



2014

Carbon Neutral Action Report



Executive Summary

Camosun has reduced greenhouse gas emissions in 2014 by 18.67% and has achieved a 29% reduction compared to 2010 numbers.

The College has made significant strides to reduce emissions from buildings in 2014 through retrofits of boilers and windows and with our B.C. Hydro Continuous Optimization project, which concluded in 2014. As part of this project and in conjunction with commensurate technology upgrades, we have begun to closely monitor our building energy use at Interurban Campus, and respond with energy saving actions.

In 2014, construction started on our new LEED Gold Centre for Trades Education and Innovation. This project also includes re-purposing the Jack White/John Drysdale Trades Buildings towards a Sustainable Construction and Renewable Energy Innovation Centre, housing Electrical, Pipe Trades, and future Renewable Energy programs.

Camosun has continued to work with the campus community to reduce emissions through behaviour change activities including our “Cut the Carbon Campaign” – details of which are highlighted in this report.

Declaration Statement

This *Carbon Neutral Action Report* for the period January 1st to December 31st, 2014 summarizes our emissions profile, the amount of offsets purchased to reach net zero emissions, the actions we

have taken in 2014 to reduce our greenhouse gas emissions, and our plans to continue reducing emissions in 2015 and beyond.

By June 30, Camosun College’s final *Carbon Neutral Action Report* will be posted to our website at www.Camosun.ca/Sustainability

<i>Camosun College</i> GHG Emissions and Offsets for 2014	
GHG Emissions created in Calendar Year 2014	
Total Emissions (tCO₂e)	1443
Total Offsets (tCO₂e)	1442
Adjustments to GHG Emissions Reported in Prior Years	
Total Emissions (tCO₂e)	11
Total Offsets (tCO₂e)	12
Total Emissions for Offset for the 2014 Reporting Year	
Total Offsets (tCO₂e)	1454

Dr. Tom Roemer
VP Strategic Development

May 22, 2015

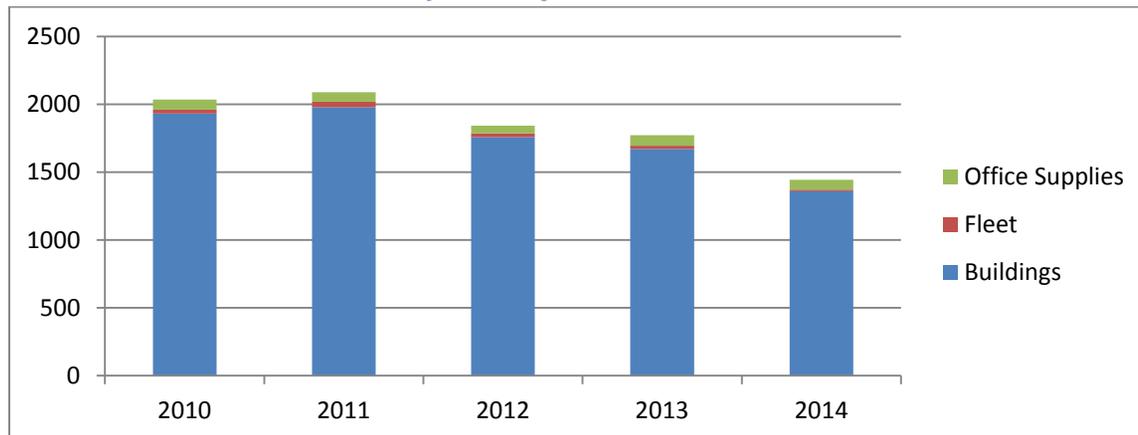
2014 Greenhouse Gas Emissions

Camosun College’s greenhouse gas (GHG) emission calculations include emissions from both the Lansdowne and Interurban campuses. The total GHG emissions for the College are 1442 tCO₂e for the 2014 calendar year. From 2013 to 2014, Camosun saw an 18.58% reduction in total emissions, and a 29.11% reduction from 2010 (*baseline used as start of Camosun Energy Project*).

A breakdown of emissions by source and comparison from 2010 levels is provided below.

SOURCE	2010 tCO ₂ e	2011 tCO ₂ e	2012 tCO ₂ e	2013 tCO ₂ e	2014 tCO ₂ e	Percent Change (2013-2014)
Buildings	1932	1978	1758	1671	1359	(18.67%)
Mobile Combustion Fleet	28	39	28	24	12	(50.00%)
Office Supplies	75	72	57	77	72	(6.49%)
Carbon Neutral Exempt	-1	-1	-1	-1	-1	
Total Emissions	2034	2084	1843	1771	1442	(18.58%)
		<i>-Prior Year adjustment (-4 tCO₂)</i>		<i>+Prior Year adjustment (19 tCO₂)</i>		

Tonnes of CO₂ equivalent, 2010 - 2014



Actions toward Carbon Neutrality in 2014

- **Buildings.** In 2014, Camosun saw nearly a 19% reduction in emissions from buildings. One of the biggest contributing factors to this was the detailed energy analysis, monitoring and management of buildings at Interurban (see detail below). Other actions Camosun took to reduce GHG emissions for buildings include:
 - At Lansdowne:
 - The boiler in Fisher building was replaced with high efficiency Condensate Boiler
 - Windows in the Fisher building were replaced with high efficiency windows
 - At Interurban:
 - Camosun concluded the BC Hydro Continuous Optimization Program at the Interurban Campus. Included in this was a building automation system (Direct Digital Control (DDC)) and HVAC hardware and software/programming upgrade to the five main buildings. All buildings have Power Metering Equipment that are now interfaced with the DDC system in five major buildings. These buildings are part of a monthly energy report which reviews usage and provides actions for greater energy efficiency for the next month.
 - We began construction on our 7,432 square metre Centre for Trades Education and Innovation (CTEI) which will be built to LEED GOLD standards and will house a marine and metal trades program.
 - Contributing to building energy consumption at both campuses, both Print Services and the Information Technology Department (ITS) have stipulated that new machinery must be Energy Star compliant.
- **Fleet.** In 2014, Camosun saw its fleet emissions reduced by half. Camosun has a small fleet and, in 2014, two of our most used vehicles for receiving purposes were replaced with smaller, more efficient models.
- **Paper.** 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. Efforts to shift from paper-based to digital copies of forms are being made across departments. For example, in 2014 the bookstore cashier at Interurban reduced its paper usage by switching over the way it processed receipts. Additionally, through Print Services, all production waste is evaluated for its reusable possibilities. Reusable items may be repurposed for scratch pads and provided to staff and students free of charge, and paper from non-confidential printing error is shared with Childcare Services for their use as scratch /colouring paper.

Other Actions to Reduce Emissions and Improve Sustainability in 2014

- **Sustainability Plan.** Camosun finalized its first three-year *Sustainability Plan (2014 - 2017)*. The plan will guide Camosun's institution-wide sustainability approach for the next three years. It focuses on integrating sustainability into all teaching and learning, reducing its environmental impacts of the college's operations and governance (including energy conservation and carbon reduction), and engaging students in real-life experiences in sustainability innovation.
- **The 2014 "Cut the Carbon" Campaign** focused on educating staff, students and faculty on ways they can help the college reduce its environmental impact and inspire them to participate in sustainability initiatives on campus including alternative transportation, recycling and energy conservation. Activities included:
 - Launch and implementation of the Camosun Express, a convenient shuttle service operating between the West Shore communities, Interurban, and Lansdowne campuses. Since then, the shuttle has been reliably delivering faculty, employees, and students in an environmentally friendly and efficient way to where they need to go!
 - Recycling Heroes Month: Rampage our Chargers Athletics mascot found recycling heroes throughout the college either reusing their mugs, recycling their paper and plastics, and composting their food scraps and compostable plates and cutlery. Informative tabling demonstrations and prizes were also part of this month.
 - The Nasty November Cycling Challenge marked the fourth year of this initiative to motivate staff and students to ride their bikes as a carbon-friendly travel mode. Rain and wind failed to deter 97 of cyclists from riding more than 9,000 kilometres throughout the month as part of the challenge.
- **Transportation biannual modal split.** The third biannual modal split analysis was completed October 2014, providing the college with essential information to assess the achievement of alternative transportation objectives. Most notable was an increase by 5% of transit mode share from the previous count.
- **Waste reduction.** A multi-year waste reduction project was initiated to increase the college's waste diversion rates. As part of this project, waste audits, education, outreach and a management plan will be developed.

Plans to Continue Reducing Greenhouse Gas Emissions in 2015

- Buildings at Lansdowne have Power Meter Equipment that are interfaced to the DDC system. Currently energy reports are not run on the buildings at the Lansdowne Campus, but this will be initiated in 2015.
- LED lighting upgrade of all parking and pathway lighting at Lansdowne Campus
- We will continue our “ Cut the Carbon Campaign” which includes RideShare Month (January); Energy Awareness Month (February), which includes Sweater Day; Walk to Camosun Week (March), and finally, Bike To Work Week in May.
- Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking Assessment and Rating System (STARS) project to rank Camosun’s achievement of sustainability based on internationally recognized best practices.
- Facilities and Office of Environmental Sustainability will conduct waste audits, education/information sessions about proper waste sorting, launch a recycling champion office program, and further develop a waste management plan.

