

2016 Carbon Neutral Action Report



Executive Summary

Northwest Community College is pleased to submit its 2016 Carbon Neutral Action Plan. This year's report contains our 2016 emissions profile, offsets purchased, the actions we have taken in 2016 to reduce our GHG emissions and our plans to continue reducing emissions. By June 30th Northwest Community College's final CNAR will be posted to our website at www.nwcc.bc.ca.

Northwest Community College is privileged to be located in some of the most pristine locales in the Province of British Columbia and as a result wholeheartedly supports initiatives that have a positive impact on our environment. Our College prides itself in unique experiential learning opportunities for students, through a variety of Field Schools, that show case our environment in conjunction with academic pursuits. We continue to source projects that will reduce our carbon footprint while modelling positive environmental stewardship.

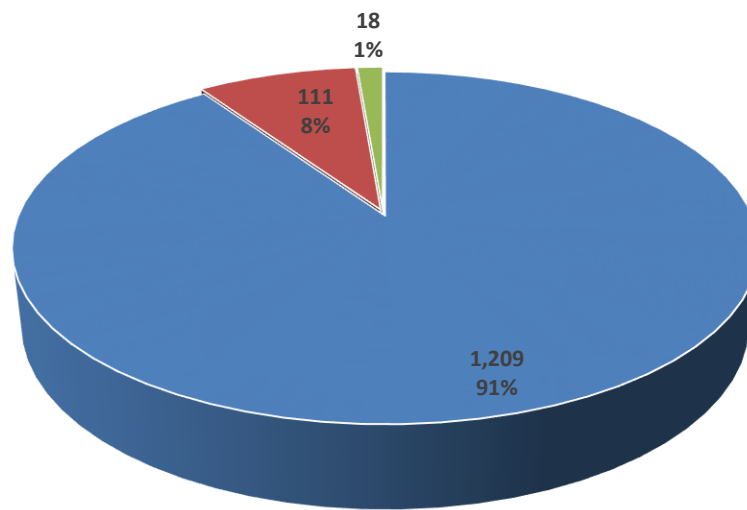
In 2016 our focus was on creating further efficiencies with our air handling with software upgrades to our DDC Control systems and training to our facilities management staff. LED lighting retrofits are a continuing project with an estimated completion in the 2017 reporting year.

NWCC is excited about our Trades Building Renewal project, commencing spring of 2017, with a completion date of August 2018. The modernization of this building will provide a greatly enhanced learning environment for our students and staff. The opportunity for increased energy savings through upgraded mechanical, structural and electrical systems is also a very beneficial component of this project.

The College will continue to demonstrate its commitment as a post-secondary institution to reduce greenhouse gas emissions, while engaging all members of the college community, by supporting the many initiatives that contribute to sustainability and the reduction of our carbon footprint.

Northwest Community College GHG Emissions and Offset for 2016 (tCO ₂ e)	
GHG Emissions created in Calendar Year 2016	
Total Emissions (tCO ₂ e)	1,337
Total Offsets (tCO ₂ e)	1,333
Adjustments to GHG Emissions Reported in Prior Years	
Total Emissions (tCO ₂ e)	17
Total Offsets (tCO ₂ e)	17
Grand Total Offsets for the 2016 Reporting Year	
Grand Total Offsets (tCO ₂ e)	1,1350

2016 GHG Emissions by Source



- Total Stationary Emissions (Heating, Lighting)
- Total Mobile Emissions (Fleet Vehicles/Mobile Equipment)
- Total Supplies Emissions (Paper)

Actions taken to reduce Greenhouse Gas Emissions in 2016

- Replacement of three boilers with high efficiency units at the Prince Rupert Campus
- Upgrades of DDC software to ensure optimal performance of our HVAC Systems
- Training of Facilities Staff to further optimize use of the DDC system
- DDC upgrades to maximize air handling capacity in several buildings throughout region
- Increased utilization of recycling services by local contractors
- Further upgrades of the institution's lighting to LED
- ICS upgrades of video conference applications for instructional and administrative use
- Replacement of three fleet vehicles to more fuel efficient models

Plans to Continue Reducing Greenhouse Gas Emissions in 2017

- Trades Building Renewal project with upgraded mechanical systems
- Completion of the institution's lighting upgrades to LED
- Development of comprehensive recycling program to include staff and student participation
- Continued upgrades of DDC software to ensure optimal performance of our HVAC systems.
- Replace older fleet vehicles with more fuel efficient and/or electric vehicles.
- Continue to encourage information sharing through shared network access and college portal.
- Continue to transfer paper based departmental forms to electronic forms.

Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, Northwest Community College is responsible for arranging for the retirement of the offsets obligation reported above for the 2016 calendar year, together with any adjustments reported for past calendar years. The Organization hereby agrees that, in exchange for the Ministry of Environment ensuring that these offsets are retired on the Organization's behalf, the Organization will pay within 30 days, the associated invoice to be issued by the Ministry in an amount equal to \$25 per tonne of offsets retired on its behalf plus GST.

Executive sign-off



May 24, 2017

Signature

Date

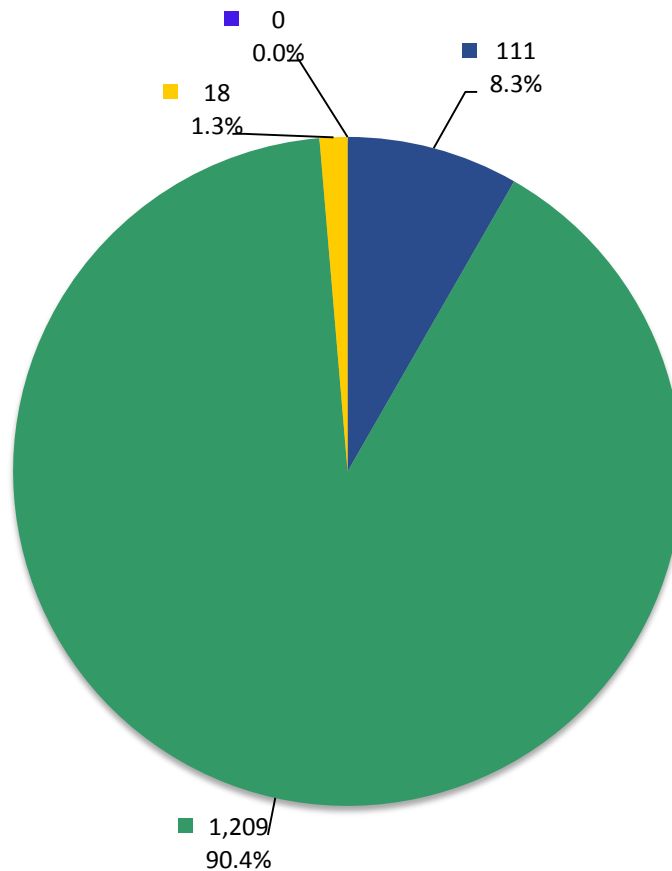
Laurel Campbell

Vice-President, Corporate Services

Name (please print)

Title

Northwest Community College Greenhouse Gas Emissions by Source for the 2016 Calendar Year (tCO₂e*)



Total Emissions: 1,337

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

Offsets Applied to Become Carbon Neutral in 2016 (Generated May 15, 2017 4:26 PM)

Total offsets required: **1,333**. Total offset investment: **\$33,325**. Emissions which do not require offsets: **4** **

*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.

2016 Carbon Neutral Action Report Survey

Page 2

Part One (external)

Contact Name(s):

Christine Speidel

Organization Name:

Northwest Community College

Please select your sector:

- Post-Secondary Institution

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

During 2016, did your organization take any of the following actions to support emissions reductions from buildings?

Select all that apply

- Other actions? Please describe briefly.: Retrofit of all building lighting to energy efficient LED fixtures, ongoing reviews and upgrading of HVAC systems to comply with DDC system to maximize energy efficiencies at all campuses.

Briefly describe your organization's plans to continue reducing emissions from its stationary sources in future years.

Majority of our campus structures were built in 1970 so retrofits of building systems as they age out, are always sourced with green initiatives as major component of project priorities.

During 2016, did your organization participate in utility-sponsored energy demand management program(s) (e.g. BC Hydro's Energy Management (Manager))?

No

If yes, please describe briefly:

(No response)

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

During 2016, did your organization take any of the following actions to support emission reductions from its mobile sources?

Select all that apply

-
- Replaced existing vehicles with more fuel efficient vehicles (gas/diesel).: 3
-
- Took steps to drive less than previous years.

Briefly describe your organization's plans to continue reducing emissions from its mobile sources in future years.

We are expecting to see a slight rise in our emissions in this area due to the fact that we are offering more experiential learning activities for students via Field School Programs. We have replaced aging vehicles with more fuel efficient multi passenger vehicles to offset the increased usage and continue to explore online meeting activity to decrease the amount of administrative travel.

3) Supplies (Paper):

During 2016, did your organization take any of the following actions to support emissions reductions from paper supplies?

Select all that apply

-
- Other actions? Please describe briefly.: Increase use of online registration for courses at all campuses
-

Briefly describe your organization's plans to continue reducing emissions associated with its office paper use in future years.

Continued exploration of web based administrative functions to ease paper based activity. Increased use of digital vs paper based filing systems in all administrative areas.

4) Other Sustainability Actions:

Business Travel:

During 2016, did your organization take any of the following actions to support emissions reductions from business travel?

Select all that apply

-
- Encouraged or allowed teleworking or working from home
-

Education Awareness:

During 2016, did your organization have any of the following programs or initiatives to support sustainability education and awareness?

Select all that apply

-
- Support for professional development on sustainability (e.g. workshops, conferences, training)
-

Other Sustainability Actions:

During 2016, did your organization have any of the following programs or initiatives to support sustainability?

Select all that apply

-
- An operations policy or program to facilitate the reduction and diversion of building occupant waste (e.g., composting, collection of plastics, batteries) from landfills or incineration facilities
 - Lifecycle costing of new construction or renovations
-