Nicola Valley Institute of Technology - 2009 Carbon Neutral Action Report

Executive Summary

NVIT is in the fortunate position of operating out of a relatively new building (2002) in Merritt that was designed to perform 35% below the Ashrae standards for energy efficiency. Thermal mass, an efficient envelope, natural ventilation, and solar control are the primary strategies used to achieve energy targets. Low flush toilets and fixtures are installed to reduce water consumption.

We rent space at our Vancouver campus and are unable to control facilities improvements to reduce building greenhouse gas emissions. Our lease however, is with another post secondary institution that is required to submit Carbon Neutral Action Reports and we anticipate that they are looking at ways to meet the regulations of the Greenhouse Gas Reductions Targets Act.

Education and training of NVIT employees will continue this year to provide them with a better understanding of how they as individuals can assist the Institution to reduce emissions as we play our part in addressing the climate change challenge.

Ken Tourand

Vice President Corporate Services

Overviews

Actions Taken to Reduce Greenhouse Gas Emissions in 2009

Construction began on a Lecture Theatre / Daycare building on the Merritt campus in 2009. Construction is being completed using the integrated design process and the building will be built to LEED gold equivalency standards.

NVIT is cognizant of the need to change other operational areas that will assist in the reduction of our carbon footprint and we are taking steps to do so. Other than investigation and planning, the action towards achieving carbon neutrality that took place in 2009 included the purchase of a second hybrid vehicle; the purchase of at least 30% recycled paper; encouraging employees to store documents on the server where others can access them without printing a copy, and; setting printers to automatically print double sided.

Plans to Continue Reducing Greenhouse Gas Emissions 2010 – 2012

Over the next three years we believe that we need to focus on educating employees and encouraging them to play a necessary part in our continued efforts to reduce greenhouse gas emissions. We cannot achieve our goals without the involvement of all employees and they will not get involved without knowledge of the value of the projects.

We anticipate that once the NVIT portal is fully operational it will not only provide a location for storing electronic documents to reduce use of paper copies and extensive printing, it will also provide a central location to post ongoing information on the climate change challenge and ways employees can take actions both at work and at home to reduce emissions.

Institutional carbon neutrality will be considered if or when purchases of computers, printers, appliances or vehicles are planned.

Although we cannot eliminate all business travel, the use of video conference or teleconference equipment will be utilized whenever possible and web-conferencing capability will be investigated.



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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)												
Vehicle fuel efficiency												
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	40	% of vehicles are fuel- efficient models	1 hybrid vehicle purchased.	Replacement of two vehicles with energy efficient models.	2008	No End Date (Continuous)					
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	100	% of vehicles are subject to regular maintenance for fuel efficiency	All vehicles receive a "walk around" inspection prior to trips, this includes visually checking tires and oil level. Vehicles are equipped with maintenance lights to ensure that oil changes and other warranty items are completed as required.	All vehicles receive a "walk around" inspection prior to trips, this includes visually checking tires and oil level. Vehicles are equipped with maintenance lights to ensure that oil changes and other warranty items are completed as required.	2005	No End Date (Continuous)					
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)												
Planning/management												
Reduce office space (square meters) per employee	Complete	7	is the current average rentable square meters per employee	No steps taken - offices in building cannot be made smaller.	No steps taken - offices in building cannot be made smaller.	2002	2009					
Owned buildings												
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	In Development	0		None	New construction 2010 - Leed Gold equivalency anticipated	2010	2010					
Incorporate integrated design process into new construction or during renovations of owned buildings	In Development	0		None	New construction 2010 - integrated design process in progress.	2010	2010					
IT power management												
Implement server virtualization	Ongoing/In Progress	30	% of servers have been virtualized since start year indicated	3 out of 10 servers have been virtualized.	Continue to virtualize the remaining servers.	2008	No End Date (Continuous)					
Appliances and electronic devices												
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Complete	100	% of fridges are ENERGY STAR rated	No steps taken in 2009 - fridges purchased prior to that year.		2002	No End Date (Continuous)					
Behaviour change program												
Ask staff to unplug electrical equipment or switch off power bars when not in use	In Development			Email sent to all staff requesting they turn off computers and monitors at the end of each day.	Further communication with staff to make them aware of the institution's actions towards carbon neutrality and to request their assistance with this.	2009	No End Date (Continuous)					
Supplies (Paper)												
Paper Type												
Purchase 30% post-consumer recycled paper	Ongoing/In Progress			Purchasing employees advised that we are committed to purchasing at least 30% recycled paper, 100% recycled recommended.	Ensure that only recycled paper is purchased.	2009	No End Date (Continuous)					

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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
Purchase 100% post-consumer recycled paper	Ongoing/In Progress		Purchasing employees advised that we are committed to purchasing at least 30% recycled paper, 100% recycled recommended.	Ensure that only recycled paper is purchased.	2009	No End Date (Continuous)
Printer/document settings						
Switch networked printers and photocopiers to automatic double- sided	Ongoing/In Progress		I.T. Department set the majority of network printers default to print double-sided.	Ensure that any new printers purchased are set to automatic double sided print.	2009	No End Date (Continuous)
Electronic media in place of paper						
Use electronic document library for filing common documents	In Development		NVIT began development of our "portal" which will allow for access to documents stored electronically.	The portal will be "live" early in 2010 and employees will be encouraged to view documents on line and not print them unless required.	2009	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress		A number of forms are available on line and once the portal is live there will be many more posted.	The portal will be "live" early in 2010 and employees will be encouraged to view documents on line and not print them unless required.	2009	No End Date (Continuous)