

College of New Caledonia



Prince George, Burns Lake, Fort St. James, Mackenzie, Quesnel, Vanderhoof



CNC Main Campus



Prince George Technical Education Centre



CNC Quesnel Campus

College of New Caledonia

2017 Carbon Neutral Action Report

Declaration statement: This Carbon Neutral Action Report for the period January 1st, 2017 to December 31st, 2017 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2017 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2018 and beyond.

Executive Summary

The College of New Caledonia continues to actively pursue all options available to reduce its overall energy consumption, reduce its overall carbon footprint, and promote green initiatives wherever possible. Highlights for the 2017 year included major mechanical upgrades within our Prince George Campus, as well as extensive lighting upgrades internally and externally in the parking lots and along campus walkways.

Building mechanical upgrades included the retrofitting of single large horsepower supply fans within our HVAC units with efficient multi fan wall units to reduce energy consumption.

Moving into the 2018 year, The College of New Caledonia will continue to move forward with its next phase of the major mechanical upgrades for the remainder of the HVAC systems, as well as Phase 2 of the Direct Digital Control system at our outlying campus facility in Quesnel.

The College looks forward with anticipation to the ongoing savings we will see from the completion of these initiatives, and will continue to actively explore all avenues available to further minimize our carbon footprint



In 2016, the College of New Caledonia began awarding contracts to begin its Major Mechanical Upgrade project. 2017 saw the initiation of the project, and the positive results in energy reduction were immediate. We at the College of New Caledonia look forward with anticipation to the long term benefits of this project as we move forward with confidence into the next phase throughout 2018.

The 2017 major mechanical upgrade project was very comprehensive, and as additional efficiency opportunities presented themselves during the project, such as heating and cooling coil replacements, we added them in. The results have presented reduced load requirements from our Central Heating and Cooling plant, reduced operating costs, and a stabilised comfortable environment for our building occupants.

In 2017 The College of New Caledonia also completed its exterior lighting upgrade project at the Prince George and BurnsLake Campuses. All exterior lighting, including parking lots, were upgraded to LED technology.



Upcoming Strategies for 2018



Implement phase two of the large scale mechanical upgrade. This will include retrofitting the remaining Air Handling equipment with new Fan Wall technology, and replacing all Heating and Cooling coils that have reached the end of their useful life.



| College of New Caledonia GHG Emissions and Offset for 2017 (tCO ₂ e) | |
|---|---------|
| GHG Emissions created in Calendar Year 2017 | |
| Total Emissions (tCO ₂ e) | 2363.00 |
| Total Offsets (tCO ₂ e) | 2363.00 |
| Adjustments to GHG Emissions Reported in Prior Years : | |
| Total Emissions (tCO ₂ e) | 0 |
| Total Offsets (tCO ₂ e) | 0 |
| Grand Total Offsets for the 2017 Reporting Year | |
| Grand Total Offsets (tCO ₂ e) | 2363.00 |



Success Update



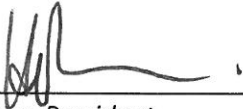
The College of New Caledonia is very pleased to see that over the past 3 years we have managed to reduce our Greenhouse Gas Emissions by a rewarding 27.78%. Hard work and dedication by all involved to date in taking giant steps to reduce our emissions, is always a reason to celebrate.

Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, *The College of New Caledonia* is responsible for arranging for the retirement of the offsets obligation reported above for the 2017 calendar year, together with any adjustments reported for past calendar years. The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy 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.

Through our Charter of Expectations and Commitments, the College of New Caledonia clearly outlines in its Priorities & Goals that the College will *"Demonstrate environmental stewardship in the management and development of our facilities, programs and services"*. This includes energy conservation and greenhouse gas emission reductions.

Executive sign – off



Henry Reiser, President

May 31, 2018

Date

Part 1: CNAR Survey

1. General Information

Name: Bob Bigelow

Contact Email: bigelowb@cnc.bc.ca

Organization Name: College of New Caledonia

Sector: Post Secondary

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

During 2017, did your organization take any of the following actions to support emissions reductions from buildings? (please select all that apply)

Performed energy retrofits of the organization's building(s); Built, or are building new LEED Gold or other "Green" buildings

If you selected "*Performed energy retrofits of the organization's building(s)*":

How many buildings were retrofitted?: 2

If you selected "*Built, or are building new LEED Gold or other "Green" buildings*":

How many new "Green" buildings?: 1

Did your Organization perform any retrofits during 2017? Please describe briefly:

Extensive lighting upgrades internally and externally. Internal florescent lighting retrofitted with LED fixtures. External parking lot lighting upgraded to LED.

Major upgrades to Air Handling Units in mechanical rooms that included the replacement of single large horsepower fans with energy efficient fan wall unit systems inclusive of intelligent valves to optimize performance.

2a. Stationary Sources (eg. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

Please briefly describe your organization's plans to continue reducing emissions from its stationary sources:

a) Over the next 1-5 years

Over the next five years the College of New Caledonia will continue with major mechanical upgrades in all mechanical rooms to optimize HVAC unit and building performance.

b) Over the following 6-10 years

3. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

During 2017, did your organization take any of the following actions to support emission reductions from its mobile sources? (please select all that apply)

Took steps to drive less than previous years

If you selected "*Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)*":

How many vehicles?:

If you selected "*Replaced existing vehicles with hybrid or electric vehicles*":

How many vehicles?:

3a. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

Please briefly describe your organization's plans to continue reducing emissions from its mobile sources:

a) Over the next 1-5 years

Over the next 5 years the College of New Caledonia visualizes optimal growth at our Community Campuses. Car pooling will become mandatory for travel. The College of New Caledonia has also introduced and expanded instruction through Digital Delivery Instruction (DDI) to reduce the need for travel.

b) Over the following 6-10 years

4. Supplies (Paper): Indicate which actions your PSO took in 2017:

During 2017, did your organization take any of the following actions to support emissions reductions from paper supplies? (please select all the apply)

None of the above

4) Supplies (Paper): Indicate which actions your PSO took in 2017: - Other? Please describe briefly: All printers in the organization have been defaulted to 2 sided printing, and all regularly posted materials are circulated electronically. o

If you selected "*Had a policy requiring the purchase of recycled content paper*":

State the required recycled content here (30%, 50%, 100%):

If you selected "*Had a policy requiring the purchase of alternate source paper (bamboo, hemp, wheat, etc)*", which type of alternate source paper did you use?

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

Develop and maintain a policy for the use of as much recycled paper or alternative paper sources as possible.

5. Other Sustainability Actions

a) Business Travel

During 2017, did your organization take any of the following actions to support emissions reductions from business travel? (please select all that apply)

None of the above

b) Education/Awareness

During 2017, did your organization have any of the following programs or initiatives to support sustainability education and awareness? (please select all that apply)

Support for professional development on sustainability (e.g. workshops, conferences, training); Supported or provided education to staff about the science of climate change, conservation of water, energy and/or raw materials

c) Other Sustainability Actions

During 2017, did your organization have any of the following programs or initiatives to support sustainability? (please select all that apply)

None of the above