

Carbon Neutral Action Report Northern Lights College

Executive Summary

We have taken many steps to reduce energy consumption, which also reduces greenhouse gas emissions and help achieve carbon neutrality.

Replaced (4) boilers - Fort St. John (2) Dawson Creek (2) to higher energy-efficient boilers.

Upgrade all our lighting to more energy-efficient ballasts and tubes.

Are currently working on the completion of an Energy Audit for all of our facilities, which will determine the amount of carbon that Northern lights College is producing.

Removed three old buildings that were very energy inefficient – the Dawson Creek Campus was originally an old Air force base.

Energy Audit conducted.

Established the Climate Action Committee.

All heating is computer controlled for efficiency and monitoring.

Lighting upgrade with BC Hydro Power Smart program.

Motion sensed lights in all new buildings.

Workshop scheduled with BC Hydro for further information on being Power Smart.

Implemented Blue boxes in prominent locations for student/staff use.

The College Board has gone to paperless meetings – first one was April 15/09.

The College Board is holding many of its meetings via Video Conference to reduce travel costs and pollution.

All new construction at Northern Lights College is being built to a minimum of LEED Gold equivalency.

Objectives

We are committed to meet our provincial energy consumption and green house gas targets as per Ministry 2010 deadline.

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

Overview

Established Climate Action Committee/have a contract in place for Energy Audit for all facilities.; once the Energy Audit is in place Climate Action Committee can then work towards reducing our carbon emission based on information from the Energy Audit.

- Northern Lights College, identifying themselves as 'BC's Energy College', currently teaches a number of Trades and Apprenticeship programs, as well as, University Arts and Science courses.

- Northern Lights College is committed to increasing BC's production of renewable energy by training the workforce required for these energy technologies. The College has identified the need for facilities, which demonstrates and showcases these technologies, as well as provide teaching space for these new educational programs.

- The vision for the 'Centre of Excellence for alternative energy training and research in the north. Centre of Excellence will be a highly visible facility, demonstrating the practical application of energy technologies, made possible through strong community partnerships.

The Centre of Excellence Project Scope includes:

- Construction of the new building with public foyer, two labs, and a demonstration mechanical room, to the standards of LEED Platinum certification.

- Construction of an enclosed walkway to connect the Centre of Excellence with the existing Campus Centre building

- Associated landscaping and outdoor seating area to the south side of the Centre of Excellence.

- Completing an Energy Audit for all of the facilities for Northern Lights College. No plan in place at this time to reduce energy consumption in our facilities, but will work with recommendations from the Energy Audit .

In 2008 completed the construction of the new Centre of Excellence for Oil and Gas Trades located at the Fort St. John Campus, which was built to a LEED Gold Standard.

1.1 Mobile Fuel Combustion			
	Completing an energy audit for all of the facilities for Northern Lights college. No plan in place at this time to reduce energy		
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In progress		of 38 fleet vehicles two to three vehicles a year will be replaced with more fuel efficient vehicles.
Provided driver training to reduce fuel use			
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In progress		
Encouraged car pooling in fleet vehicles	in progress		
Established travel reduction goals	in progress		
1.2 Stationary fuel combustion and electricity			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Used air dry setting on dishwashers	complete	energy savings	purchased only EnergyStar appliances
Turned off lights in unused rooms	in progress	energy savings	motion activated light sensors
Replaced Refrigerators (EnergyStar rated appliance)	complete	energy savings	purchased only EnergyStar appliances
Replaced other appliances (with EnergyStar rated appliance)	in progress		
Installed motion activated lights	complete		
Undertaken lighting retrofit	complete		
Initiated corporate computer shut-down/wake-up for maintenance	in progress		
Undertaken building energy audit at LOCATION(s)	in progress		
1.3 Supplies			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to use 30% recycled paper	complete	Have been using for 4 years	
Initiated automatic double sided printing	in progress		educate staff on double-sided printing
1.4 Travel			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Installed Video Conferencing facilities	in progress		installing videoconferencing rooms at Chetwynd, Dawson Creek, Fort Nelson, Fort St. John, Tumbler Ridge; cut down on travel as we live in the northern part of British Columbia
1.5 Employee Engagement			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided climate change education	in progress		Climate Action Task Force Committee
Provided conservation education	in progress		
Developed Green Teams	in progress		Climate Action Task Force Committee
Supported Green Teams (resources)	in progress		
Supported professional development	in progress		attended workshops for carbon reduction Natural Resources Canada
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	complete		motion activated plumbing fixtures flush only one necessary
Ran dishwasher only when full	complete		run the dishwasher once a day
Reduced/replaced bottled water with filtered or refrigerated water	in progress		
Used re-usable dishes	in progress		disposable utensils or paper plates
Purchased green cleaning products	in progress		are janitorial supplies are green cleaning products
Used green (low-e paints)	in progress		purchase low e-paint

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

Overview installation of geothermal will reduce natural gas consumption, carpooling and videoconferencing will reduce our consumption of

2.1 Mobile Fuel Combustion

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	in progress		signage to indicate idle free zone	
Encourage car pooling in fleet vehicles	in progress		encourage carpooling from all LOCATIONS	

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			
Supply power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)	in progress			
Replace # computers with EnergyStar models	in progress			
Use air dry setting on dishwashers	in progress			
Turn off lights in unused rooms	in progress		motion sensor lights	
Replace Refrigerators (EnergyStar rated appliance)	in progress		replacements are EnergyStar	
Replace other appliances (with EnergyStar rated appliance)	in progress		replacements are EnergyStar	
Replace standard bulbs with CFLs	in progress			
Install motion activated lights	in progress		replacing most light switches with motion activated	
Undertake lighting retrofit	in progress		following Energy Audit recommendations	
Utilize desk-top power management settings on computer	in progress			
Unplug unused equipment	in progress			
Undertake building energy audit at LOCATION(s)	in progress		Energy Audit in progress will be completed end of March	
Initiate or complete a building energy retrofit	in progress			

2.3 Supplies

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Commit to use 30% recycled paper	in progress			
Initiate automatic double sided printing	in progress			
Commit to hold paperless meetings	complete		use laptops or recyclable scrap paper will	
Re-use non-confidential scrap paper	in progress			
Restructure a process to use less paper	in progress			
Actions on non-paper related supplies:				
Choose "Green" items from Distribution Centre	in progress			
Encourage re-use of furniture and equipment	in progress		recirculated used furniture	

2.4 Travel

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Install Video Conferencing facilities	in progress		installing videoconferencing equipment in all of our locations	

2.5 Employee Engagement

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide climate change education	in progress		BC Hydro presentation with Ben Gardiner	
Develop Green Teams	in progress		establish a Climate Action Committee. Establish Terms of Reference in early April	
Support Green Teams (resources)	in progress		educational workshops	

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		motion sensors on urinals low flush toilets	
Run dishwasher only when full	in progress			
Reduce/replace bottled water with filtered or refrigerated water	in progress			
Improve recycling measures	in progress			
Purchase green cleaning products	in progress		continue to use green cleaning products	
Use green (low-e paints)	in progress		continue to use low e-paint	
Support sustainable procurement practices	in progress			
Adopt low-carbon contracting practices	in progress			