



2024

Carbon Neutral Action Report



Okanagan
College





2023 PSO Climate Change Accountability Report

Okanagan College

PART 1. Legislative Reporting Requirements

Declaration Statement:

This PSO Climate Change Accountability Report for the period January 1, 2023 to December 31, 2023 summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2023 to minimize our GHG emissions, and our plans to continue reducing emissions in 2024 and beyond.

Overview

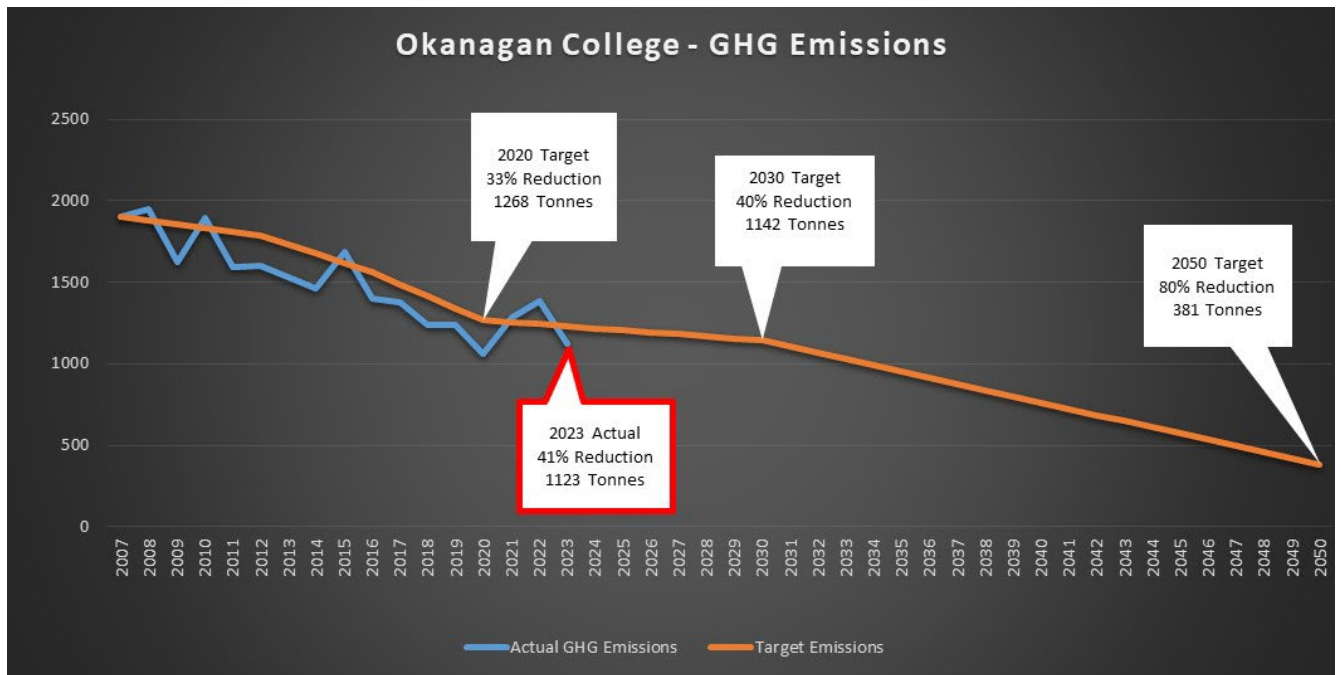
Okanagan College continues to develop and enhance its focus on sustainability from the perspective of an organization with responsibility for education, training, and community development.

While the effects of the COVID-19 pandemic restrictions compelled Okanagan College to shift away from normal operating practices in 2020, three years later Okanagan College continues to transform our operations to reflect some of the changes brought about by the pandemic. We telecommute more, print less and are also far more flexible in office arrangements – allowing for better space utilization. Some of these related emissions reductions (such as reduced commuting) are not tracked as part of the provincial carbon neutral program but are still considered significant climate victories for our community.





The quest for improvement is ongoing. The institution has established a goal to exceed the provincially mandated Bill 44 targets for carbon emissions with an annual carbon emission reduction target of eighty tons per year. Overall, we are managing to stay ahead of that pace with the exception of a handful of winter seasons where longer than usual cold snaps drove our heating related emissions up significantly. This illustrates the importance of decarbonizing our heating systems wherever possible.



Emissions Reductions: Actions and Plans

A. Stationary Sources (e.g., buildings, power generation)

All the construction projects we engage in provide us with the infrastructure and opportunity to share construction best practices with our students and the communities we serve.



Student Housing Projects - There were three student housing projects on the go in 2023, all at different stages of construction but all scheduled for completion in time for 2024 fall classes. All three projects are designed to meet BC Step Code 4, which will align well with our carbon reduction plans. While Step Code 4 was the goal for these projects, preliminary design was overbudget putting the goal in jeopardy. However, with changes in design and project delivery model, we managed to keep all the desired design elements including energy and carbon targets.



Centre for Food, Wine & Tourism - A new project was announced in 2023 with design work to begin in early 2024. This project will support programming in, culinary, business, viticulture, and tourism. While various sustainability targets are still being determined, we expect to pursue BC Energy/Carbon step codes and accessibility targets such as Rick Hansen and Well. This project's design will also include a strong integration with the BC Transit hub directly in front of the building which will help support our long-term transportation planning and related emissions.



Additional Activities - The College has also received another year of funding from FortisBC to support our Energy Analyst position. This partnership is specifically intended to identify energy reduction opportunities as well as help develop and implement an institutional 'Carbon Zero' action plan. This funding has been in place since December 2022 and the analyst continues to provide us with excellent information to help us make energy and carbon saving decisions. Deep energy audits of our most energy intensive buildings were started in fall 2023 with the upgrades planned to begin in 2024.



B. Mobile Sources (e.g., fleet vehicles, off-road/portable equipment)



Fleet Electrification. – Okanagan College took another major step in reducing our mobile emissions. We continue to participate in the provincial ‘Go Electric Fleets’ program and replaced another aging fleet vehicle with a plug-in electric pick-up truck, to help reduce emissions related to the transfer of goods and equipment between campuses. This increases our fleet of bookable EV’s to four. These vehicles are available for staff to reserve for intercampus travel. Feedback has been positive and utilization is steadily increasing. With a

range of 400 km, range anxiety has not been a challenge. As more staff get an opportunity to ‘try-out’ the electric fleet vehicles, we are seeing a corresponding increase in personal EV’s in our parking lots.

C. Paper Consumption

Printing - The pandemic-driven push to a more digital operating model has led to lasting change in our information management strategies. Most of us are now more comfortable with the digital data storage and communication mediums which has resulted in printing levels much less than pre-COVID and, as an added benefit, our space utilization has also improved in many areas as we continue to remove ‘no-longer-needed’ shelving and filing cabinets.

2023 GHG Emissions and Offset Summary Table:

Okanagan College 2023 GHG Emissions and Offsets Summary	
GHG emissions for the period January 1 - December 31, 2023	
<i>[See Appendix 1 for instructions on how to access your 2023 emissions data from CGRT. Cells A and B below are identified in Figure 1; cells C and D are identified in Figure 2.]</i>	
Total BioCO ₂	1.18
Total Emissions (tCO ₂ e)	1124
Total Offsets (tCO ₂ e)	1123





Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO ₂ e)	0
Grand Total Offsets for the 2023 Reporting Year	
Grand Total Offsets to be Retired for 2023 Reporting Year (tCO ₂ e) <i>[must round to a whole number (no decimal places)]</i>	1123
Offset Investment (\$) <i>[Grand Total Offsets to be Retired for 2023 Reporting Year x \$25 per tCO₂e]</i>	\$28,075

Retirement of Offsets:

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, Okanagan College is responsible for arranging for the retirement of the offsets obligation reported above for the 2023 calendar year, together with any adjustments reported for past calendar years (if applicable). The College hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (the Ministry) 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 its behalf plus GST.

PART 2. Public Sector Leadership

A. Climate Risk Management

Similar to 2022, unusual weather events factored heavily in our 2023 operations. Extended heat waves highlighted some limitations in several cooling systems and forest fire smoke required us to limit outdoor air ventilation in some areas. Strategic replacements for some systems and deeper assessments for others continue to dominate our infrastructure planning. Changes in rainfall patterns have also required us to focus more on our stormwater management systems.

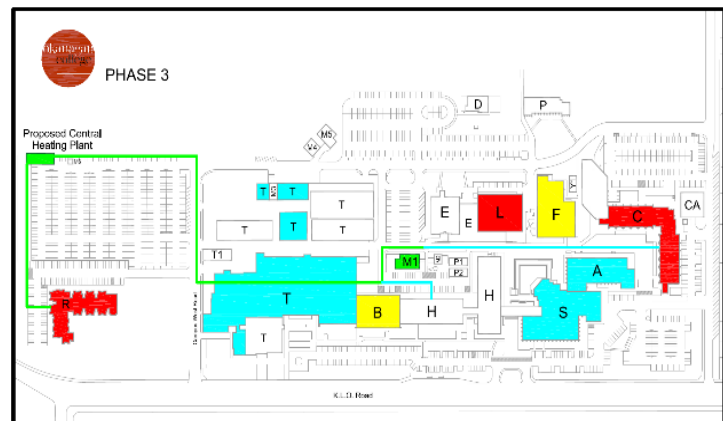


B. Other Sustainability Initiatives & Success Stories

While our overall GHG reduction progress is comforting, the Paris Accord and follow-up 2018 report from the IPCC (Intergovernmental Panel on Climate Change) have illustrated that there is a global need for more ambitious targets. This point is supported by the continuation of unusual weather-related events which seem to be more frequent and more intense. This new reality continues to be the driving force behind the development of our carbon zero plan. While the plan is initially focusing on reducing scope 1 and 2 emissions, tackling the significant scope 3 emissions such as from commuting, purchasing and waste management will not be overlooked. The intent of the plan is to reduce our emissions while ensuring we impart a culture of sustainability into the entire college population and the communities we serve. This plan is also designed to align with the United Nations Sustainable Development Goals.



The first phase of this plan was driven by the pursuit of the Carbon Zero designation for the new Health Sciences Centre which required us to develop a strategic “Zero Carbon Transition Plan” for the entire Kelowna campus. This includes energy reduction strategies, deep energy retrofits to some of our older buildings as well as an expansion of the central heat pump plant which uses treated effluent from the



neighboring wastewater treatment plant as the heat source. The overall infrastructure plan is intended to be staged over a decade and expand to include all campuses, taking advantage of any infrastructure changes, partnerships, and funding opportunities as they materialize. When fully implemented this plan will account for a GHG reduction of approximately 65% of baseline emissions, which would be a big step towards the mandated 80% reduction by the year 2050.



Sustainability Tracking, Assessment & Rating System (STARS)

Last year saw the College set a new STARS baseline rating. Thanks to COVID and a disruptive cyber-attack in early 2023, our operations changed so significantly that a re-evaluation of our sustainability activities, priorities and individual responsibilities was in order. While the score itself was relatively low, we identified many areas where there was great progress but a lack of tracking or reporting data limiting our ability to include the items in our rating. To build momentum, we plan to identify data that may be included in our next submission which is planned for September 2024.



Executive sign-off:

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Signature
E

Date
W

Name (please print)

Title