



COLLEGE OF
THE ROCKIES

CARBON NEUTRAL ACTION REPORT | 2016

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2016 CARBON NEUTRAL ACTION REPORT

COLLEGE OF THE ROCKIES

This Carbon Neutral Action Report for the period January 1, 2016 to December 31, 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 COLLEGE OF THE ROCKIES' (The College) final *Carbon Neutral Action Report* will be posted to our website at www.cotr.bc.ca.

ACTIONS TAKEN TO REDUCE GREENHOUSE GAS EMISSIONS IN 2016

Stationary Fuel Combustion, Electricity (Buildings)

Cranbrook Campus

- Completed Architectural stage of new Trades building.
- Continue to change out inefficient fluorescent light fixtures to new LEDs.



Mobile Fleet Combustion (Fleet & Other Vehicles)

Cranbrook Campus – Facilities Department purchased 2016 Toyota Tundra pickup truck to replace aging 1998 GMC pickup truck.

Supplies (Paper)

Financial Services

- Financial Services expanded their use of Electronic Funds Transfer (EFT) payments to include not just employees, but also vendors. As of February 9, 2017, they have registered just over 175 vendors to be paid via EFT rather than by paper cheques. This has saved at least 2,000 cheques from being printed, and approximately one cheque printer toner cartridge from being used
- Invermere Campus – Has been scanning 95% of registration receipts for Continuing Education students rather than putting them in the mail.

Enrolment and Student Services

- In 2016, the Registrar's Office implemented a new self-serve platform through AccessCOTR- the College's online registration and information system. Students are now able to view important documents such as registration statements and payment receipts, as well as submit important requests such as graduation applications and official transcript requests without the use of paper.
- In addition, the Registrar's Office piloted an Admissions package project in which students receive email correspondence linking them to electronic versions of their program's detailed admissions packages. Through this project, there has been notable reductions in paper use

Other

Installed three water bottle refill stations - Cranbrook Campus.

Staff and Faculty participated in BC Bike to Work Week 2016.

Cranbrook Campus - Battery recycling collection bin located in Shipping & Receiving shop. Facilities Department staff then bring the batteries to the local collection depot for recycling.

Carpooling is mandatory whenever the President, Board of Governors and the President's Council are involved in common meetings off site. Exceptions to this are approved by the President or Board Chair under exceptional circumstances only.

Meetings are piggybacked for efficiency of travel. Dean's meetings are scheduled consecutively as many have multiple portfolios.

All Campuses deliver documents and packages by way of already planned travel so as to not schedule deliveries unless necessary.

Student Services/Registration: All Education Advisors, Disability Service Coordinators, Learning Assistance staff and Aboriginal Coordinator desks have cameras and Lync access, making meetings with students at regional Campuses possible without having to travel.

Faculty members use Skype to conference with students rather than travel to placement sites. All regional Campuses further than 50km from Cranbrook have been equipped with full video conferencing suites. Video-recorded assignments for practicum students cut down on faculty travel for site visits. YouTube is used for posting video assignments.

The College encourages electronic submissions from our students.

Staff and faculty are encouraged to attend meetings virtually via teleconference, webinars and web conferencing whenever possible ie: BlueJeans, Lync, Bridget, Skype, LiveMeeting, etc.

Staff and students are encouraged to print only when necessary and all printer settings are defaulted to print double-sided.

All computers and printers utilize sleep functions to reduce energy costs.

Window blinds are utilized to reduce heating and cooling costs, as well as energy costs.

All campuses provide courses to staff and the community on various topics related to climate change and conservation.

College staff/student online message portal posts information about upcoming "Green" workshops and conferences.

All toner is ordered in a larger size to reduce waste. All cartridges are recycled where facilities are available.

Moodle:

- The Production Support Centre staff is trained in supporting faculty in moving toward more online instruction through Moodle.
- Student Services/Registration and Institutional Research - Stores training documentation on Moodle as of 2013.
- Faculty emails or posts handouts on Moodle rather than make copies for class distribution.
- Learning Research Centre uses electronic document library.
- Faculty requests that students upload their assignments to Moodle sites. Faculty then marks the assignments virtually rather than making paper copies.

AssetPlanner:

All faculty and staff requests to the Production Support Centre, IT Technology Department, and Facilities Maintenance Department are now made electronically through the AssetPlanner (formerly FAME) system, eliminating all paper requests.

SharePoint:

- Student Services/Registration and Institutional Research - Created a SharePoint site.
- All media monitoring/clipping done and filed electronically in SharePoint, replacing weekly photocopy circulation.
- Use SharePoint for Nursing Program to jointly edit and create accreditation documents.

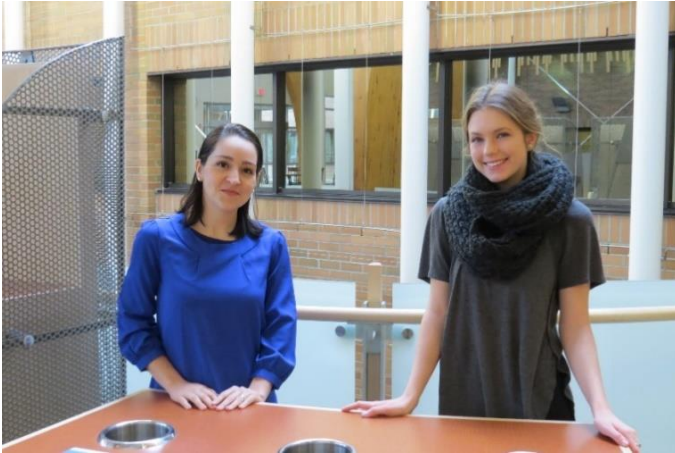
- Learning Research Centre uses SharePoint technology for electronic editing.
- HR/Payroll uses SharePoint for all payroll handout documents. Most of this department's information is now electronic.
- Electronic records of training (ROT) have been set up on SharePoint so that Office Administration faculty can enter grades electronically. ABE Directed Studies is grading online using AccessCOTR to submit grades rather than on paper copies, saving many reams of paper.

The Deans Department circulates agendas and minutes electronically and encourages use of e-readers rather than printed documents.

Marketing Department:

- Distribute a monthly emailed newsletter rather than a printed version.
- Dramatically reduced the amount of printed material (i.e. posters, brochures) that we produce, and have moved the majority of information online.
- When producing printed marketing material, we always ask for 30% or greater recycled content, and use Forestry Stewardship Certified paper and vegetable dyes whenever possible.

The Bookstore implemented an online Text Request System for faculty to order textbooks. This has eliminated all paper requests.



Working Toward A Sustainable Campus: The rebirth of our Sustainability Committee.

College of the Rockies Blog January 28, 2016:

<http://www.cotr.bc.ca/blog/story.asp?ID=49>



Earth Day 2016. *College of the Rockies Blog dated April 25, 2016:*

<http://www.cotr.bc.ca/blog/story.asp?ID=56>

CARBON NEUTRAL GOVERNMENT 2016 SUCCESS STORY

Fluorescent Fixture Replacement to LED Fixtures

College of the Rockies has made great strides in replacing our current fluorescent fixtures to LED fixtures. Currently we have replaced all T12 fixtures with either LED fixtures or LED tubes with an electronic start ballast in the existing fixture. We have begun the process of replacing our T5 fixtures with LED fixtures and all of our T8 fixtures with either LED fixtures or LED tubes and electronic start ballasts. The change in light has been dramatic and well received by staff. We are continually making the change to LED as ballasts burn out or tubes need to be replaced.

Exterior wise, we are 100% changed over to LED fixtures, all wall packs, parking lot lights, architectural lighting, soffit lighting, bollard lighting is all LED, again, the consistent colour of light as a result of the LED lighting is well worth the effort.

Allan Knibbs, Facilities Manager

PLANS TO CONTINUE TO REDUCE GREENHOUSE GAS EMISSIONS IN 2017 AND BEYOND

Change out aging MAUs to newer models with variable frequency drives.

Continue to change out inefficient light fixtures to LEDs.

2017 – Sustainability Committee to roll out 15 new Waste/Recycle Collection Pods at the Cranbrook Campus.

New Trades Training Facility

We're growing! As you may have heard, thanks to investments from the Government of Canada, the Province of BC, Columbia Basin Trust, and the College – we are getting a brand new trades-training facility. *College of the Rockies Blog dated January 23, 2017:*

<http://www.cotr.bc.ca/blog/story.asp?ID=84#sthash.ixPKzVqL.dpuf>



Rinse and Recycle

What a small team of researchers learned by sorting through the garbage. *College of the Rockies Blog dated March 8, 2017:*




<http://www.cotr.bc.ca/blog/story.asp?ID=90#sthash.h6cvll8n.dpuf>

Emissions and Offsets Summary:

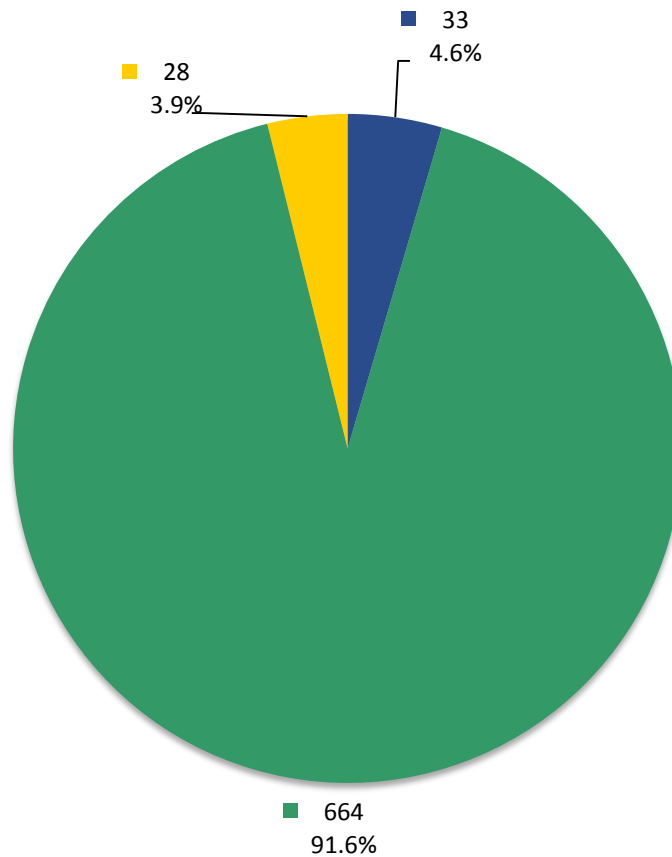
COLLEGE OF THE ROCKIES' GHG Emissions and Offsets for 2016 (TCO2E)	
GHG Emissions created in calendar year 2016 (from SMARTTool Homepage)	
Total Emissions (TCO2E)	725
Total Offsets (TCO2E)	712
Adjustments to GHG Emissions Reported in Previous Years (from SMARTTool Homepage)	
Total Emissions (TCO2E)	6
Total Emissions for Offsets (TCO2E)	6
Total Emissions for Offset for the 2015 Reporting Year (from SMARTTool Homepage)	
Total Offsets (TCO2E)	718

Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, College of the Rockies (The College) 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 College hereby agrees that, in exchange for the Ministry of Environment ensuring that these offsets are retired on the College's behalf, the College 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 behalf plus GST.

		
Signature	Date	
Dianne Teslak	Allan Kibler	VP-Finance + Corporate Services / Facilities Manager
Name (please print)	Title	

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



Total Emissions: 725

- 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 June 12, 2017 1:43 PM)

Total offsets required: **712**. Total offset investment: **\$17,800**. Emissions which do not require offsets: **14** **

*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):

Allan Knibbs, Facilities Manager; Wendy Roberts, Facilities Administrative Assistant

Organization Name:

College of the Rockies

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

- Built, or are building new LEED Gold or other “Green” buildings.: Architectural stage of new Trades Building in 2016

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

Continue to change out light fixtures to LED.

Change out aging MAUs to newer models with variable frequency drives.

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).: Purchased 2016 Toyota Tundra, replacing 1998 GMC Pickup Truck
- 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.

*Quarterly maintenance program on current vehicles.
Replace aging vehicles with more fuel efficient models.*

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.: 2016 - Photocopy paper purchase: white paper 100% recycled content; coloured paper 30% recycled content; specialty paper 10% recycled content.
-

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

Financial Services

- *Financial Services expanded their use of Electronic Funds Transfer (EFT) payments to include not just employees, but also vendors. As of February 9, 2017, they have registered just over 175 vendors to be paid via EFT rather than by paper cheques. This has saved at least 2,000 cheques from being printed, and approximately one cheque printer toner cartridge from being used*
- *Invermere Campus – Has been scanning 95% of registration receipts for Continuing Education students rather than putting them in the mail.*

SharePoint: Electronic records of training (ROT) have been set up on SharePoint so that Office Administration faculty can enter grades electronically. ABE Directed Studies is grading online using AccessCOTR to submit grades rather than on paper copies, saving many reams of paper.

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) |
| • Other, please describe briefly: Bike parking available on campuses. Staff and Faculty participated in BC Bike to Work Week 2016. |

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) |
| • Supported or provided education to staff about the science of climate change, conservation of water, energy and/or raw materials |
| • Other, please describe briefly: Installed three water bottle refill stations - Cranbrook Campus |

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 |
| • Other, please describe briefly: Cranbrook Campus - Battery recycling collection bin located in Shipping and Receiving shop. Facilities Department staff then bring the batteries to the local collection depot for recycling. |