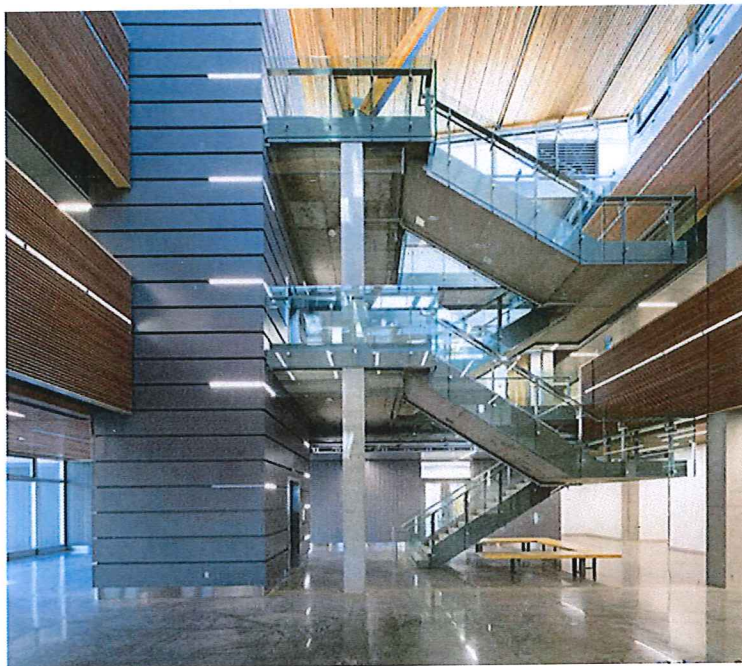




2015

Carbon Neutral Action Report

Okanagan College





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Declaration Statement:

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 Okanagan College's final *Carbon Neutral Action Report* will be posted to our website at [http://www.okanagan.bc.ca/Campus and Community/employees/facilities management/Sustainability/Climate/Carbon Neutrality.html](http://www.okanagan.bc.ca/Campus_and_Community/employees/facilities_management/Sustainability/Climate/Carbon_Neutrality.html)

Overview

Okanagan College continues to develop and enhance its focus on sustainability from the perspective of an organization with a responsibility to education, training and community development, and from the perspective of an organization that is focused on achieving carbon neutrality.

The Okanagan College Strategic Plan identifies the need to address the human and financial resources, infrastructure, and environmental challenges that will accompany anticipated demographic, economic, and social changes.



- Seek additional sources of funding to sustain and further develop the College.
- Ensure there are sustainable operations in each of the four regions.
- Augment the College's human resource plan through improved strategies in key areas such as succession planning, employee development and the recruitment and retention of a diverse employee base.
- Complete and implement a sustainability plan that addresses environmental, financial and social sustainability.



The College continues to participate in the STARS program – (**Sustainability Tracking and Assessment Rating System**) administered by the Association for the Advancement of Sustainability in Higher Education. The process involves a rigorous examination of practices, policies, and achievements that contribute to sustainability. In July 2014, Okanagan College submitted its bi-annual report and scored a Silver rating, a full 10% higher than our original submission in 2011. Conveniently, many of the activities which improve our STARS scoring are also directly aligned with our carbon reduction initiatives.

The quest for improvement is ongoing. The institution has established goals for itself for carbon emissions and energy use/production:

- Okanagan College is seeking to be energy net zero by 2025, producing as much energy as it consumes, and
- Reduce our net carbon emissions by 80 tons per year.

Part of Okanagan College's commitment to sustainability has involved giving greater voice and visibility to the topic. It starts with new staff orientation – sustainability is a featured topic in those sessions that introduce employees to the values and vision, policies and practices of the institution. Social Media plays a larger role every year as we now have an active Facebook page to complement our sustainability blog.

A significant achievement in 2015 was the ongoing construction of phase 2 and 3 of the **"Trades Training Complex"** on our KLO campus. The project is seeking a minimum of LEED Platinum standard as well as meeting the much more rigorous Living Building Challenge. It will be "Energy Net Zero" and include approx. 450 KW of PV Solar Panels. Construction of the 4 year project began in fall 2012 with the initial steps of renovating and retrofitting of 4,385 square meters of existing shop, classroom and administration space. The project will conclude with the construction of 6,264 square meters of new space, which will accommodate more than 750 trade and apprenticeship students, many of whom currently train offsite in leased space. All mechanical and energy systems in the renovated spaces will be improved to reduce the building's carbon footprint significantly.

The College will continue to leverage the technology, passion and creativity inherent in the building to be an agent of change for the larger community, drawing on the interests and





expertise of staff and students to advance the efforts to be sustainable and to reduce our collective carbon footprint.

Emissions Reductions Activities in 2015

Purchasing / Consumption

- Trash Audits were performed on the Vernon and Penticton campus to help us identify opportunities for carbon reduction in our purchasing practices.
- Our “Pay for Printing” program entered its third year which included the introduction of a personal printing account option to help staff better appreciate the impact of their own printing and copying habits.

Transportation

- Development of an enhanced Bus Exchange in front of Okanagan College to make our transit system a more viable option.
- Continued participation in the First Annual “Campus Commuter Challenge” in the fall of 2015 which saw our number of participants KM’s “saved” increase by almost 30%
- Continued Expansion of our “Ride to Work week” and “ICBC Commuter Challenge” programs.

Energy

- With funding from the Carbon Neutral Capital Program (CNCP), we were able to replace older inefficient boilers with high-efficiency condensing boilers on our Salmon Arm & KLO Campuses.
- We are continuing to implement the energy saving opportunities identified through our Building Optimization Program (BOP) on the KLO campus.
- Lighting retrofits continue on all sites whenever possible and include replacement of fixtures, addition of motion sensors and daylight harvesting.

Policy & Planning

- Our new “Strategic Plan 2016-2020” includes Sustainability as one of our Core Values.
- A College Wide official sustainability plan has been developed and is currently under review.



- A new Campus Master Plan is currently under development and will be informed by our transportation, energy and sustainability plans.
- STARS Planning: We resubmitted in July 2014 and scored a Silver. We are now working on our performance in many areas in anticipation of our next submission.

Education and Engagement

- Staff Training Staff – Our ILT group (Institute of Learning and Teaching), hosted a number of sustainability Lunch and Learns on all campuses.
- Sustainability has been added to our orientation processes for new staff and students.

Plans to Continue Reducing Greenhouse Gas Emissions 2015 and beyond

- The Trades Training Complex – was under construction in 2015 and was completed in March 2016. It is anticipated to be energy net zero. We will spend the next year, ensuring we operate it effectively so we can maximize our GHG reduction and also use the building as a learning tool to inform future construction projects.
- Complete Central Plant boiler upgrade on KLO campus.
- Complete HVAC Upgrade to Sunoka Building in Penticton.
- Review administration processes in different departments using Lean methodology to reduce unnecessary paper-based filing systems where practical.
- Continue to have projects planned and budgeted so we can take advantage of the Carbon Neutral Capital Program.

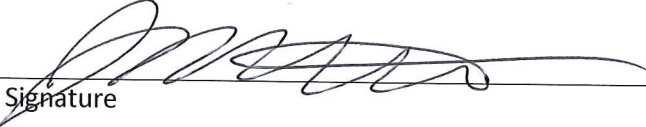
Emissions and Offset Summary Table:

Okanagan College GHG Emissions and Offset for 2015 (tCO ₂ e)	
GHG Emissions created in Calendar Year 2015 :	
Total Emissions (tCO ₂ e)	1688
Total Offsets (tCO ₂ e)	1686
Adjustments to GHG Emissions Reported in Prior Years :	
Total Emissions (tCO ₂ e)	0
Total Offsets (tCO ₂ e)	0
Grand Total Offsets for the 2015 Reporting Year :	
Grand Total Offsets (tCO ₂ e)	1686

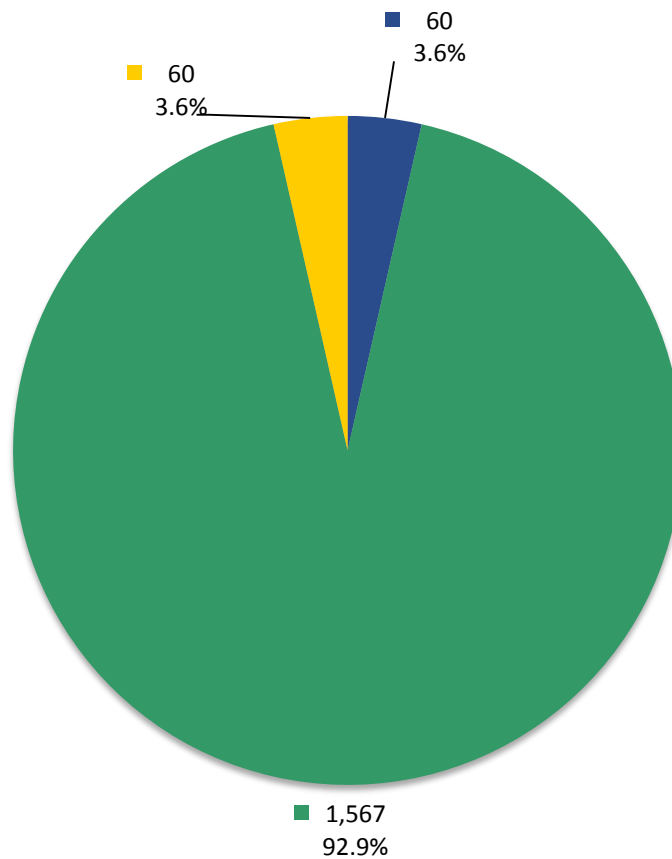
Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, **Okanagan College (the Organization)** 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:

 Signature	June 8, 2016. Date
JAMES S HAMILTON Name (please print)	PRESIDENT Title

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



Total Emissions: 1,688

- 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 2015 (Generated May 25, 2016 10:55 AM)

Total offsets required: **1,686**. Total offset investment: **\$42,150**. 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.

2015 Carbon Neutral Action Report Survey

Organization Name:

Okanagan 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:

Yes

If Yes, please describe:

We are actively reducing our Energy and GHG profile through a targeted reduction campaign. Key components of our plan include retrofitting existing buildings and providing usage data to building occupants through a series of energy dashboards.

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:

(No response)

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:

While we don't have an official policy, we are actively reviewing many work assignments to effectively reduce inter-campus travel.

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:

We purchase only paper with 30% recycled content for our print fleet. We are actively increasing access to E-textbooks for our academic programming.

Have put in place an operations policy/program to facilitate behavioural changes from paper use:

(e.g. awareness campaign to reduce paper use):

Yes

If yes, please describe:

*We no longer support "desktop printers" and wherever possible, have replaced them with central printing rooms.
We also provide individual print and copy reports so people are at least aware of their own usage.
Departments also have a print budget which motivates them to reduce printing where possible.*

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:

We have established print accounts which allow staff to print (and pay for) personal documents. This compels them to consider the personal cost of what they print and has resulted in much less personal printing.

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:

No

Other:

(No response)

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:

(No response)

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:

Yes

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.)

Yes

Incorporated lifecycle costing into new construction or renovations:

Yes

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

We design all new construction to LEED Platinum.