

sustainable

selkirk college



MAY 2017

2016 Carbon Neutral Action Report – SELKIRK COLLEGE

This Carbon Neutral Action Report (CNAR) for Selkirk College covers the period January 1, 2016 to December 31, 2016. This report summarizes our 2016 emissions profile, the total offsets purchased to reach net-zero emissions, the actions we have taken in 2016 to reduce our GHG emissions and our plans to continue reducing emissions in 2017 and beyond.

By June 30, 2017, Selkirk College's final CNAR will be posted to our website at www.selkirk.ca

2016 GHG Reduction Actions:

In 2016, Selkirk College continued to work at the completion of several projects to reduce energy use and GHG emissions. A domestic hot water heating system used for providing hot water to the Cafeteria building at our Castlegar campus was replaced with an energy efficient, on-demand system.

At our Tenth St campus in Nelson, we completed a number of projects from recommendations of an energy audit of the campus completed the previous year. These included upgrading Building Controls and installation of variable speed drives on exhaust fans and air handlers.

Our Silver King Trades campus in Nelson is presently undergoing an \$18.9 M renovation and upgrade. Upon project completion, it is expected that energy use will be reduced by approximately 35% compared to current use. Renovation work began in 2016 with upgrades to the Welding and Millwright/Machine shop areas. Work on this capital upgrade project will continue into 2018.

At the Classroom Building at Silver King (outside the scope of the above mentioned project) a number of Building Control changes were completed to reduce energy use.

Several areas of the college had LED lighting upgrades completed.

Selkirk College has committed to investing in the Nelson Community Solar Garden where at least 200 solar panels will be installed to provide solar power to the Nelson Hydro grid. Energy produced from the solar array will offset the energy bills for our Tenth Street and Silver King campuses.

2017 GHG Reduction Strategies:

We will continue to work at completing other projects identified in our Tenth Street campus energy audit. These include installation of demand hood controlled ventilation for the kitchen hoods at the commercial kitchen located on this campus.

An energy audit will be completed for our Kootenay Studio Arts School located in Nelson. We will continue to replace energy inefficient lighting systems with LED lights including the lighting at our Castlegar campus gymnasium.

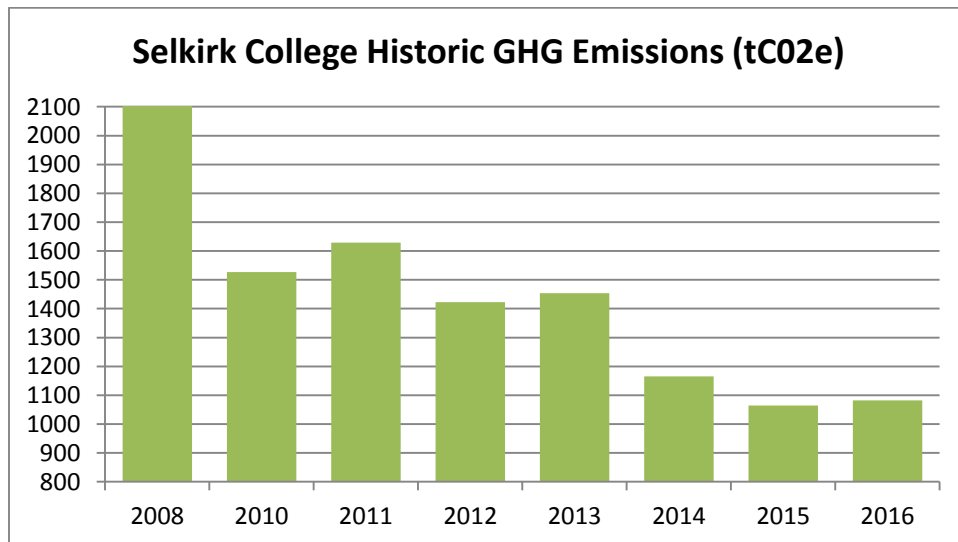
A successful “Sweater Day” held at the Castlegar campus the past winter resulted in a 25% reduction in natural gas consumption for the day by lowering room temperatures across the campus. We intend to expand Sweater Day to other campuses in the coming year.

Completion of construction work projects currently underway at our Silver King Trades campus will begin to show some improvements in energy use as building renovations are completed in a staged fashion. However, 2017 will be the busiest period of construction activity for this capital project and during this time, it is expected that energy consumption will increase, especially during the winter months.

GHG Reduction Performance:

Sustainability and the reduction of our ecological footprint is part of Selkirk College’s Vision statement. One of the College’s strategic directions is to have state of the art facilities not only for learning, but for a reduced environmental impact. Selkirk College is committed to reducing its GHG emissions by at least 33% by 2020 compared to 2007 emission levels and is proud of the fact that we were able to meet this target several years earlier.

Our emissions for 2016 increased slightly compared to 2015. We attribute most of this increased energy use to construction activities underway at our Silver King campus.



Emissions and Offsets Summary:

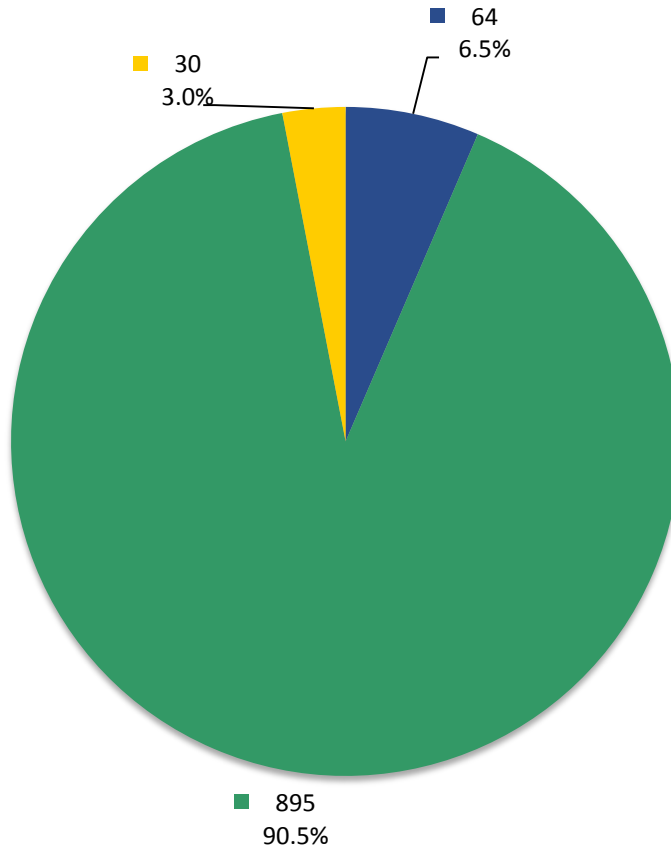
Selkirk College GHG Emissions and Offsets for 2016 (tCO2e)	
GHG Emissions created in calendar year 2016 (from SMARTTool Homepage)	
Total Emissions	989
Total Emissions for Offsets	987
Adjustments to GHG Emissions Reported in Previous Years (from SMARTTool Homepage)	
Total Emissions	95
Total Emissions for Offsets	95
Grand total Offsets for the 2016 Reporting Year (tCO2e)	1,082



May 30, 2017

Signature	Date
Gary Leier	VP College Services & CFO
Name (please print)	Title

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



Total Emissions: 989

- 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 2016 (Generated May 15, 2017 4:21 PM)

Total offsets required: **987**. Total offset investment: **\$24,675**. Emissions which do not require offsets: **2** **

*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

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Part One (external)

Contact Name(s):

Ron Zaitsoff

Organization Name:

Selkirk 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

- Performed energy retrofits of the organization's buildings.: If yes, how many buildings? 3
- Built, or are building new LEED Gold or other "Green" buildings.: If yes, how many buildings? 1

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

Older, inefficient heating systems used for space and hot water heating will be replaced with energy efficient systems. Building controls will be optimized to reduce space heating/ cooling and lighting energy where possible. Lighting systems will be upgraded to LED technology to replace energy inefficient lighting.

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).: If yes, how many vehicles? 2
-

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

A review of current electric vehicle suitability for use within the maintenance department will be completed.

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

-
- Policy requiring the purchase of recycled content paper.: If yes, state % of recycled content (eg 30%, 100%) 100%
-

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

Group printers with default 2-sided printing will continue to be installed to replace individual office printers.

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

-
- Green, Sustainability or Climate Action Team
 - 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

-
- A water conservation strategy which may include a plan or policy for replacing water fixtures with efficient models
 - 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
-