



2020

Carbon Neutral Action Report

Okanagan College





2020 PSO Climate Change Accountability Report

Okanagan College

Declaration Statement:

This Climate Change Accountability Report for the period January 1, 2020 to December 31, 2020 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2020 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2021 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.

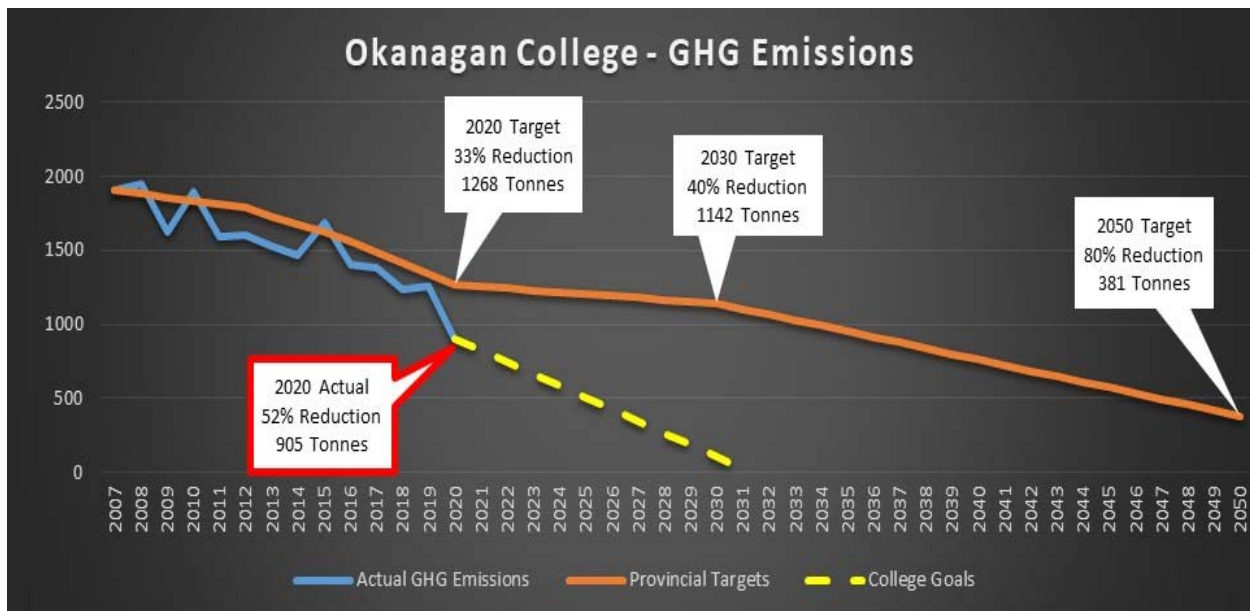
While the effects of the COVID-19 pandemic restrictions compelled Okanagan College to shift away from normal operating practices and some of our strategic sustainability related initiatives, the need to rethink some of the operational paradigms provided tremendous insight into opportunities for a more carbon friendly future state. Technological creativity allowed many of our staff and students to





work and learn from home which in turn yielded tremendous reductions in paper and fleet vehicle usage. Because of remote learning there was reduced heating and ventilation requirements which had a tremendous impact on GHG emissions. There remains opportunities to parley some of the environmental efficiencies provided by the appropriate use of technology.

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 are managing to stay ahead of that pace and reached the original Provincial 2020 target by 2018, a full 2 years ahead of schedule. While this progress is comforting, the Paris Accord and follow-up 2018 report from the IPCC (Intergovernmental Panel on Climate Change) have illustrated, there is a global need for more ambitious targets which has inspired Okanagan College to begin development of an aggressive carbon reduction plan. While the plan is still under development, understanding that stronger targets are necessary is helping guide the decision making process.





Success Stories and Emissions Reductions Activities in 2020

Infrastructure

Health Sciences Centre - Construction Completed



Construction work on this project began in 2018 and was completed in 2020. We are pursuing multiple green construction certifications including LEED Gold and the WELL building standard for the 30,000 ft² project. The building is also a pilot project for the new Carbon-Zero building standard developed by the Canadian Green Building Council. Following this standard required that we calculate the amount of embodied carbon in the project and develop a report identifying the sources and amounts. The goal of the Council is that this information will guide the decisions of the construction team. This is a significant achievement from a carbon perspective.



Other construction projects

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.

Purchasing / Consumption / Transportation

As a result of the COVID-19 pandemic most of our program delivery and routine operational processes moved into the digital realm. This led to an 82% reduction in paper related emissions and a 27% reduction in fleet vehicle usage. Many of these new processes have proven to add efficiencies and are likely to impact decisions as staff and students return to a face-to-face model.

Plans to Continue Reducing Greenhouse Gas Emissions 2021 and beyond

The pursuit of the Carbon Zero designation for the new Health Sciences Centre required us to develop a strategic “Zero Carbon Transition Plan” for the entire Kelowna campus. This plan 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 Zero Carbon Plan for the Kelowna campus began development in 2018 and is now being expanded to include the other campuses. The overall plan is intended to be staged over a decade, 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.

Using Lean methodology, we are constantly reviewing processes in different departments to encourage more sustainable and carbon friendly approaches.

The continued monitoring of fleet vehicles usage patterns as well as technology developments in video conferencing will help optimize travel related emissions and maintain many of the gains achieved over the last year. We are also exploring the possibility of replacing one or more of our





aging fleet vehicles with electric models to reduce operating costs and GHG emissions as well as provide an opportunity to introduce staff to the 'EV experience'.


Emissions and Offset Summary Table:

Okanagan College 2020 GHG Emissions and Offsets	
GHG Emissions created in Calendar Year 2020	
Total Emissions (tCO ₂ e)	906
Total BioCO ₂	1.33
Total Offsets (tCO ₂ e)	905
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO ₂ e)	19
Grand Total Offsets for the 2020 Reporting Year	
Grand Total Offsets (tCO ₂ e) to be Retired for 2020 Reporting Year	924
Offset Investment (\$25 per tCO ₂ e)	\$23,100

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.

Executive sign-off:

	June 3, 2021
Signature	Date
Neil Fassina	President
Name (please print)	Title



