



2021

# Carbon Neutral Action Report

Okanagan  
College





# 2021 PSO Climate Change Accountability Report

## Okanagan College

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### PART 1. Legislative Reporting Requirements

#### Declaration Statement:

This PSO Climate Change Accountability Report for the period January 1, 2021 to December 31, 2021 summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2021 to reduce our GHG emissions, and our plans to continue reducing emissions in 2022 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.

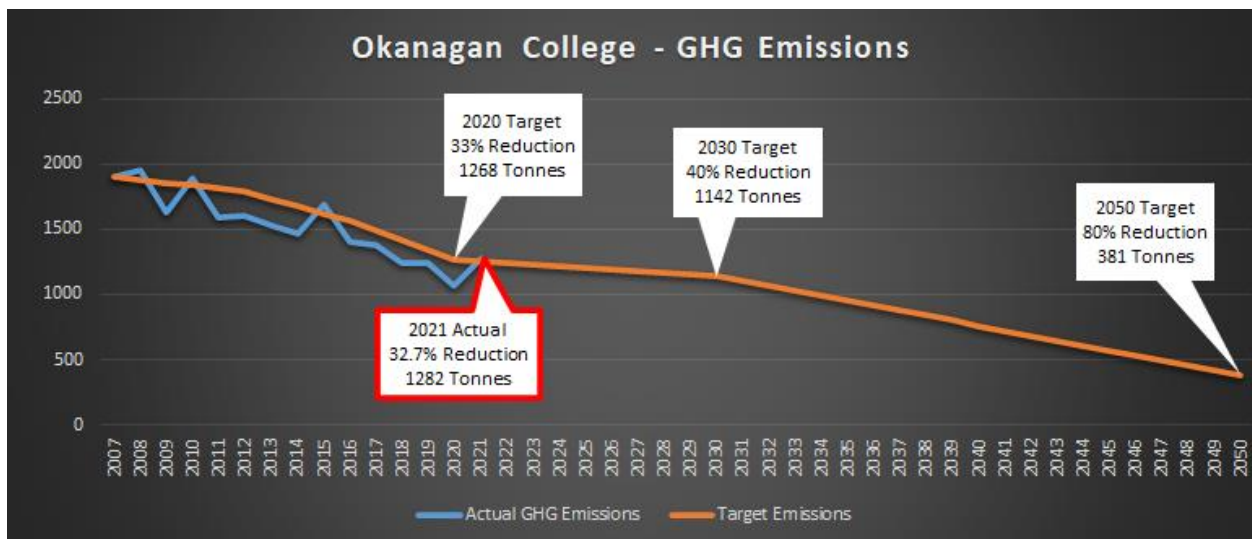
While the effects of the COVID-19 pandemic restrictions compelled Okanagan College to shift away from normal operating practices in 2020, operations returned to a 'new normal' in 2021. Some of the changes brought about by the pandemic remained in place which could have a benefit to our GHG profile in the upcoming years. We telecommute more, print less, and are also far more flexible in





office arrangements – allowing for better space utilization. Some of the 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 of 80 tons per year. We were managing to stay ahead of that pace and reached the original Provincial 2020 target by 2018, a full 2 years ahead of schedule however, 2021 ended with a long cold snap which drove our heating related emissions up significantly.



## Emissions Reductions: Actions and Plans

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

**Student Housing Projects** - There are three student housing projects which began design in 2021. All three projects are designed to meet BC Step Code 4 which will align well with our carbon reduction plans.

**Health Sciences Centre** – Received LEED Gold certification as well as the new Carbon-Zero building standard. We are still pursuing the WELL building standard and anticipate certification later this summer.





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.

The College plans to continue to leverage the technology, passion, and creativity inherent in these buildings in order to be an agent of change for the larger community. We

draw on the interests and expertise of staff and students to advance our intentions regarding sustainability and carbon reduction.



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

**Fleet Electrification.** - Okanagan College took some major strides in reducing our mobile emissions. We registered to participate in the provincial 'Go Electric Fleets' program and also replaced two aging fleet vehicles with two plug-in electric vehicles. These vehicles are available for all staff to reserve for intercampus travel. With a range of 400 km, range anxiety has not been a challenge. Feedback has been all positive and utilization is steadily increasing. An online booking system to be implemented in 2022 will likely increase usage even further. There is a desire to add a 3<sup>rd</sup> EV, but supply chain issues may force the College to wait until 2023.





### C. Paper Consumption

**Printing** - The pandemic driven push to a more digital operating model has allowed us to get comfortable reducing our printing habits which has led to a decrease in individual printing. This is offset somewhat by an increased volume at our print center in the form of contract printing for other organizations to take advantage of the new capacity freed up by lower internal demand.

### 2021 GHG Emissions and Offset Summary Table:

Okanagan College 2021 GHG Emissions and Offsets	
<b>GHG Emissions created in Calendar Year 2020</b>	
Total Emissions (tCO <sub>2</sub> e)	<b>1283</b>
Total BioCO <sub>2</sub>	<b>1.36</b>
Total Offsets (tCO <sub>2</sub> e)	<b>1282</b>
<b>Adjustments to Offset Required GHG Emissions Reported in Prior Years</b>	
Total Offsets Adjustment (tCO <sub>2</sub> e)	<b>108</b>
<b>Grand Total Offsets for the 2020 Reporting Year</b>	
Grand Total Offsets (tCO <sub>2</sub> e) to be Retired for 2021 Reporting Year	<b>1390</b>
Offset Investment (\$25 per tCO <sub>2</sub> e)	<b>\$34,750</b>

### Retirement of Offsets:

In accordance with the requirements of the Climate Change Accountability 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 2020 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (the Ministry) ensuring that these offsets are retired on the Organization's behalf, the Organization 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

Unusual weather events factored heavily in our 2021 operations. Extended heat waves highlighted some limitations in several cooling systems. Strategic replacements for some and deeper assessments for others are now underway. Heavy rains also challenged some of our storm drainage systems which has led to some upgrading projects in 2022.

Another key change is the identification of key personal to oversee some of these situations including the creation of the role 'Manager, Safety, Security & Emergency Management'.

The events which sometimes caught us off-guard in 2021 have become key learning tools for our planning.

### 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 was further driven home thanks to the series of abnormal weather events in 2021. These factors have inspired Okanagan College to undertake development of an overarching carbon reduction plan. While the plan will initially focus 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 will be to reduce our emissions while ensuring we impart a culture of sustainability into the entire college population and the communities we serve. This plan will be designed to also align with the United Nations Sustainable Development Goals.

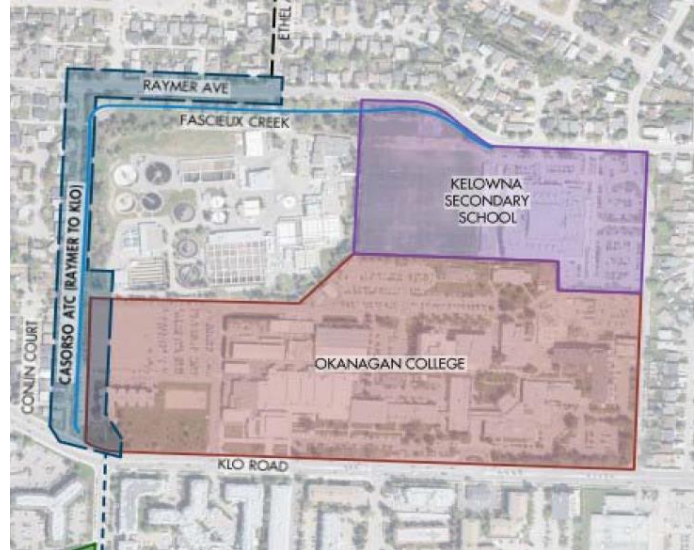


The first phase of this plan was driven by the pursuit of the Carbon Zero designation for the new Health Sciences Centre which required us to develop a strategic “Zero Carbon Transition Plan” for the entire Kelowna campus. This includes energy reduction strategies, deep energy retrofits to some of our 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.

Another successful project in 2021 was the transportation partnership with the City of Kelowna on the extension of the 'Active Transportation Corridor' along the edge of the college campus. This project improved foot and bike access to the college for our staff and students and also provided a smoother flow of active traffic for the surrounding community.



### Executive sign-off:

June 10, 2022

Signature

Date

Neil Fassina

President

Name (please print)

Title

