

Executive Summary

Background:

Vancouver Coastal Health Authority (VCHA), Fraser Health Authority (FHA) and Providence Health Care (PHC) are united in their commitment to reduce their impact to the environment. One of the goals and objectives for all three health organizations is to increase the health and well being of British Columbians while maintaining the important link between health and the environment. An increased focus has been placed on engaging our staff, communities and key stakeholders to take action on climate change and to reduce our organizations' overall carbon footprint. We are now creating the Green Health Care Plan within the context of overall health care strategies.

In March 2008, the President and CEOs of VCHA, PHC and FHA outlined their firm commitment to ensure that health care dollars are focused on direct patient care by announcing that the three organizations will formally work together to manage and deliver clinical services and non-clinical support services. This partnership has allowed for new opportunities to coordinate environment and sustainability work across the three organizations in a unified manner, which:

- Provide services to British Columbia communities ranging in location from Boston Bar to Pemberton, encompassing the North Shore, Powell River and the Sunshine Coast, including Vancouver and surrounding area in the Lower Mainland.
- Oversee the operation of 25 acute care hospitals and 27 residential care facilities.
- Serve a total population of over 2.5 million British Columbians, and include 37 municipalities and regional districts.

Reducing our environment impact is everyone's responsibility and not the sole responsibility of a single program or service. The three organizations will work to coordinate, consolidate and integrate environmental initiatives within all operational work plans, which will include both clinical and non-clinical services. A committee structure has recently been established to coordinate environmental work plans, identify Green House Gas (GHG) reduction opportunities and to search for new economies by working in a collaborative fashion. We have adopted the term "GreenCare" as the common brand name across the three organizations. This common branding supports communications and tactical planning efforts.

Key Actions and Planning:

The Business Initiatives and Support Services division will provide the initial coordination of the GreenCare program. The GreenCare focus for 2009 will be directed into three main work streams:

1. Further development and creation of the GreenCare Program, providing overall leadership and integrating environmental/green initiatives across the three organizations into clinical and non-clinical work plans. The program includes the establishment of:
 - a. A Senior Environmental Advisory Committee (SEAC) – an advisory body providing recommendations regarding environmental planning and implementation;
 - b. A GreenCare Leadership Team – a working team comprised of functional experts from across the three organizations, ensuring the GreenCare program goals are executed smoothly; and
 - c. A Manager of Environmental Reporting position – coordinating the GreenCare program and acting as the single point person for environmental issues.
2. Creation of the Carbon Neutral Action Report, with a focus on three main sources of greenhouse gas (GHG) emissions (energy related to buildings, fleet/transportation/travel, and paper); and
3. Implementation of the SMARTTool carbon data collection system. Streamlining internal data collection processes/systems and identifying all sources of carbon emissions as defined within Bill 44 – GGRTA, SMARTTool is a web based software program, provided by government to all public sector organizations to measure, aggregate and report GHG emissions.

In addition, a dedicated Energy Manager (EM) now represents each health authority and acts as a dedicated resource, trained and experienced in professional engineering with a specialty in energy management. The EM primary focus is the execution of the technical component of the GreenCare program related to managing GHG emissions from all owned and operated facilities. The EM is the primary lead for conducting energy assessments of the health authorities' buildings' utilities consumption, for identifying energy conservation opportunities and for developing appropriate action plans.

Examples of Initiatives Undertaken Prior to 2008:

FH continues to be committed to environmental sustainability and has made the connection that the environment and health are closely linked. The following are a few examples of sustainability work accomplished prior to the 2008 year:

- In 2007, FH implemented the Strata Health Pathways system by Community Access Program, utilizing software to match residential clients to vacant residential beds. This program has resulted in reduced paper consumption by this department.
- Beginning in 2007, all internal and external positions are posted electronically and require electronic application. The FH electronic internal application process is now 100% paperless.
- Beginning in 2007, Internal Audit required electronic storage for all documents. Switching to electronic storage for all internal audit documents has resulted in paper reduction as well as decreased use of storage space. As work on this program continues, specific metrics are being developed to better track paper reduction.
- Anti Idling policies were implemented in 2007 and are enforced, ensuring delivery trucks do not idle in docking areas.
- The Plant Services department have carried out numerous energy conservation measures prior to 2008, including lighting retrofits, building automated system upgrades, installation of variable speed drives to name but a few.

Objectives

Beyond the key objective of reducing greenhouse gas (GHG) emissions, the following are important related objectives:

1. Employee engagement - increasing employee morale, attraction and retention by focusing on urgent public priority;
2. Financial responsibility - reducing operating costs through energy conservation and behaviour change;
3. Sustainability - balancing economic, social and environmental issues for future generations;
4. Social responsibility - demonstrating leadership and capitalizing on the ability to reach community, influence private sector and make transformative changes to how we do business; and
5. Promoting healthier communities (through active transportation and cleaner air) and workplaces (through improved built environments).

Overview

Energy Managers within all three health organizations (VCHA/PHC/FHA) have been introducing facility infrastructure upgrades which will reduce GHG emissions. BC Hydro and the provincial government have provided funding to the Health Authorities to target energy/emission reductions through a new program called the Public Sector Energy Conservation Agreement (PSECA). All three organizations have been active in accessing this funding, thereby introducing a number of green projects which meet the reduction goals.

Key stakeholders who have direct involvement with reducing GHG emissions related to paper use reductions, transportation/fleet and travel are being engaged to develop reduction strategies. Multi-disciplinary working teams are being formed to coordinate the GHG reduction initiatives across the three organizations.

Communications leads for the three organizations are working closely and have created a working group to develop a joint communications strategy, brand and tactical materials to advance the implementation of environmental/green initiatives across the three organizations.

Fraser Health is reviewing its plans to expand the current recycling program across the organization. Recycling volumes are now being monitored closely, on a site by site basis. New recycling targets are being set for fiscal year 2009/10 which will see an increase of recycling at many sites. Future annual CNAR's will outline the expansion of the recycling program.

Fraser Health is currently making plans to conduct a staff environmental survey within its owned and operated sites. VCHA has conducted two environmental surveys over the past two years.

Regional departments such as Information Management/Technology, Materials Management/Supply Chain, Food & Nutrition Services, Waste Management and Parking Administration are all currently involved in various initiatives pertaining to the reduction of GHG emissions. These initiatives are further described in detail within this report.

The Facilities Planning departments across the three health organizations are making Leadership in Energy and Environmental Design (LEED) certification the new standard within the building planning process. LEED certification is a nationally accepted benchmark for design, construction and operation of high performance "green" buildings. Key features of LEEDs designation include reduced energy consumption, use of locally manufactured and recycled materials, increased water efficiency, high indoor environmental quality and sustainable systems. LEED certification has been obtained for several new builds within the health organizations in 2008, and LEED Gold certification is now the provincial standard for all new public sector facilities being planned.

The SMARTTool system, the provincial government's carbon accounting system which will track GHG reductions across all Public Sector Organizations (PSO's), will be launched in the Spring of 2009. The Provincial Environmental Technical Team (PETT) recently organized a pilot of the SMARTTool system within the Vancouver Island Health Authority (VIHA). The lessons learned from the VIHA pilot will be applied to the SMARTTool launch across our three organizations.

Part 1 of the CNAR document outlines the key initiatives undertaken in 2008, and the final section, Part 2, showcases the future programs and initiatives.

1.1 Mobile Fuel Combustion

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	Complete	Research done by BCAA has shown that well maintained vehicles will consume up to 50% less fuel.	Regular vehicle maintenance and inspections are part of the FH fleet management program. There are 5 owned fleet vehicles and approximately 50 leased fleet vehicles across FH.
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	Complete	Compliance by suppliers to anti-idling policy reduces emissions.	Anti-idling signs are in place at loading docks and compliance by suppliers is monitored by materials management staff.
Encouraged car pooling in fleet vehicles	In Progress	Reduced GHG emissions by reducing the number of vehicle trips to purchase supplies.	Residential Services in Surrey/Langley have incorporated sustainability practices into work plans such as having a dedicated shopper to reduce trips. Plant services staff continually are promoting energy awareness throughout sites.
Encouraged use of public transit/active transportation		Increased percentage of staff using alternate methods of transportation for work.	Stepped up promotion of Rideshare program.
Encouraged alternatives to travel in fleet vehicles – bicycles, scooters, electric carts	Complete	More energy efficient form of transportation by staff riding motorcycles.	Designated motorcycle parking zones at 5 sites with more being planned.
Introduce new technology to reduce travel requirements	Complete	Travel by on-call radiologists has been reduced.	Picture Archiving and Communications System (PACS) virtually eliminates the need to travel to Hospital to review emergent patient film.
Consolidation of regular deliveries to reduce number of trips	Complete	Reduced GHG emissions by reducing number of trips required.	Deliveries to site laboratories have been reduced to one day per week from three days per week.
Maximize efficiencies in moving products between sites	Complete	Reduced GHG emissions and number of repeat trips.	Established Courier/Taxi Call Centre and began use of multi stop vehicles.
Combined delivery of medical instruments with mail service delivery	Complete	Reduced the overall number of trips made and eliminated the need for a second courier.	Implemented use of daily Mail Courier to move medical instruments from 13 Home Health offices.

1.2 Stationary fuel combustion and electricity

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Encouraged staff to use stairs	Complete	Staff taking stairs rather than elevators reduced energy consumption.	Take the Stairs Days promoted at two sites with plans to expand across FH.
Turned off lights in unused rooms	In Progress	Reduced energy consumption. Staff are becoming more knowledgeable about how they can contribute to saving energy.	Residential Services in Surrey/Langley have incorporated sustainability practices into work plans, including turning down heat and turning off lights. Plant services staff are continually promoting energy awareness throughout sites.
Replaced Refrigerators (EnergyStar rated appliance)	Complete	Reduced energy consumption	Any new refrigerators are to be Energy Star rated
Replaced other appliances (with EnergyStar rated appliance)	Complete	Energy for drying will be reduced by 50% from current levels. Reduced water consumption will be achieved.	All new capital equipment for laundry is to be Energy Star rated.
Replaced standard bulbs with CFLs	In Progress	Reduced energy consumption.	All sites are reviewing and changing incandescent to CFL lamps when they need replacing.
Undertaken lighting retrofit	Complete	Reduced energy consumption.	Light fixtures retrofitted as part of building renovation projects throughout the region. Also, rolling program to retrofit T12 fixtures to T8 as and when required. Unique retrofit project carried out at RMH. Exit lights retrofitted from incandescent to LED throughout sites.
Undertaken building energy audit at Location's)	In Progress	Over \$2m received for PSECA Phase 1.	<ul style="list-style-type: none"> o Lighting Studies at RCH, SMH, PAH, SMH, BUH, ERH & CGH (Phase 1) o Boiler Plant Study at RMH (Phase 1) o Lighting Studies at DEH, QPCC, MMH, HV, FCH, LMH & FCC (Phase 2) o Overall building energy audit at ERH (Phase 2) o Overall building energy audit at FCH (Phase 2) o Overall building energy audit at QPCC (Phase 2) o Updated overall building audits at BUH, FCC and RCH (Phase 2) o Detailed energy audit of the Chilled Water System at RCH (Phase 2)
Initiated or completed a building energy retrofit	Complete	Estimated reduction of 4,000GJ of natural gas. Savings projected to be \$40,000 per year.	Burnaby Hospital -- replacement boiler. \$850,000 was initially invested into this project.

Obtained \$2 Million funding from PSECA Phase 1 for energy conservation initiatives.	Complete	Estimated energy savings approximately 4 GWh (5%) and 5000 GJ (1%) for gas.	Projects to be completed in 2009-2010.
Creation of a leasing handbook	Complete	Provides staff the ability to identify key environmental expectations for new lease agreements.	Includes parameters from: - lighting (high efficiency) - paint (Environmental Choice or equivalent) - flooring adhesives (Environmental Choice or equivalent)
Coordination of energy studies and application submissions for Public Sector Energy Conservation Agreement (PSECA) phase 2 funding	Complete	Over \$1m funds obtained for 4 x PSECA 2 applications (12 conservation projects)	14 PSECA applications submitted, identifying 40 conservation projects.
Compiled and analysed energy consumption data for FHA owned sites	In Progress	Reduced energy consumption.	Benchmarked owned and operated healthcare facilities, identified high energy use sites and inefficiencies.
Optimization of Building Management Systems	In Progress	Reduced energy consumption.	Implemented adjustments on Building Management Systems.
1.3 Supplies			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Used collaborative software to edit on-line	Complete	Reduced paper consumption by 120,000 sheets annually.	The Strata Health - Pathways system implemented by Community Access utilizes software to match residential clients to vacant residential beds
Used laptops/tablets	Complete	Reduction in paper consumption of 90% in the office of the Chief Medical Health Officer.	All Medical Health Officers now have laptops and VPN connections at home and are encouraged to carry documents electronically to reduce paper use.
Restructured a process to use less paper	Complete	The process has improved efficiency, improves auditing process, and will reduce paper consumption & storage substantially. There were 71,500 electronic internal vacancy posting applications submitted in 2008. The electronic internal application process is now 100% paperless.	Electronic Personal Mileage Reimbursement Process has been updated, using e-technology where staff can claim mileage reimbursements electronically. All applications for job postings are submitted electronically.
FH Supply Chain management team has baselined paper use data for FHA sites.	Complete	Provide data that will be useful for paper use reduction initiatives.	Collectively, over 100 million sheets of paper are used annually. 2008

LEED Certification	In Progress	Key features of LEEDs designation include reduced energy consumption, use of locally manufactured and recycled materials, increased water efficiency, high indoor environmental quality and sustainable systems.	LEED Gold certification obtained for: - Cottonwood Lodge (Riverview) LEED Silver certification obtained for: - Abbotsford Regional Hospital and Cancer Centre LEED Gold or Silver expected for: - Creekside Withdrawal Management Centre (Surrey) - Cypress Lodge (Riverview) - Memorial cottage (Langley) - Surrey Outpatient Facility
Actions on non-paper related supplies:			
Encouraged re-use of furniture and equipment	In Progress	Reuse of equipment and reduction in recycling or disposal in landfills.	Introduce a "Reuse-It" Website to support reuse of office and medical equipment.
Increased Use of Electronic Invoicing	Complete	Switching to electronic invoicing has resulted in paper reduction and a decreased use of storage space.	All suppliers are being encouraged to move to electronic invoicing.
Online Electronic Surveys	Complete	This has resulted in a reduction of paper as well as decreased use of storage space.	Electronic surveys are encouraged where ever possible.
Disaster Response Plan Distributed on CD to 51 Users (VCH, FH, PHC)	Complete	Resulted in a reduction of 102,000 sheets of paper.	Disaster Response Plan was distributed to 51 users in FH/VCH/PHC on Compact Discs.
Electronic storage for documents	Complete	There has been significant reduction in paper use and specific metrics are being developed to track progress and report gains accomplished over time.	Internal auditing is switching to electronic storage for all internal audit documents.
Environmental Procurement Team formed	Complete	Specific metrics are being developed to track progress and report gains accomplished over time.	Environmental Procurement Team ensures that environmentally preferable purchasing objectives are met within new RFPs and purchases.
1.4 Travel			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Installed Video Conferencing facilities	In Progress	Decreased staff travel.	Video Conferencing is now available in most facilities.
Initiated Travel Policy	Complete	Reduced GHG emissions related to travel.	Managers have been tasked to decrease travel and to use more environmental friendly meeting alternatives (e.g.. video-conferencing or telephone-conferencing).

Parking Knowledge Network	In progress	Expanded alternative transportation networks, fewer staff driving vehicles to work, less demand for staff parking.	FH is participating in a Parking Knowledge Network with IHA, PHSA, VCH, PHC and VIHA that will share best practices and work together to reduce the carbon footprint.
Review of local staff business travel	Complete	Baseline business travel data is being collected to track progress regarding GHG emission reductions.	Review local staff business travel across Fraser Health with a goal to reduce fuel consumption and Green House Gas (GHG) emissions.

1.5 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided conservation education	In Progress	Conservation behaviour uptake by FH staff.	Joint Energy Awareness Campaigns and Promotions (Plant Services) to introduce behaviour based change.
Developed Green Teams	In Progress	Increased staff awareness and understanding of the impact of personal choice on the environment -- leading to energy conservation and reduced GHGs.	Green Teams in place at select sites (Burnaby/Ridge Meadows/ARHCC). These grassroots teams introduce environmental programs at the health care site level.
Supported professional development	Complete	More engaged workforce, with the capacity and desire to bring change.	Several FH staff attended sustainability courses and conferences.
Encouraged use of public transportation/active transportation	Complete	An increase of 10% from 2007 in the number of employees taking transit and not driving to work	Parking Administration continues promoting the Translink Employer Pass Program.
Improved bicycle racks, storage facilities and shower facilities for staff	Complete	More staff are riding their bikes to work, resulting in fewer vehicles on the road.	Five year capital plan will see new bike cages added at sites every year.
Implementation of Tele-working Program for medical transcriptionists	Complete	Reduction in greenhouse gas emissions by having fewer staff commuting to work.	Encouraging employees to work from home in this pilot project has increased productivity and job satisfaction.
Environmental Reporting Position created to connect and aligning Health Authority programs and services across VCHA, PHC and FHA	Complete	Carbon Neutral Reporting and CO2 data collection will be coordinated through this position and form a single point of contact for all three organizations.	The Environmental Reporting management position was created from existing management resources and will provide initial support for the GreenCare program.

GreenCare Program Brand Introduced	In Progress	GreenCare program and corresponding Wordmark or brand (officially registered) allows VCHA, PHC and FHA to work efficiently and effectively and jointly promote good news stories, environment and sustainability initiatives.	GreenCare program and corresponding Wordmark will be introduced across the three organizations. The GreenCare "brand" will promote all environmental and sustainability work.
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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	Reduction in water consumption and sewer waste.	Installed 3 new water efficient dish machines and low flow water devices installed on urinals and faucets in various locations.
Used re-usable dishes	Complete	Decreased the use of disposable aluminum pans by 80% at one site.	Food and Nutrition Services at LMH purchased reusable pans.
Used green (low-e paints)	In Progress	Reduced energy consumption.	Generally all paint now being used is low-emissivity.
Supported sustainable procurement practices	In Progress	45,696 grams of mercury removed from FH sites to date. Target is to have FH virtually mercury free by the end of 2009.	Mercury Free Initiative has identified all mercury containing devices in use across FH. All will be replaced. All new RFP's and contracts stipulate that devices are to be mercury free.
Standardizing waste management practices and expanding recycling programs	In Progress	Advancing environment and sustainability requirements within service contracts that align with Bill 44 -GGRTA. Identifying best practices across the 3 organizations and with other Health Authorities and Public Sector Organizations.	A Multi-Health Authority "Support Services" division was created across the three organizations (VCHA, PHC and FHA). This integrated model of management allows for the integration, standardization and consolidation within the following services: Housekeeping, Food, Laundry and Waste.
Consolidate food deliveries	In Progress	Reduced GHG emissions by reducing number of deliveries per week.	Decreased the number of food deliveries per week to sites through reviewing delivery patterns.
Improved traffic flow at facilities	Complete	Reduced GHG Emissions through improved traffic flow and support through better information.	Google Maps of parking facilities and surface sites created to provide users with information ahead of arriving at the site. Elimination of attendant and barrier gate operations at Langley Memorial Hospital reduces car idling.

Replacement of solid waste compactors	Complete	Use of energy efficient or solar units will reduce energy consumption and reduced transportation will reduce GHG emissions.	Solar assisted compactor is being piloted at one site for future reference and expansion to other sites. Implement fullness alert monitoring system to maximize compactor capacity.	
Databases created to track 5 separate waste streams, by site, across the three health organizations (VCH, PHC and FH)	Complete	Future targets will be set to increase recycling programs/activities and to trend progress in better managing all waste streams across all sites.	Waste Management to use this central reporting system to create a baseline of all waste stream volumes.	
Provincial Environmental Technical Team (PETT) - A provincial joint initiative to link the six health authority efforts with Bill 44 and GGRTA legislation	In progress	Advance PETT committee joint initiatives and launch sub working groups as required (e.g.. Energy, Paper and Transportation)	Coordinate provincial environmental planning, policy development and sharing of information and best practices.	Began 2008 and ongoing
Participation in Public Sector Organizations (PSO's) Environmental Workshop	Complete	Enhanced collaboration and reduced duplication across PSO's.	Initial PSO workshop focused on information sharing on current and planned initiatives.	Jan-09
Development and implementation of SMARTTool	In progress	Provide data that can be used to focus efforts on GHG emissions reduction.	Working groups already in place.	April-June 2009
GreenCare Program to promote environment and sustainability programs.	In progress	Integrated Multi-Health Authority working agreement to coordinate respective environmental programs.	Internal governance structures have been created to share information and support decision making. (SEAC, GCLT). Resources are aligned to reduce duplication, maximize limited resources and enhance overall effectiveness.	2008 and ongoing
Green Care Leadership Team creation	In progress	Emissions baseline will be established by	Created to support GHG emission baseline	2009

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	Reduced GHGs by switching from range of vehicles to hybrid only. Hybrids are approximately 35-40% more fuel efficient.	Explore the purchase of hybrid for use by Plant Services staff travel between sites (and currently using personal vehicles)	2009
Provide driver training to reduce fuel use	Planned	Improved driving habits should result in reduced fuel consumption.	Driver training to be arranged for primary operators of fleet vehicles.	2009

Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	Planned	Realize better consistency in maintenance of vehicles resulting in reduced GHG emissions and fuel consumption.	Explore consolidating all fleet vehicles to one fleet management company/program.	2009
Encourage use of public transit/active transportation	In progress	Reduced GHG emissions by reducing amount of car travel.	Will be investigating Rideshare ride matching program in an effort to reduce number of vehicles required for work travel between sites.	2009
Encourage alternatives to travel in fleet vehicles – bicycles, scooters, electric carts	In progress	Expect to see more staff riding bikes and scooters between sites if storage and parking facilities are made available.	Continue with program to add additional and better bicycle storage facilities at all sites and add more scooter/motorcycle parking.	2009
Establish travel reduction goals	Planned	Reduced GHG emissions by reducing amount of car travel.	Travel within different sectors will be tracked and targets for reduction set based on particular sector requirements.	2009

2.2 Stationary Fuel Combustion (including electricity)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Replace # computers with EnergyStar models	In Progress	All PC's will be Energy Star 4.0, 80+ rated by September 2009.	Computer refresh program replaces old computers with Energy Star models.	2009
Encourage staff to use stairs	Planned	Reduced number of elevator trips will reduce amount of energy used.	Expansion of "Take the Stairs Day" to all sites.	2009
Turn off lights in unused rooms	Planned	Reduced energy consumption.	Energy Awareness Campaigns	2009
Replace Refrigerators (EnergyStar rated appliance)	In Progress	Reduced energy and water consumption.	Maintenance program to replace water-cooled compressors to air-cooled as and when required.	2009 and ongoing
Install multi-function devices (and remove stand-alone printers/faxes)	In Progress	Currently 457, or 25% of the fleet have been replaced, with the remainder to be done over the next 18 months.	Wherever possible, MFP's (multi-function printers) are being placed and fax machines removed as part of the Printer Refresh.	2009 to 2010
Replace standard bulbs with CFLs	In Progress	Reduced energy consumption.	All sites are reviewing and changing incandescent to CFL lamps when they need replacing	2009
Install motion activated lights	Planned	Reduced energy consumption.	Lighting control strategy for internal and external lighting to be implemented across all sites. (Subject to funding availability)	2009
Undertake lighting retrofit	Planned	Potential reduction in energy consumption of 1.5GWh.	Subject to funding, lighting retrofits to be carried out at QPCC, DH, LMH, HV, FCH & FCC.	2009

Implement server virtualization	Planned	This will reduce the server room power and cooling demands, thereby reducing Greenhouse Gas emissions over current levels.	Increase our current virtualized server environment from approximately 25% up to 75%	2009 and ongoing
Unplug unused equipment	Planned	Reduced energy consumption.	Energy Awareness Campaigns.	2009
Undertake building energy audit at Location's)	Planned	Identify Energy Savings Opportunities	Detailed energy audits to be undertaken at LMH, PAH and RCH as part of the Continues Optimization programme with BC Hydro. In addition, other building audits to be undertaken at CGH, SMH, HV & DH.	2009
Initiate or complete a building energy retrofit	Planned	Estimated annual reduction of 200,000 kWh and 700 GJ gas.	Kitchen Ventilation upgrades BUH, CGH, FCH & MMH (PSECA 2 funding)	2009
		Estimated annual reduction of 200,000 kWh and 3,500 GJ gas.	Building Automation System and Air Handling/extract plant upgrade at BUH (PSECA 2 funding)	
		Estimated annual reductions of 6,000 GJ gas.	Various projects at FCH, including Boiler Plant replacement, AHU controls upgrade, VSD and heat recovery (PSECA 2 funding)	
Implement Strategic Energy Management Plan	Planned	Approved and Sponsored Strategic Plan and policy.	Working in conjunction with BC Hydro as part of the Energy Management Assessment (EMA) exercise.	2009
LEED certification is a nationally accepted benchmark for design, construction and operation of high performance "green" buildings.	In Progress	Key features of LEEDs designation include reduced energy consumption, use of locally manufactured and recycled materials, increased water efficiency, high indoor environmental quality and sustainable systems.	LEED Gold or Silver certification is anticipated for: -Creekside Withdrawal Management Centre -Cypress Lodge (Riverview) - Memorial Cottage (Langley) - Surrey Outpatient Facility	
External funding applications for additional energy conservation measures	Planned	Potential energy reduction throughout region with the availability of external funding from PSECA, BC Hydro, Terasen and NRCan.	Further Energy Studies to be undertaken to identify opportunities.	2009 and ongoing
2.3. Supplies:				
Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Initiate automatic double sided printing	Planned	Reduction in paper consumption.	Paper reduction working group to be established	2009

Change document template margins	Planned	Reduction in paper consumption.	Being discussed and a small project charter will be established as there is a requirement to test for Meditech Magic and ITS.	
Commit to hold paperless meetings	Planned	Reduction in paper consumption.	Guidelines for holding "green" meetings to be introduced HA wide.	2009
Actions on non-paper related supplies:				
Encourage re-use of furniture and equipment	Planned	Reduce the amount of furniture being disposed of by reusing where ever possible.	Expansion of the VCH "Reuse-It" website to FH.	2009
Requirements and Guidelines in Procurement	Planned	Provide FH staff with criteria to judge GHG emissions associated with contracted services.	Vendors to disclose carbon emissions and outline steps taken to reduce emissions, and include carbon emissions in scoring, evaluation, and decision tools.	2009

2.4 Travel

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Set a X% Travel reduction goal	Planned	Reduced travel to and from meetings.	There will be discussion with various stakeholders to arrive at travel reduction targets for 2009.	2009
Install Video Conferencing facilities	Planned	Reduced travel to and from meetings.	Looking to add more video conferencing capabilities and will be looking at other technology to allow for more virtual meetings.	2009

2.5 Employee Engagement

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide conservation education	Planned	Staff from across the three organizations will be engaged to get involved and make plans to reduce their environmental impact.	Introduce GreenCare Education and Awareness Fairs to increase healthcare workers' overall environmental awareness and introduce new GreenCare initiatives. Environment Week & Energy Awareness Campaigns to coincide with Earth Day celebrations. Earth day will be celebrated across VCH/PHC and FH sites this year.	2009 Week of April 20-24, 2009
Add a green work goal to performance management	In Progress	Increased awareness among managers to bring environmental and green initiatives into their departmental work plans.	All individual Performance Plans are to include environmental and green initiatives.	2009

Introduce Environment/Sustainability Staff Survey	Planned	Staff from across the three organizations will be engaged to get involved and make plans to reduce their environmental impact. Staff from across the three organizations will be engaged to get involved and make plans to reduce their environmental impact.	The success of the VCHA Environmental staff survey from the past two years has been monitored by FHA leaders. FH will introduce an environmental survey to staff across all health care owned and operated sites in 2009.	2009
Build inventory of DVD videos on Environmental Sustainability	Planned	Increased staff awareness on a variety of environmental issues.	DVD's to be accessible by all staff.	2009

2.6 Sustainability Actions (others)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Take water conservation measures – low flow showers or toilets, fix leaks	In Progress	Reduction in water consumption and sewer waste.	Low flow water devices to be installed on urinals and faucets in various locations.	on going
Support composting	Planned	Reduced solid waste over previous years through increased participation in organic recycling program.	Expanded Organics Recycling Program.	2009
Building to LEED Gold	Planned	Maximize energy conservation and minimize building footprint on the ecosystem.	Fraser Health will continue to plan and build facilities to the LEED Gold standard.	2009