

Vancouver Island University

2020 PSO Climate Change Accountability Report



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.

By June 30, 2021 Vancouver Island University's final 2020 Climate Change Accountability Report will be posted to our website at https://adm.viu.ca/sustainability/carbon-neutral-action-report.

Overview

As part of its deep commitment to equitable access to education and fostering engaged, lifelong learning, VIU endeavors to plan strategically with an eye to its obligations to future generations. A multi-dimensional vision for sustainability includes meeting expected levels government targets for the reduction of greenhouse gas emissions through embedding sustainability in all aspects of the institution as well as by encouraging a vibrant community of climate action. 2020 events have signaled a worldwide shift in views and actions sustainability, resilience, and building better. VIU continues its sustainability efforts through wide-ranging climate action that includes addressing physical buildings and infrastructure, research, and engaging with the community.

2020 Actions to Minimize Emissions



Accessibility Renovations/Improvements

Extensive accessibility improvements These spaces provide greater inclusivity and allow flexibility and resilience in space use as the community's needs continue to evolve.

HVAC Upgrades Mechanical and Cooling

Heating and cooling has been upgraded in one of VIU's largest buildings to improve interior comfort and address resource use. This upgrade will improve building comfort, air quality, and energy efficiencies. HEPA filter units have been installed in a number of buildings to ensure suitable air quality in classrooms/buildings.



Roof Replacements Roof Repair, Skylight & Roof Replacement,

As with all roofs, these replacement/repair projects will protect structures and help maintain efficient heating and cooling.

Envelope Repairs/Upgrade

Structural assessment and repairs have been made to improve the efficiency and longevity of VIU's LEED® Platinum building.



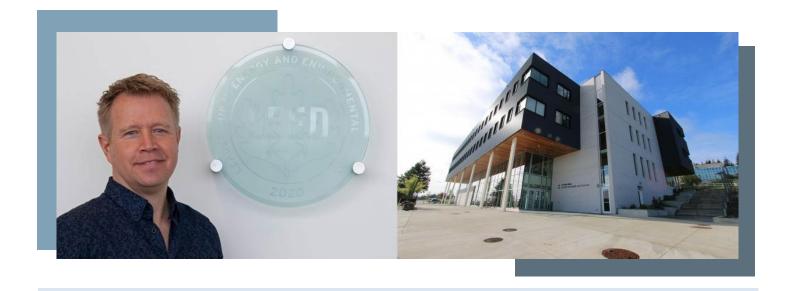
Upgrade Exterior/Interior Lighting in Various Buildings to LED

Interior and exterior lighting has now been converted to LED lighting. This will help VIU use less electricity and lower its carbon footprint. As well, this lighting is night-sky friendly.



Bike Parking Expanded

To encourage and support active transportation, bike parking facilities have been expanded and significant security features have been added.



Craig Hanson, Manager of Capital Projects, shows off the new LEED Gold plaque in the Dr. Ralph Nilson Centre for Health and Science. https://bit.ly/3e0NP3i

The Dr. Ralph Nilson Centre for Health and Science received LEED ® Gold certification from the Canada Green Building Council. These buildings demonstrate VIU's commitment to facilities that maximize sustainability, function and beneficial student learning environments, and ensure VIU's buildings will operate in a sustainable way for decades to come.

As outlined on the <u>CaGBC project profile</u>, "the Dr. Ralph Nilson Centre for Health & Science is a modern, four-level, 6912 m², multipurpose post-secondary health and science learning centre. The facility is designed to accommodate 900 students and 80 faculty and features a flat floor lecture theatre, a mix of classrooms, nursing labs and simulation suites that replicate real-world clinical settings, and state-of-the-art chemistry labs, each supported by the most current audiovisual learning technology."

Constructed to LEED-Canada NC v2009 Gold standards, the facility features a geo-exchange heating and cooling system that uses water from the flooded mine shafts deep under the campus and the many other LEED designed features contribute to VIU's carbon reduction goals in a significant way.

Some notable features include active design integration with daylit stairwells, a focus on daylight in all regularly occupied spaces, integration with the hillside campus, and a four-level atrium design that supports natural ventilation while also highlighting Nanaimo's panoramic city and ocean views. More information about this, and other, VIU LEED ® projects can be found here https://leed.cagbc.org/LEED/projectprofile_EN.aspx

The pandemic has set the stage for creativity and resilience. As well as pursuing opportunities for improved resource stewardship through infrastructure upgrade and replacement, the university continues to inspire the community to 'do better' through research and engagement. From arts to science, VIU has connected study with innovative action.



Rebecca Hanelt, left, and Chantelle Calitz, VIU Graphic Design students, showcase their environmentally sustainable packaging redesigns during the art exhibit Unwrapped at The View Gallery.

Vancouver Island University Photo https://bit.ly/3qIJmnH

Consumer-conscious packaging designed by VIU Graphic Arts students was a feature of a 2020 Coast Waste Management Association networking event

Climate change investigation that ranged from investigating the cryosphere to effects on marine animals to wildfire smoke enables and challenges students to explore new ways of looking at climate change. They are then empowered to apply novel strategies to mitigate consequences of these changes.

Dr. Erik Krogh, left, and Dr. Chris Gill, VIU Chemistry Professors and Co-Directors of the Applied Environmental Research Laboratories, are developing new methods to measure contaminants in environmental and street drug samples (Photo taken before COVID-19 pandemic). Vancouver Island University Photo https://bit.ly/3vsL6p2





Dr. Dan Baker a VIU
Fisheries and Aquaculture
Professor, examines some
of the plants growing in the
aquaponics greenhouse.

Vancouver Island University Photo

https://bit.ly/2Rbtm2w

Food security work that ranged from sustainable food production through aquaculture, a speaker event that discussed food security in the age of COVID-19, and surplus food donation by the Culinary Arts program to the Salvation Army.

VIU Culinary Arts students pack baked goods into reusable containers for donation to Nanaimo Salvation Army meal centre.

https://bit.ly/32XTroM



Emissions and Offset Summary Table

Vancouver Island University 2020 GHG Emissions and Offsets

GHG Emissions created in Calendar Year 2020

Total Emissions (tCO₂e)	2621.00	
Total BioCO ₂	9.37	
Total Offsets (tCO₂e)	2609.00	

Adjustments to Offset Required GHG Emissions Reported in Prior Years

Total Offsets Adjustment (tCO2e)	376
Grand Total Offsets for the 2020 Reporting Year	
Grand Total Offsets (tCO2e) to be Retired for 2020 Reporting Year	2233
Offset Investment (\$25 per tCO2e)	\$55825

Total Offsets will not equal Total Emissions minus Total BioCO2 because offset exempt emissions for school buses are included within Total Emissions.

Retirement of Offsets

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, *Vancouver Island University* (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

Deborah Saucier, Ph.D. President and Vice-Chancellor

Vancouver Island University