



2015 Carbon Neutral Action Report

Camosun College

Declaration Statement

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

By June 30, 2016 Camosun College's final *Carbon Neutral Action Report* will be posted to our website at <http://camosun.ca/sustainability/our-commitment/index.html> .



Actions towards Carbon Neutrality in 2015

- **Buildings**

- Completed a BC Hydro Continuous Optimization program at Interurban Campus, included a Building Automation System and HVAC hardware and software programming upgrade
- Boilers in the Fisher building were replaced with Viessmann condensate boilers
- Put optimization schedules in all buildings for Air Handling Units (AHUs)
- Replaced all outside lamp posts at Lansdowne with LED lights
- Continue to replace faucet fixtures, urinals, and toilets with energy efficient models when current equipment and appliances reach their end of life.
- Major mechanical upgrade on Fisher, replacing end of life motors, pumps, hot water tanks, CC panels, controls, dampers, AHUs, etc.
- Built a LEED Gold building
 - The Centre for Trades Excellence & Innovation building at Interurban campus is a new 7, 432 square meter building that was built to LEED Gold environmental standards and meets BC's Wood First policy.
 - Learn more about the CTEI building [here](#)



- **Fleet**
 - Streamlined regular “Courier/ Receiver” routes and implemented a “minimum travel, maximum cargo” efficiency program
- **Paper**
 - Camosun’s Print Shop continues to use 100% recycled paper for letter and legal size copy paper – only the specialty papers are the exception as a 100% option is not available in many cases. Also, all multifunction devices (copier/ printer/ scanner) on campus have been set up for double sided printing
 - Camosun continues to seek out ways in which it can reduce its printing by making applicable resources and departments “paperless.” For example, efforts to reduce office printing have resulted in all of Camosun’s reports and documents being available online. Receipts handled by finance, including parking and registration receipts have gone paperless. The bookstore offers eBook options as well.



Other Actions Taken to Reduce Emissions and Improve Sustainability in 2015

- **STARS**

- Camosun College has been a proud member of the Association for the Advancement of Sustainability in Higher Education (AASHE) since 2013. In 2015, the college participated in the Sustainability Tracking, Assessment & Rating System program established by AASHE, earning a rating of Silver in recognition for its sustainable achievements.
- The STARS program is a fantastic tool that helps Camosun identify, track and improve our sustainable practices and the college will be using it as a guide to advance its sustainability goals.
- Learn more about Camosun's STARS report [here](#).

- **Camosun Express**

- Camosun College offers a free shuttle service, known as the Camosun Express, to staff and students that provide service between the two campus locations. Over 10,000 students and staff were transported on the shuttle this Academic year.



- **ATD Program**

- This year an Alternative Transportation Dividend Program (ATD) was offered to all Faculty and Exempt Staff. The ATD program incentivizes these staff members to forgo their parking permits in order to receive benefits such as free secure bike locker rentals, locker rentals, towel service, Camosun subsidized BC Transit Propass and access to the emergency ride home service.

- **Sustainability Week 2015**

- The Office of Environmental Sustainability hosted a free Sustainability Week event that was open to all staff and students. The event included a variety of sessions, workshops and keynote speakers that were focused on sustainability at Camosun College, specifically incorporating sustainability in the curriculum.



Plans to Continue Reducing Greenhouse Gas Emissions in 2016

- **Buildings: Measurement and verification Building Energy Use and Building Upgrades**
 - The CTEI building will be monitored for Natural Gas and Hydro usage quarterly to ensure it is performing to specifications in relation to the design of the system.
 - A review process will occur of the Energy auditing software system that will provide virtual metering of all HVAC and associated controls.
 - Camosun has applied for funding for the replacement of an end-of-life, inefficient cooling plant with an energy efficient, quiet, state of the art technology cooling plant. This project proposes to replace existing screw chillers with variable speed chillers for increased energy efficiency and reduced noise levels.
 - Planned replacement of the boilers in the Jack White Building with more efficient versions
- **Cut the Carbon Campaign**
 - We will continue our “Cut the Carbon Campaign” which includes Nasty November Bike Challenge (November); RideShare Month (January); Energy Awareness Month (February), which includes Sweater Day; Walk to Camosun Week (March), and finally, Bike To Work Week in May.
- **Office Waste Collection**
 - Facilities Services is continuing the process of finding ways to increase diversion rates. Actions towards these goals will continue in 2016.
- **Water Audit**
 - Facilities services, in collaboration with the Office of Environmental Sustainability and the Capital Regional District have the intention of conducting a water audit at Camosun College Lansdowne. The audit will help to benchmark water usage at the college and guide the creation and implementation of a water management plan.
- **Sustainability Symposium**
 - The Office of Environmental Sustainability is hosting a Sustainability Symposium in May 2016. This free event, open to all faculty and staff members at Camosun College will include in-house faculty projects through to region-wide initiatives, aiming to bring a lineup of presenters that will introduce the Camosun Community to sustainability in our region. Keynote presenters include Camosun’s Sherri Bell and Victoria Mayor Lisa Helps. The day ends with the launch of Camosun’s Na’tsa’maht Indigenous Plant Garden.
- **Faculty GHG project**
 - Faculty member, Becky Mason (School of Business, Economics), is currently completing a GHG course at Harvard University. She is using Camosun College as a case study, looking at greenhouse gas emissions which include Scope 1, 2 & 3.

Emissions and Offset Summary Table

Camosun College GHG Emissions and Offset for 2015 (tCO₂e)	
GHG Emissions created in Calendar Year 2015: 1608 TCO₂E	
Total Emissions (tCO ₂ e)	1608 tCO ₂ e
Total Offsets (tCO ₂ e)	1607 tCO ₂ e
Adjustments to GHG Emissions Reported in Prior Years:	
Total Emissions (tCO ₂ e)	2 tCO ₂ e
Total Offsets (tCO ₂ e)	2 tCO ₂ e
Grand Total Offsets for the 2015 Reporting Year:	
Grand Total Offsets (tCO ₂ e)	1609 tCO ₂ e

GHG emissions increased slightly this year due to the construction of the new CTEI building, which required a very high consumption of electricity and fuel for heating. The CTEI building project is now complete and consumption is back to regular levels. Combined with our ongoing efforts to reduce GHG emissions at Camosun, we expect our emissions to decrease next year.

Retirement of Offsets:

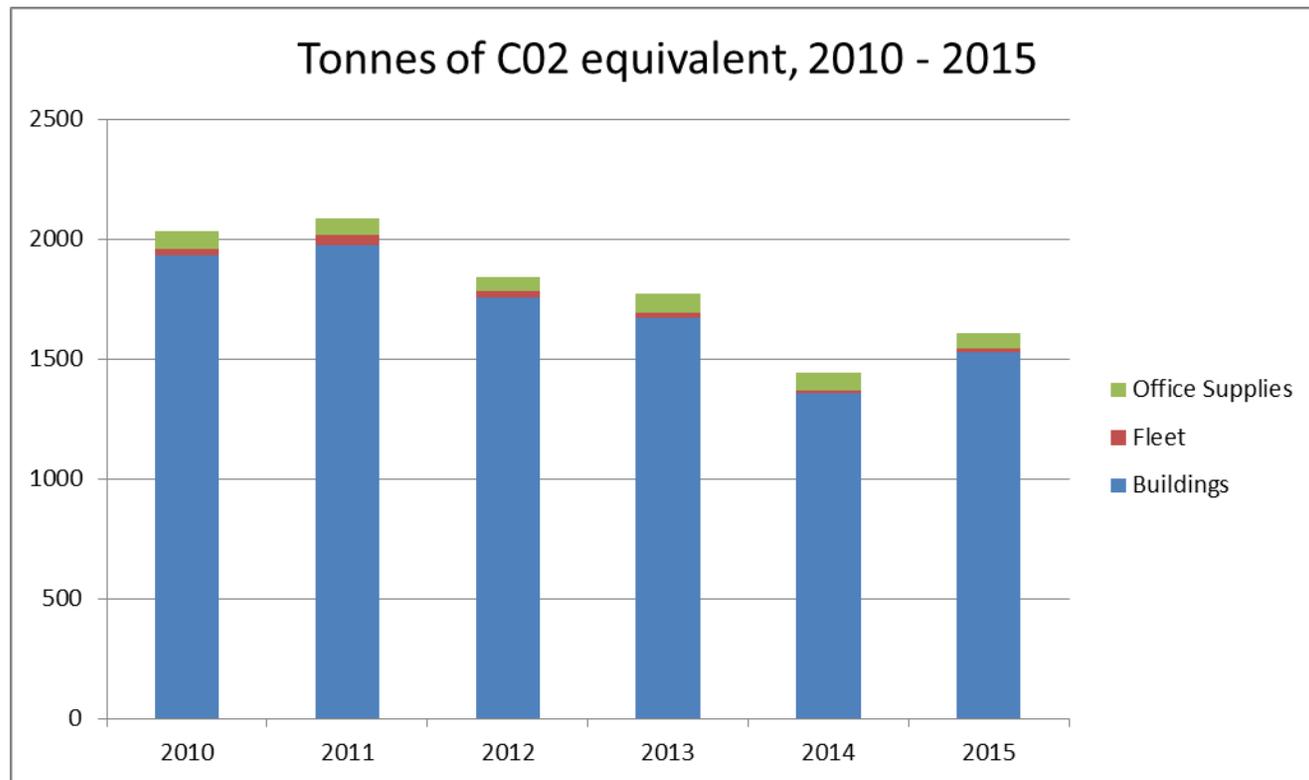
In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, *Camosun College* is responsible for arranging for the retirement of the offsets obligation reported above for the 2015 calendar year, together with any adjustments reported for past 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 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:

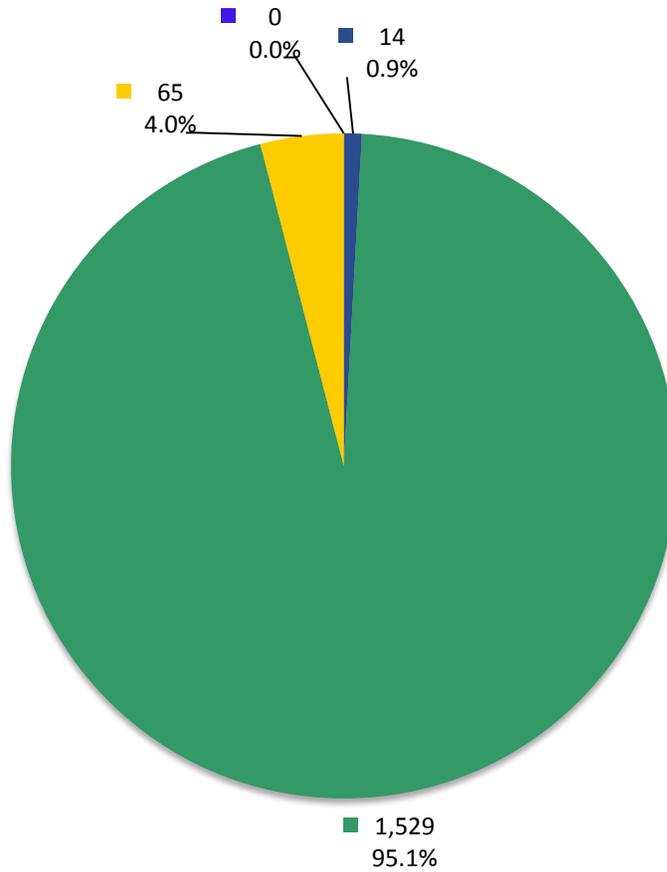
May 27, 2016

Signature	Date
Shane Busby	Vice President, Administration
Name (please print)	Title

GHG Emission Source Data, 2010-2015 (tCO2e)						
SOURCE	2010	2011	2012	2013	2014	2015
Buildings	1932	1978	1758	1671	1359	1529
Fleet	28	39	28	24	12	14
Office Supplies	75	72	57	77	72	65
Total	2034	2084	1843	1771	1442	1608



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



Total Emissions: 1,608

- 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 2015 (Generated May 25, 2016 10:42 AM)

Total offsets required: **1,607**. Total offset investment: **\$40,175**. Emissions which do not require offsets: **0** **

*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:

Camosun 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:

No

If Yes, please describe:

(No response)

Undertook evaluations of building energy use:

Yes

Performed energy retrofits on existing buildings:

Yes

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

Yes

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

Put optimization schedules in all buildings for AHU's. Replaced all outside lamp posts at Lansdowne with LED lights. Continue to replace faucet fixtures, urinals and toilets with energy efficient models. Did a major Mechanical upgrade on Fisher, replacing end of life motors, pumps, hot water tanks, MCC panels, controls, dampers, AHU's, etc.

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:

Streamlined regular "Courier/Receiver" routes and implemented a "minimum travel, maximum cargo" efficiency program

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:

Camosun's Print Shop continues to use 100% recycled paper for letter and legal size copy paper - only the specialty papers are the exception as a 100% option is not available in many cases. Also, all MFD's on campus have been setup for double sided printing.

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:

Print Services at Camosun College is committed to using recycled products whenever possible for all of its services. Across the college, we have been using and supplying 100% recycled copy paper for several years (due in large part to a 2006 referendum held by the Student Society in which students each pay \$0.15 per month to offset the cost of recycled paper). Today, 94% of Camosun College's office paper is 100% recycled content. Furthermore, 100% of Camosun printers are set to print double-side as default. Camosun continues to seek out ways in which it can reduce its printing by making applicable resources and departments "paperless". For example, efforts to reduce office printing have resulted in all of Camosun's reports and documents being available online. Receipts handled by finance, including parking and registration receipts have gone paperless. The bookstore offers ebook options as well.

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:

Yes

Other:

Camosun College offers a free shuttle service, known as the Camosun Express, to staff and students that provide service between the two campus locations. Staff are encouraged to use this shuttle to travel to meetings that are held at the opposite campus. Additionally, this year an Alternative Transportation Dividend Program was offered to all Faculty and Exempt Staff. The ATD program incentivizes these staff members to forgo their parking permits in order to receive benefits such as free secure bike locker rentals, locker rentals, towel service, BC Transit Propass program and access to the emergency ride home service. Camosun intends to expand this program to be offered to all regular staff in the future.

Education Awareness

Have a Green/Sustainability/Climate Action Team:

Yes

Supported green professional development:

(e.g. workshops, conferences, training)

Yes

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

Yes

Other:

Hosted a Sustainability Week that was free and open to all students and staff. The event included a variety of sessions, workshops and keynote speakers that were focused on sustainability at Camosun College, specifically, incorporating sustainability in the curriculum.

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:

No

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.)

No

Incorporated lifecycle costing into new construction or renovations:

Yes

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

(No response)