



2016 Carbon Neutral Action Report

Camosun College

Declaration Statement

This Carbon Neutral Action Report for the period January 1st, 2016 to December 31st, 2016 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2016 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2017 and beyond.

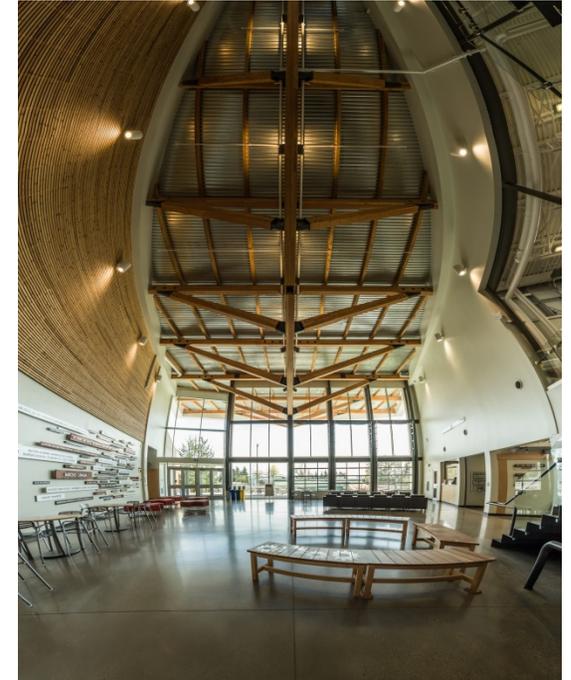
By June 30, 2017 *Camosun College's* final *Carbon Neutral Action Report* will be posted to our website at <http://camosun.ca/sustainability/our-commitment/index.html>.



Actions Towards Carbon Neutrality in 2016

- **Buildings**

- Paul building boiler replacement using Viessmann Boiler with controls package, as well as second floor President's area renovation including new LED lighting.
- Fisher building first floor window replacement project providing greater insulation.
- Technologies building 259 window film applied to exterior windows preventing ultraviolet light from entering the computer lab.
- Technologies\CBA building chiller replacement project – variable speed, energy efficient and quieter equipment.
- LACC building chiller replacement project - variable speed, energy efficient and quieter equipment.
- Jack White building compressor & airline replacement, as well as replacement of two AHUs on the roof – fan motors and controls are more efficient, new dampers and less air loss.
- Lansdowne Library DRC 152 renovation including new LED lighting.
- Lansdowne campus had High Voltage repairs\upgrades for the Ewing, Dawson, and Dental building transformers – upgrades increase efficiency and life of equipment.
- Facilities Services, in collaboration with the Office of Environmental Sustainability and the Capital Regional District conducted a water audit of the Lansdowne Campus. The report information will be used to create and implement a water systems improvement plan.



- **Fleet**

- Camosun continues to use its streamlined regular “Courier/Receiver” routes and “minimum travel, maximum cargo” efficiency program.

- **Paper**

- Camosun embarked on preliminary arrangements for a Multi-Functional Device (i.e. printers/copiers/scanners) program via the *BC Public Post-Secondary Purchasing Consortium* to refresh the college's fleet with more energy efficient devices, as well as better paper consumption tracking systems, and reduction in total number of devices along with higher frequency of devices with scanning ability for digital archiving. In addition, the proposed vendor program will provide recycling services for ink/toner bottles/cartridges.

- Camosun’s Print Shop continues to use 100% recycled paper for letter and legal size copy paper – specialty papers are the only exception, as 100% options are only available in 20% of cases. Also, all multifunction devices (i.e. 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.



Other Actions Taken to Reduce Emissions and Improve Sustainability in 2016

- **Sustainability Plan Refresh**
 - The college has recently developed a new [Strategic Plan 2016-2021](#). A great opportunity presents itself to greater align the future direction of sustainability at Camosun with the college's mandate, as represented in Corner Post 4 of the new Strategic Plan – “Sustainability for the Environment & Society”, for which the primary goal is to “provide leadership and support on key social, environmental, and economic issues impacting the college”. The Office of Sustainability has embarked on a Sustainability Plan refresh project in 2016, as our current [Camosun College Sustainability Plan 2014-2017](#) is winding down. The new Sustainability Plan will also include a refresh/expansion of Camosun's Sustainability Council, with particular focus on increasing student representation and participation. The Sustainability Plan refresh is anticipated be completed in 2017.
- **Student Engagement**
 - Representatives from the Office of Sustainability and Department of Ancillary Services visited classrooms to speak directly to students about sustainability. The Sustainability Office also worked with instructors to develop and execute projects, facilitated by internal funding sources such as the college's *Creativity & Innovations* program, that infuse sustainability into everyday learning. The Camosun College Student Society Sustainability Day event was held in April at the Interurban campus, which highlighted sustainability projects taking place at Camosun, and celebrated sustainable businesses and initiatives in our region.
- **Sustainability Symposium 2016**
 - The Office of Environmental Sustainability hosted a Sustainability Symposium in May of 2016 at the college's Lansdowne campus. This free event, open to all Camosun faculty and staff, featured numerous talks on topics ranging from sustainable business practices to local funding initiatives. Speakers included Camosun President Sherri Bell and Victoria's Mayor, Lisa Helps. The day ended with the official opening of Camosun's Indigenous Plant Garden.
- **Camosun Express**
 - Camosun College offered a free shuttle service, known as the Camosun Express, to staff and students that provides transportation service between the two campus locations. Over 10,000 students and staff were transported on the shuttle in the 2016 Academic year (September to April).
- **ATD Program**
 - The Alternative Transportation Dividend Program (ATD) continued in 2016, and 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, subsidized BC Transit ProPass, and access to the emergency ride home services. The overall aim of the ATD program is to encourage individuals to use alternate forms of commuting methods (i.e. cycle, public transit) in lieu of single occupancy vehicle transport.

- **Cut the Carbon Campaign**

- Camosun continued the “Cut the Carbon Campaign”, which included Energy Awareness Month (February); Bike to Work Week (May), and finally, Nasty November Bike Challenge (November).

- **Contractors on Campus**

- Although the food services contractor - Aramark - is a separate entity from the college, it is worth noting that the contractual agreement includes a focus on sustainable initiatives as they pertain to dining establishment operations. Some examples of such initiatives include purchase and provision of sustainable, locally grown/raised and socially responsible products; Green Seal certified cleaning products; compostable containers, cutlery, and coffee cups; and a food waste management program. Aramark received the 2016 Canada’s Greenest Employer Award in recognition of their efforts in creating a culture of environmental awareness.
- Camosun joined a Master Agreement for Vending Services through the *BC Public Post-Secondary Purchasing Consortium*; this agreement requires the vendor to update their systems and equipment in order to implement sustainable actions such as power smart equipment, motion detecting and low power consumption, as well as remote monitoring of equipment - lessening frequent visits to the campus.

- **Other Sustainable Actions**

- Promotion of Earth Hour, sponsorship of the CRD’s “Ready, Set, Solve Challenge”, and the bi-annual Modal Split analysis (Lansdowne and Interurban campuses) conducted in October to determine how college community members are getting to campus – results inform future planning for reduction of single occupancy vehicles at Camosun. In addition, a Human Resources run wellness program called “Healthy Together!” organized a “Walking 4 Wellness” initiative in November.



Plans to Continue Reducing Greenhouse Gas Emissions in 2017

- **Buildings**

- Construction of a new 89,000 square foot Health building has commenced at the Interurban campus in May 2017, which will be built to LEED Gold standards. Learn more about the Health building at <http://camosun.ca/about/health-building/>.
- Jack White building renovations (east end) are ongoing with end-of-summer completion expected. The work will include upgraded LED lighting, as well as new and more efficient electrical and mechanical systems.
- Fisher Building Envelope Remediation Project - existing stucco cladding will be removed from the building and replaced with exterior insulation, and metal composite paneling. The new exterior insulation is in addition to the existing batt insulation inside the walls, which will greatly enhance the energy efficiency of the building based on ASHRAE 90.1 (2010) standards.
- Review of the CRD water audit report (Lansdowne campus) to identify areas for improvement, and devise a plan of action for upgrading of related infrastructure/systems.
- Potential of conducting a CRD water audit at Camosun's Interurban campus. Pending receipt and review of the 2016 Lansdowne audit report, which will provide scope of the current situation, areas for improvement, and direction towards avenues of action.

- **Sustainability Plan Refresh**

- The Office of Environmental Sustainability will refresh and expand on the college's Sustainability Council. The council will consist of students, faculty and support staff, and will have the goal of aligning sustainability efforts with the college's mandate (represented in Corner Post 4 - "Sustainability for the Environment & Society") through planning and promotion of sustainable practices on campus. The new Camosun Sustainability Plan is expected to be finalized in 2017.

- **Multi-Functional Device Program**

- Full execution of the Multi-Functional Device program will take place in 2017. Improved tracking systems and vendor system audits will provide further insight on opportunities for improvement and efficiency of copying/printing equipment and systems. Camosun's Information Technology Services, Printshop and Bookstore are continuously looking for viable ways to improve the college's sustainable practices.

- **Student Engagement**

- Representatives from the Office of Sustainability will continue to engage with students in and out of the classroom and assist professors in development and execution of sustainability projects, as well as working alongside the Student Society and their Sustainability Director.

- **Affiliations**
 - Camosun continues to be a proud member of the Association for the Advancement of Sustainability in Higher Education (AASHE). In early 2017, Camosun became a member of the Canadian College and University Environmental Network.
- **Cut the Carbon Campaign**
 - Camosun will continue its “Cut the Carbon Campaign”, which includes, but is not limited to, Nasty November Bike Challenge, Bike to Work Week in May, and “Healthy Together!” Sustainability month in April. It is anticipated that other initiatives and opportunities will present themselves in 2017 as the new Sustainability Plan and Council take effect.
- **Office Waste Collection**
 - Facilities Services, in collaboration with the Office of Sustainability, is continuing the process of finding ways to increase waste diversion rates. In April of 2017, Camosun’s Manager of Sustainability attended a Post-Secondary Recycling Forum at Douglas College, where members of BC’s related institutions came together to share their challenge and success stories, as well as imagining new paths forward. Actions towards improvement of waste/recycling at Camosun will continue in 2017.
- **Other Sustainable Actions**
 - Camosun’s “Healthy Together!” program team conducted a Gardening Workshop in April, where participants learned about growing their own food, as well as interviewing Kim Benson on veganism and the effects on the environment for pod-cast release.



Emissions and Offset Summary Table

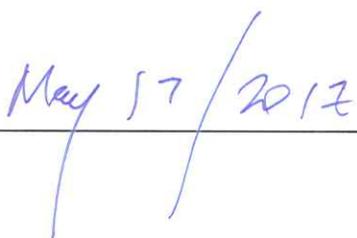
Camosun College GHG Emissions and Offset for 2016 (tCO₂e)	
GHG Emissions created in Calendar Year 2016: 1586 TCO₂E	
Total Emissions (tCO ₂ e)	1586 tCO ₂ e
Total Offsets (tCO ₂ e)	1585 tCO ₂ e
Adjustments to GHG Emissions Reported in Prior Years:	
Total Emissions (tCO ₂ e)	1 tCO ₂ e
Total Offsets (tCO ₂ e)	1 tCO ₂ e
Grand Total Offsets for the 2016 Reporting Year:	
Grand Total Offsets (tCO ₂ e)	1586 tCO ₂ e

Camosun College's greenhouse gas (GHG) emissions calculations include emissions from both the Lansdowne and Interurban campuses. The total GHG emissions for the College is 1586 tCO₂e for the 2016 calendar year. From 2015 to 2016, Camosun saw a 1.4% reduction in total emissions and a 22% reduction from 2010 (baseline used as start of Camosun Energy Project). Results from 2014 to 2015 showed an 11.5% increase in emissions (due to construction of the CTEI building), and it is anticipated that 2016 to 2017 emissions comparison may also reflect an increase due to construction of the new Health building at the Interurban campus.

Retirement of Offsets:

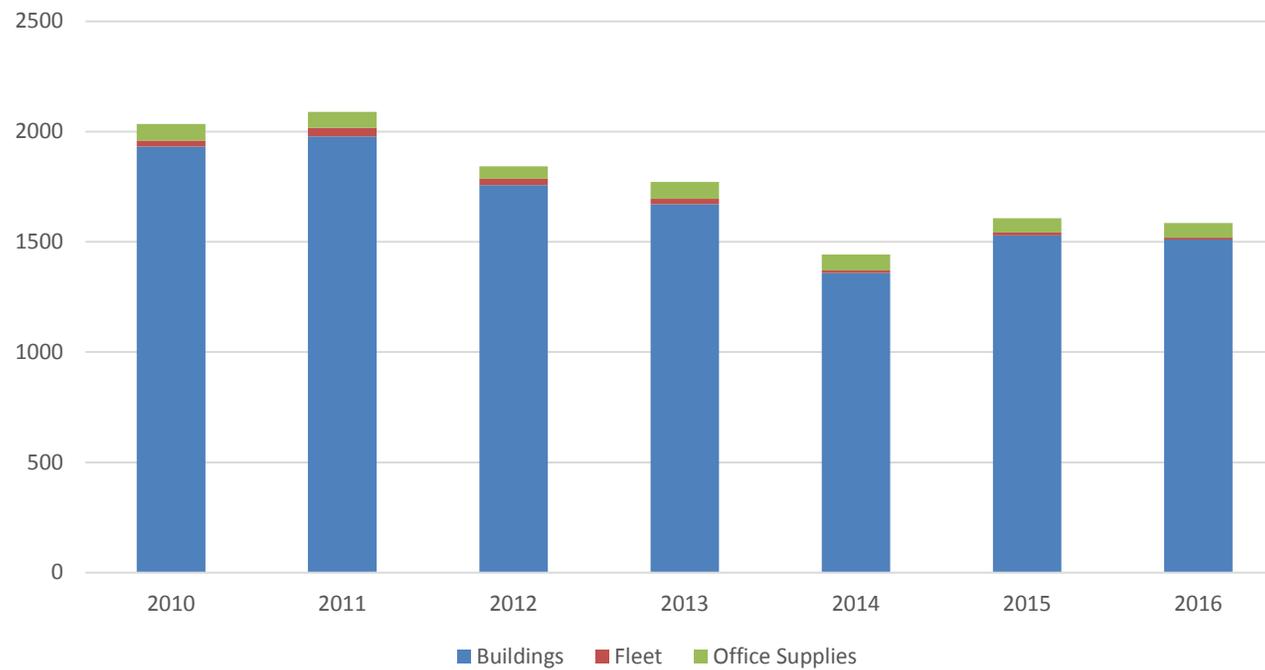
In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, *Camosun College (the Organization)* is responsible for arranging for the retirement of the offsets obligation reported above for the 2016 calendar year, together with any adjustments 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 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:

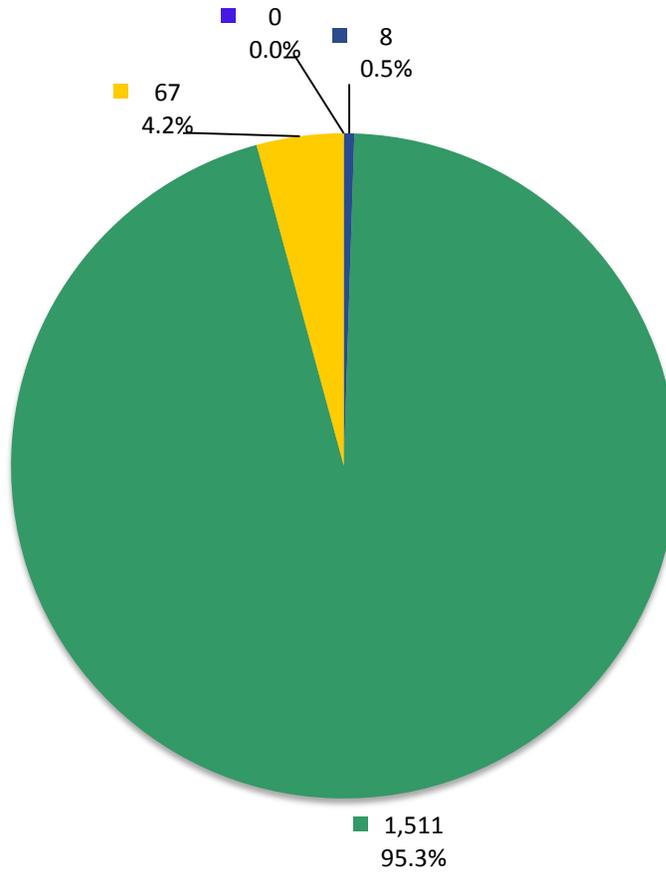
	
Signature	Date
Shane Busby	Vice President, Administration
Name (please print)	Title

GHG Emission Source Data, 2010-2016 (tCO2e)							
	2010	2011	2012	2013	2014	2015	2016
Buildings	1932	1978	1758	1671	1359	1529	1511
Fleet	28	39	28	24	12	14	8
Office Supplies	75	72	57	77	72	65	67
Total Emissions	2034	2084	1843	1771	1442	1608	1586

Tonnes of CO2 Equivalent, 2010-2016



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



Total Emissions: 1,586

- 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 4:27 PM)

Total offsets required: **1,585**. Total offset investment: **\$39,625**. 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.

2016 Carbon Neutral Action Report Survey

Part One (external)

Contact Name(s):

Jonathan Siqueira

Organization Name:

Camosun 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.: Approximately 8-9 buildings.
- Other actions? Please describe briefly.: Camosun College, in collaboration with the CRD (Parks & Environmental Services Department), conducted a water audit of the Lansdowne campus.

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

- *Continue to identify opportunities and secure funding for building and systems related upgrades (i.e. electrical/mechanical systems, building renovations/retrofits).*
- *Continue to replace faucet fixtures, urinals and toilets with energy efficient models.*
- *CRD conducted water audit of Lansdowne campus in 2016– report from CRD with recommendations pending, which will inform future planning and action.*
- *New constructs (Health building) to meet LEED Gold certification level.*

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

- 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.

Continuous use of streamlined regular "Courier/Receiver" routes and "minimum travel, maximum cargo" efficiency program.

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.: Embarked on preliminary arrangements to implement a Multi-Functional Device (i.e. printers, copiers, scanners) program, via the BC Public Post-Secondary Purchasing Consortium, to refresh the college's fleet with more energy efficient devices. The MFD change will also provide better paper consumption tracking systems, and reduction in total number of devices along with higher frequency of devices with scanning ability for digital archiving. In addition, the vendor program will provide recycling services for ink/toner cartridges/bottles.
-

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

- *The Multi-Functional Device program is in its final stages of organization (determining number of devices and optimal locations) and will be executed in 2017. Improved tracking systems and vendor system audits will provide further insight on areas/opportunities for improvement and efficiency of copying/printing equipment and systems.*
- *Camosun's Print Shop continues to use 100% recycled paper for letter and legal size copy paper. Only specialty papers are the exception, as 100% options are not available in many cases - currently at approximately 20% utilization of 100% recycled material.*
- *Print Services at Camosun College is committed to using recycled products whenever possible for all of its services. Furthermore, 100% of Camosun printers are set to print double-sided 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 e-book options as well.*

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 alternative travel for business (e.g. bicycles, public transit, walking)
-
- Encouraged or allowed teleworking or working from home
-
- Other, please describe briefly: Camosun College continued provision of a free intercampus shuttle service (between Lansdowne and Interurban campuses) to students and staff, known as the Camosun Express. Staff are encouraged to use this shuttle to travel to meetings that are held at the opposite campus. In addition, the Alternative Transportation Dividend Program, offered to all Faculty and Exempt Staff, also continued in 2016. The ATD program incentivizes eligible 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 discount, and access to an emergency ride home service program.

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)
-
- Supported or provided education to staff about the science of climate change, conservation of water, energy and/or raw materials
-
- Other, please describe briefly: Sustainability related educational programming and course work – i.e. Environmental Technologies program (recognized by AASHE in the 2015 STARS report), sustainability elements in Economics, Marketing, and Anthropology courses, among others (i.e. waste/recycling/composting). Guest speaker engagements for various functions/classes that touch on aspects of sustainability in course work, events, and International Student Orientation sessions. Provision of internal data (i.e. waste audits) to instructors and students upon request, which is generally related to course work, as well as special projects. The Office of Sustainability organized and hosted the college's first Sustainability Symposium, which was delivered to faculty and staff in May 2016. The Symposium provided guests with insights from a number of speakers, including keynotes from Camosun President Sherri Bell and Victoria Mayor Lisa Helps. Topics ranged from sustainable business practices to local funding initiatives. Other external speakers' organizational representations included Monk Office, Food Eco-District/Synergy Enterprises, Vancity, and Canadian Passive House Institute West.

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