

Carbon Neutral Action Report Nicola Valley Institute of Technology

Executive Summary

NVIT is in the fortunate position of operating out of a relatively new building (2002) 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.

That being said, NVIT is cognizant of the need to change other operational areas that will assist in the reduction of our carbon footprint and are taking steps to do so. Other than investigation and planning, little action towards achieving carbon neutrality took place in 2008. 2009 will be our first year of action.

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

Overview

NVIT has been using green cleaning products since we moved into this building in 2002 and our food services contractor has always used reusable dishes. Although these were not new actions in 2008 they are an ongoing way to help promote sustainability.

During the 2008 year, NVIT purchased a hybrid vehicle and began investigating replacing two other vehicles with hybrids. We have also been encouraging employees to refrain from printing unnecessary documents, to print double sided wherever possible, and to file documents electronically in shared folders to again prevent unnecessary use of paper.

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 | | Purchased a hybrid vehicle for the Vancouver campus. |

1.2 Supplies

| Action | Action Taken | Outcome/Performance Measure | Notes Clarifying Action Taken |
|--|--------------|-----------------------------|---|
| Initiated automatic double sided printing | In progress | | Email correspondence has been sent out requesting employees double side printing - IT department ensuring that printer defaults are set to double side where possible - a reduction in the use of paper will measure this action. |
| Developed document library (online and one printed copy) for large documents | In progress | | A number of instruction manuals are in shared folders on our server - more will be added - fewer paper copies will result in a reduction of the use of paper. |

1.3 Employee Engagement

| Action | Action Taken | Outcome/Performance Measure | Notes Clarifying Action Taken |
|------------------------------------|--------------|-----------------------------|--|
| Supported professional development | In progress | | NVIT has always supported professional development. The Campus Manager has attended a number of workshops and conferences related to reducing GHGs. Future requests to attend such events will be supported. |

1.4 Sustainability Actions (others)

| Action | Action Taken | Outcome/Performance Measure | Notes Clarifying Action Taken |
|-----------------------------------|--------------|-----------------------------|--|
| Improved recycling measures | In progress | | Additional recycling boxes were placed on campus to encourage use by all employees. Further efforts will be made in this regard. |
| Used re-usable dishes | Complete | | Campus cafeteria has used re-usable dishes since 2002. |
| Purchased green cleaning products | Complete | | Green cleaning products have been used since 2002 and will continue to be used. |

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

| Overview | |
|----------|---|
| | <p>We plan to replace two leased vehicles with hybrids as soon as it is cost effective to change the leases and will work towards education programs for employees with regard to changing driving habits to reduce greenhouse gas emissions. Discussions will be held with the individuals in charge of vehicle maintenance to ensure that regular check-ups are completed.</p> <p>We will continue to educate and encourage employees to consider the environment when determining what to print and how to print it and to recycle whenever possible. The purchasing officer has been advised to only order 30% recycled paper.</p> <p>Both campuses have been equipped with video conference capabilities and the use of the equipment will be encouraged to decrease travel between campuses.</p> <p>A new daycare/lecture theatre building will be built to LEED Gold or equivalent standard this year.</p> |

2.1 Mobile Fuel Combustion

| Action | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken | Timeframe |
|--|----------------|-----------------------------|--|-----------|
| Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups) | Planned | | Education will be provided to employees in charge of vehicle maintenance and checks will be made to ensure compliance. | |
| Establish anti-idling behaviour change program (e.g. signs, stickers, messages) | Planned | | Education will be provided to all employees regarding this item. | |
| Establish travel reduction goals | In Progress | | Video conference equipment will be utilized whenever possible to decrease travel between campuses. Other travel will be completed only as necessary. | |

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 | Planned | | Will work with the IT department and educate employees on the importance of this. | |
| Undertaken Monitor turn-off challenge | Planned | | Will work with IT department to come up with a fun challenge for employees. | |
| Unplug unused equipment | Planned | | Will educate employees on the importance of this. | |
| BC Hydro Inspection | Complete | | BC Hydro completed an inspection of our building in February of this year. | |

2.3 Supplies

| Action | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken | Timeframe |
|--|----------------|-----------------------------|--|-----------|
| Commit to use 30% recycled paper | Planned | | Discussed with purchasing officer and will be implemented. | |
| Initiate automatic double sided printing | Planned | | Will work with IT department to ensure default on printers is set to double side where possible. | |
| Use laptops/tablets | In progress | | For math classes only to date - unsure at this time if tablets can be used for other courses. | |
| Restructure a process to use less paper | In progress | | We will continue to educate and encourage employees to consider the environment when determining what to print and how to print it and to recycle whenever possible. | |

2.4 Employee Engagement

| Action | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken | Timeframe |
|----------------------------------|----------------|-----------------------------|---|-----------|
| Provide conservation education | Planned | | We will need to investigate this further before outlining any specific plans. | |
| Provide green tips | Planned | | We will need to investigate this further before outlining any specific plans. | |
| Support professional development | In progress | | NVIT has always supported professional development workshops and conferences. Future requests to attend such events related to reducing GHGs will be supported. | |