetra packs, tin cans, and all return-for-deposit drinking containers and have converted from the use of plastic trays to recyclable cardboard trays.</p> | <p>In progress</p> | <p>Reduced chemical use.</p> | <p>General Support Services is conducting a housekeeping trial using microfiber cleaning materials at the Gorge Road Hospital. These materials may reduce water and chemical use.</p> <p>Housekeeping has changed to using hydrogen peroxide disinfectant, which is more environmentally friendly due to reduced by-products.</p> |

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| <p>Sustainability Actions- Water reduction</p> | <p>In progress</p> | <p>Ongoing monitoring and modification of processes</p> <p>Testing every 2 months</p> | <p>General Support Services considers environmental impacts when making decisions about chemical and product use for Housekeeping and Laundry.</p> <p>VIHA's regional laundries regularly donate discarded quality linens and patent clothing to local and international charity organizations.</p> <p>Laundries purchase highly concentrated products to reduce space requirements and carbon cost of shipping from manufacturer.</p> <p>Because local water is already soft, at regional laundries in Cumberland and Victoria, no phosphates are used to sequester water hardness-associated chemicals such as calcium and magnesium compounds.</p> <p>Waste-water discharge from the regional laundry facility in Victoria to the sewer system is laboratory tested and monitored by the Capital Regional District Environmental Services.</p> |
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| <p>Sustainability Actions- Recycling Medical Devices</p> | <p>In progress</p> | <p>Reduced environmental footprint; waste reduction</p> <p>SCENT HEALTHCARE SOLUTION - WASTE SOLUTIONS 2009 2009 PROJECTED SAVINGS & WASTE (LBS)</p> <p>Nov-08 Dec 31- Bi-monthly Total Savings (\$) Waste Reduction (lbs)</p> <p>Device savings (\$) 28401 52048 80449 \$481,375 Waste reduction (lbs) 463 474 937 5,607 Waste/container savings (\$) 355 284 639 \$3,824 Total \$485,199 5,607</p> | <p>VIHA has partnered with Ascent Healthcare Solutions. As the leading reprocessor of medical devices for hospitals throughout North America; Ascent Healthcare Solutions is committed to assisting hospitals and healthcare providers with reducing waste in their operations. While their primary contribution to this mission involves lowering supply costs for our partners through reprocessing, their services also help reduce their impact on our environment by recycling the majority of items VIHA cannot reprocess for reuse. Ascent's partners use VIHA's reprocessing and recycling services as a cornerstone of their environmental initiative, such as Hospitals for a Healthy Environment (H2E) and their mission to reduce hospital waste.</p> <p>Ascent uses specially designed and designated collection systems to capture medical devices in many different clinical settings. When these containers are received at their processing facility their contents are decontaminated and sanitized according to approved processes. Once sorted, reprocessable devices are placed through an FDA-cleared process that restores the devices to original specifications so they may be used one more time. Devices that cannot be reprocessed, either due to obvious functional reasons or because they are not approved for reprocessing, are recycled. Ascent contracts with third-party recycling companies to guarantee the most extensive use of recyclable materials and components.</p> <p>– VIHA's licensed contractor stores waste in correct containers, in locked storage rooms. Joint audits include waste audits to confirm waste streams are being used correctly (consistently audited).</p> |
| <p>Sustainability Actions- Biohazardous waste</p> | <p>In progress</p> | <p>Waste is stored correctly</p> | <p>– VIHA's licensed contractor stores waste in correct containers, in locked storage rooms. Joint audits include waste audits to confirm waste streams are being used correctly (consistently audited).</p> |

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| Sustainability Actions- Environmental & Sustainability Initiative | In progress | Ongoing monitoring and modification of processes | General Support Services is involved with the Environmental & Sustainability Initiative (health care regions brainstorming on how Health Authorities may conduct performance, purchasing, and recycling in an environmentally aware manner). |
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