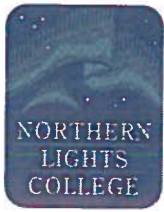


Northern Lights College 2015 Carbon Neutral Action Report



Centre for Clean Energy Technology (CECET)



Northern Lights College

2015 Carbon Neutral Action Report

This Carbon Neutral Action Report for the period January 1st to December 31st, 2015 summarizes our emissions profile, the amount of offsets purchased to reach net zero emissions, the actions we have taking in 2015 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2016 and beyond.

Overview/Executive Summary

Northern Lights College continues with our commitment towards carbon neutrality. We are continuing to focus on building improvements with energy audits and upgrades.

Key Actions Taken in 2015 to Reduce Emissions:

- Window replacements in our Fort St. John Campus
- Chiller replacements in both the Dawson Creek and Fort St. John Campuses, should result in lower utilities, as they use much less energy.
- Exterior lighting retro fit on the Fort St. John campus
- Put in new more energy efficient blinds in the Dawson Creek Main Campus building, to help prevent heat loss in the winter and the sun out in the summer, to help keep the room cool
- Replaced several outside doors that were very inefficient and old, with new sealed ones that

Small Actions Taking in 2015 to Reduce Emissions:

- We have reused windows, doors and key building materials when renovating, to help reduce the amount of material taken to landfills
- Retro fitting desks and cabinets instead of buying new ones
- Ensuring all of our cleaning supplies are eco-friendly

- Ensuring all of our paper products are either made from recycled paper or at least part recycled paper or made from sustainable forest practices
- Any renovations or upgrades we do, we look for products that are made from part recycled material and/or eco friendly
- Turning off computer screens after hours.
- Ensuring auto sensor lighting is all in working order.

Carbon Neutrality Linked to NLC's Mandate

We continue to practice and promote principles that protect and sustain our natural environment.

Broader Sustainability Goals for NLC for 2016-2017

- Continue to work towards identifying energy saving projects that will reduce our carbon footprint.
- Continue to replace blinds in all Campus locations
- Build a new Trades Centre so the very inefficient existing facilities can be replaced.
- Replace older water taps in washrooms with new water saving automatic ones
- Looking into a implementing a shuttle between the Dawson Creek and Fort St. John Campuses, which would reduce our fleet size.
- Conducting a study into using smaller vehicles (i.e. golf carts) for use on Campus grounds instead of larger vehicles.
- Smaller plans such as putting up idle free zone signs, using rain barrels to catch water for grounds maintenance, planting more trees to offset CO2 levels, leaving lights off in offices during spring and summer seasons.
- Educating and engaging with staff better on how to be carbon neutral.
- Continue to replace older inefficient, heat loss, doors and windows.
- Upgrading older buildings with more energy efficient lighting and heating.
-
- Having the Green Team identify and plan large and smaller scale projects for the College to undertake.

- Looking into new auto scrubbers for floor cleaning which use a newer technology using only water to clean floors with.

Anticipated Financial, Environmental, or Social Benefits of Reducing Energy Use and/or GHG Emissions

Financial and Environmental – By replacing the old inefficient facilities with new energy efficient facilities and equipment, the college will lower currently high operational and maintenance costs for existing facilities due to poor building performance, lack of insulation and poorly performing mechanical systems.

Social Benefits – The new and more efficient Trades Centre building will improve NLC facilities, which will in turn enhance student life and revitalize the Dawson Creek Campus improving the College's image and ability at recruitment and retention of students.

By bringing staff and students together more to help learn about lessening their carbon footprint, we can become more socially involved in the Carbon Neutrality of the College and the area around us on a day to day basis.

Efforts made to Reduce Emissions and Improve Overall Sustainability

- Continue to complete mechanical and electrical renovations to our existing facilities to reduce our energy consumption.
- Continue energy audits on all campus locations.

Emissions and Offsets Summary Table:

<i>[Organization X] GHG Emissions and Offsets for 2014 (TCO2E)</i>	
GHG Emissions created in Calendar Year 2014 (from SMARTTool Homepage):	
Total Emissions (TCO2E)	1246
Total Offsets (TCO2E)	1243
Adjustments to GHG Emissions Reported in Prior Years (from SMARTTool Homepage):	
Total Emissions (TCO2E)	109
Total Offsets (TCO2E)	109
Total Emissions for Offset for the 2014 Reporting Year (from SMARTTool Homepage)	
Total Offsets (TCO2E)	1352

Executive sign-off:

Andrea Graft

Signature

May 30, 2016

Date

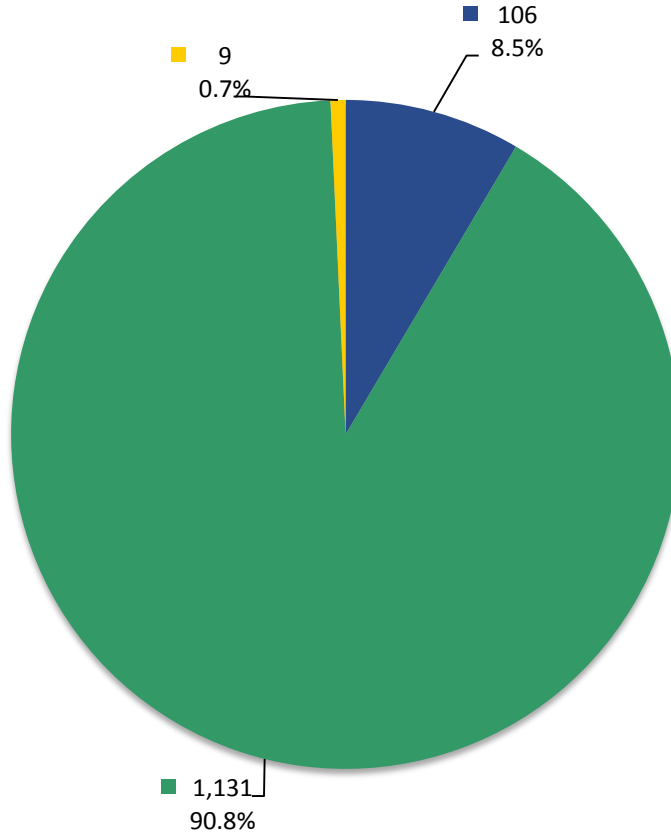
Andrea Graft

Name (please print)

Vice President, Finance + Corporate Services

Title

**Northern Lights College
Greenhouse Gas Emissions by Source
for the 2015 Calendar Year (tCO₂e*)**



Total Emissions: 1,246

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2015 (Generated May 25, 2016 10:53 AM)

Total offsets required: **1,243**. Total offset investment: **\$31,075**. Emissions which do not require offsets: **3** **

*Tonnes of carbon dioxide equivalent (tCO₂e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

** Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.

2015 Carbon Neutral Action Report Survey

Organization Name:

Northern Lights College

Please select your sector:

- Post-Secondary Institution

1) Stationary Sources (Buildings, Power Generators, Ext. Lighting) Fuel Combustion, Electricity use, Fugitive Emissions:

Please indicate which actions your PSO took in 2015:

Have developed an overall strategy/plan to reduce energy use in your organization's buildings inventory:

Yes

If Yes, please describe:

We are installing new more energy efficient windows and doors in older buildings and also looking at other ways to reduce our energy consumption.

Undertook evaluations of building energy use:

No

Performed energy retrofits on existing buildings:

Yes

Built or are building new LEED Gold or other "Green" buildings:

No

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from buildings:

We have installed some upgraded motion sensors in some buildings so that lights will not always be on if no one is in the room. Also we have done some initiating so that if it is bright outside, we do not turn lights on inside.

2) Mobile Sources (Fleet, Off-road/Portable Equipment) Fuel Combustion:

Indicate which actions your PSO took in 2015:

Have put in place an operations policy/program to support systematic reductions in fleet related emissions:

(e.g., program to convert fleet to renewable fuels)

No

If Yes, please describe:

(No response)

Replaced existing vehicles with more fuel efficient vehicles (gas/diesel):

No

Replaced existing vehicles with hybrid or electric vehicles:

No

Took steps to drive less than previous years:

Yes

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from fleet combustion:

We are looking into buying some new more efficient vehicles for our fleet and retiring older less efficient ones.

3) Supplies (Paper):

Indicate which actions your PSO took in 2015:

Have put in place an operations policy/program to facilitate a systematic reduction in paper-related emissions:

(e.g., policy to purchase 100% Recycled Content; default to double-sided printing)

Yes

If yes, please describe:

We ask to keep photocopying to a minimal if possible. We purchase paper that has recycled content in it and also use double sided printing when we can.

Have put in place an operations policy/program to facilitate behavioural changes from paper use:

(e.g. awareness campaign to reduce paper use):

No

If yes, please describe:

(No response)

Used only 100% recycled paper:

No

Used some recycled paper:

Yes

Used alternate source paper:

(e.g., bamboo, hemp, wheat etc.)

No

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from paper supplies:

(No response)

4) Other Sustainability Actions:

Please note that this section is optional

Business Travel

Created a low-carbon travel policy or travel reduction goal:

(low-carbon = lowest emission of greenhouse gas per kilometer per passenger)

No

Encouraged alternative travel for business:

(e.g. bicycles, public transit, walking)

Yes

Encouraged or allow telework/working from home:

No

Other:

(No response)

Education Awareness

Have a Green/Sustainability/Climate Action Team:

Yes

Supported green professional development:

(e.g. workshops, conferences, training)

No

Supported or provided education to staff about the science of climate change, conservation of water, energy and/or raw materials:

No

Other:

(No response)

Adaptation Planning for Climate Risks

Have assessed whether increased frequency of extreme weather events and/or long term changes in climate will affect your organization's infrastructure, its employees and/or its clients:

No

Have incorporated these anticipated changes in climate into your organization's planning and decision making:

No

Other:

(No response)

Other Sustainability Actions

Established a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models:

Yes

Have put in place an operations policy/program to facilitate the reduction and diversion of building occupant waste stream from landfills or incineration facilities:

(e.g., composting, collection of plastics, batteries)

Yes

Established green standards for goods that are replaced infrequently and/or may require capital funds to purchase:

(e.g., office furniture, carpeting, etc.)

Yes

Incorporated lifecycle costing into new construction or renovations:

Yes

Please list any other sustainability actions your organization has taken not listed above:

(No response)