

Actions Towards Carbon Neutrality

The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act.

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equipment)						
Other Mobile Fuel Combustion Actions Included electric car recharging stations at Cloverdale Campus when opened in 2007	Complete		None			
Add electric scooter recharging station at Langley Campus in 2008	Complete		None			
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)						
Planning/management						
Reduce office space (square meters) per employee	Ongoing/in Progress					
Owned buildings						
Establish energy performance baseline for owned buildings	Ongoing/in Progress	100	Energy use is tracked monthly from utility bills and energy intensity per square meter is calculated and benchmarked to historical energy consumption.	Continue program	2008	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/in Progress	17	% of owned buildings are certified LEED NC Gold or LEED NC Platinum	Cloverdale Campus (17,203 M2) LEED Gold, Surrey Main (4300 M2) under review for LEED Gold, Fir Bldg Expansion (3220 M2) - equivalent LEED Gold.	2005	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	Continue process for new buildings and major renovations	2004	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/in Progress		All equipment using refrigerant is maintained on a regular basis and all refrigerant use is recorded to meet regulatory requirements.	Continue process	2000	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/in Progress	70	% of owned buildings have undergone energy retrofits since start year indicated	Continue process	2000	No End Date (Continuous)
Retrofitting owned buildings						
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Complete	100	% of retrofits (captured above) had heating, cooling, and ventilation systems upgrades		2000	
Upgrade lighting systems during retrofits	Complete	100	% of retrofits (captured above) had lighting systems upgrades		2000	
Upgrade/adjust control systems during retrofits	Complete	100	% of retrofits (captured above) had control system upgrades or adjustments		2000	
Improve building insulation (including windows) during retrofits	Complete	3	% of retrofits (captured above) had insulation improvements		2000	
IT power management						
Install power management software which shuts down computers outside of regular business hours	Ongoing/in Progress	86	% of computers shut down automatically outside of regular business hours	Replace staff, faculty and student PC Desktops with Thin Clients.	2007	2011
Apply auto-sleep settings on computer monitors and CPUs	Complete	100	% of computers have auto-sleep settings applied	Plan to convert 75% of the PC desktops to thinclient technology	2006	2011
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/in Progress			Centralization of Student printing at the Langley and Richmond campuses. Installation of multi-function devices for faculty pods.		
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Complete	100	% of devices have auto-sleep settings applied			
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/in Progress	80	% of computers are ENERGY STAR rated	Plan to co-convert 90% of all computer PC based desktops to energy saving Thin Client technology	2007	2011
Appliances and electronic devices						
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Complete					No End Date (Continuous)
Behaviour change program						
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/in Progress			Continue process		No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/in Progress			Continue process		No End Date (Continuous)
Promote hot water conservation	Ongoing/in Progress			Continue process		No End Date (Continuous)
Other Stationary Fuel Combustion and Electricity Actions						
Start implementation of PSECA projects to reduce energy consumption.	Complete		-> Installed occupancy sensors on washroom lighting at Surrey Campus. -> Upgraded 6 Hvac fan motors totalling 160 HP to energy efficient models at Surrey Campus. -> Installed demand ventilation control on Kitchen exhaust hoods at Langley and Surrey Campus. -> Installed LED as a test into track lighting in one area at Langley Campus. -> Installed new Pot lighting 851technology in our conference centre to reduce wattage by 25%.		2009	2009
Final phase of implementation of PSECA projects to reduce energy consumption.	Ongoing/in Progress		-> Installed 1 new condensing boiler to serve the main heating plant at Langley Campus. -> Installed 2 new condensing boilers to serve the main heating plant at Surrey Campus. -> Upgraded lighting at Langley and Surrey Campuses		2009	2010
Revise "Energy Management Action Plan" for 2010	Ongoing/in Progress		Plan our next energy conservation work which also reduces greenhouse gases for 2010.	Implement our "Energy Management Action Plan" for 2010 and continue annual updating.	2009	No End Date (Continuous)
Develop RFP for "Energy Manager" which we plan to apply to BHydro for funding	In Development		Develop RFP document and measurable deliverables	Issue the RFP and begin the work to achieve planned deliverables	2009	2010
Increasing the size of our GeoExchange system at Surrey Campus	Ongoing/in Progress		Design and tender	Construction	2009	2010
Added additional controls at Richmond Campus to expand demand ventilation and reduce energy consumption and reduce GHG's	Complete		Added additional controls at Richmond Campus to expand demand ventilation and reduce energy consumption and reduce GHG's	Will review Richmond and other campus locations to see if further opportunity exists	2009	2009
Re retrofit library mechanical system in the original part of the library building to reduce energy consumption and reduce GHG's.	Complete		Mechanical system redesigned, work was tendered and construction work was implemented to remove the old system and install the new system		2009	2009
Switch to daytime cleaning to reduce energy consumption and reduce GHG's	Complete		Revised cleaning contract to have cleaners clean during the day when we are open and not at night after we are closed		2009	2009
Rebump parking lot under building and all 24 hour light fixtures in hallways and common areas to 25 watt tubes to reduce energy consumption and reduce GHG's	Complete		Rebump parking lot under building and all 24 hour light fixtures in hallways and common areas to 25 watt tubes to reduce energy consumption and reduce GHG's		2009	2009
Add controls to entry heaters and kitchen exhaust fans so they can be controlled on a time schedule rather than run all the time.	Complete		Add controls to entry heaters and kitchen exhaust fans so they can be controlled on a time schedule rather than run all the time.		2009	2009
Supplies (Paper)						
Printer/document settings						
Switch networked printers and photocopiers to automatic double-sided	Ongoing/in Progress	75	Converted all MFD units to automatic double sided printing	All network printers installed will be set-up to automatic double sided by default	2010	2010
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	In development			Will proceed with a plan analyze the print fleet to standardize "print and hold" settings where applicable	2010	2012
Electronic media in place of paper						
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In development			Planned to roll out SharePoint Intranet to 100% of staff computer in 2010.	2010	2010
Use electronic document library for filing common documents	Complete	100				
Post materials online that were previously printed	Complete	100				
Switch to an electronic payroll modification system in place of paper pay stubs	Complete	100				
Behaviour change program						
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	In development	5		100% of staff to be trained as part of SharePoint rollout	2010	2011

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 theGreenhouse 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 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Business Travel						
Virtual meeting technology						
Install web-conferencing software (e.g., Live Meeting,lluminate, etc.)	Ongoing/In Progress		Office Communication Server & OCS client pilot program implemented and webcams installed on all information and Education Technology computers. The live meeting application also installed and in use both for the desktop conferencing and two meetings rooms in Surrey and Langley	Office Communication Server production infrastructure installed to support all kwantlen computers and external web conferencing. Polycom CX 5000 systems installed on each campus to support both internal and external web conferencing		
Make desktop web-cameras available to staff	Ongoing/In Progress		All IET staff have web-cameras available for use	Office Communicator Server production complete and all Kwantlen employees will be able to use web-cameras and OCS client including Live Meeting for web conferencing		
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress		Polycom CX-5000 Video-conferencing units installed in two meeting rooms, Langley and Surrey locations. Three complete Sony video conferencing classrooms installed in Richmond , Langley and Surrey campuses.	Polycom CX-5000 video conferencing units will be installed in selected meeting rooms University wide.		
Behaviour change program						
Train staff in web-conferencing	Ongoing/In Progress		IET staff trained in web conferencing	Staff and Faculty on all campuses will have training available for both Office Communicator and Live Meeting.		
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress		Approx five faculty members have been trained and use in video conferencing for course delivery weekly. IET supports video conferencing in both meeting and classroom environments	As more programs adopt video conferencing for course delivery additional training will be provided as required.		
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress		All IET staff is encouraged to use virtual attendance if available for vendor meetings and conferences when available			
Encourage carpooling to meetings	Ongoing/In Progress		IET encourages all staff to carpool to any event or meeting off campus.			
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress					
Other Sustainability Actions						
Water conservation						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		Continue process	Begin retrofit of washroom faucets	2007	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			Continue to use Xeriscape landscaping in landscape renovations.		
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Ongoing/In Progress		New ISH research lab project incorporated stormwater management.	Ensure new construction incorporates stormwater management as well as major landscaping retrofits	2006	
Waste reduction/diversion	Ongoing/In Progress		Continued program	Enhance program	1994	No End Date (Continuous)
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress					
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress		Minimize hazardous products used. Dispose through recycling and or safe disposal practice.			
Procurement (non-paper supplies)						
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress		Standardization of cleaning products.	Re-evaluate program	2007	
Building construction, renovation, and leasing						
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress		New construction and renovation diverts debris from landfill. Re-use building materials where practical	Re-use building materials in major renovations		
Indoor air quality						
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress		Continued purchase of low VOC products including majority of furniture and flooring		2005	No End Date (Continuous)
Commuting to and from home						
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress		Showers installed in new ISH research facility	Continue expansion of shower facilities		
Provide secure bicycle storage	Complete					