

CARBON NEUTRAL ACTION REPORT

MAY 2020



This Carbon Neutral Action Report for the period January 1, 2019 to December 31, 2019 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2019 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2020 and beyond. By June 30, 2020 Selkirk College's final Carbon Neutral Action Report will be posted to our website at selkirk.ca

OVERVIEW

ACTIONS TAKEN IN 2019

In the spring of 2019, Selkirk College released a new strategic plan, providing a roadmap forward for the next 5 years. Environmental Sustainability is included within this plan as a fundamental commitment, alongside Diversity and Inclusion, Health and Wellness, Innovation, and Reconciliation. Selkirk will continue to integrate respect for the land and natural environment, sustainable practices, carbon footprint reduction and responsible use of natural resources into student learning, services, operations, and workforce development. The College is committed to implementing practices that promote a healthy natural environment and climate change mitigation in teaching practices, administration, programming, facilities and operations, funding allocations and applied research priorities. Selkirk is committed to developing and supporting college-wide and regional solutions to environmental remediation, cleaner transportation, lowered emissions and waste reduction.

In October 2019, the roof of Selkirk College's main building on Castlegar campus was transformed, with 275 solar panels installed over a two-week period. This installation has a capacity to produce an estimated 112 000 kilowatt-hours of electricity per year, which will account for approximately 10 percent of the annual electricity demand for Castlegar campus. An online dashboard showing live energy production from this system is now available and accessible to the campus community.

Lighting upgrades within the Castlegar campus library were completed in 2019. The changes made aim to improve energy efficiencies and reduce consumption while providing consistent lighting levels when and where required.



Figure 1. Maintenance staff on the library roof that now houses 275 solar panels.

Figure 2. Students and staff took the BC Cool Campus pledge to adjust their energy use habits.



Many modern technologies were utilized, including wireless occupancy, dimming, and daylight harvesting controls. It is anticipated that consumption in this space will be less than 25% of what it was prior to the project.

In the winter of 2019, Selkirk claimed the title of The Coolest Campus in British Columbia during the BC Cool Campus Challenge, a province-wide energy conservation initiative. The Challenge encouraged individuals of participating campus communities to take an energy conservation pledge, committing them to adopt more sustainable energy-use habits, and challenged post-secondary institutions to reduce natural gas use. Selkirk collected the most pledges from students and staff as a percentage of its overall FTE figures,

and was deemed the 2019 winner. At our Castlegar campus, we lowered our natural gas usage during January and February by 239 gigajoules when compared to 2018 (data normalized with respect to weather). Just over 200 energy conservation pledges were taken, amounting to nearly 7.5% of our total full-time equivalent student-staff population.

Throughout 2019, Selkirk continued to utilize Prism Engineering's online utility software, PUMA (Prism Utility Monitoring and Analysis). This data is now displayed on a dedicated energy monitor display installed in the common area of Castlegar campus. Selkirk continues to develop new ways to share its energy conservation progress with the campus community.

SUCCESS STORIES

OVERALL INITIATIVES WHICH TIE IN WITH GHG EMISSION REDUCTIONS

Silver STARS Rating

For the second time, Selkirk College earned a silver STARS rating from the Association for the Advancement of Sustainability in Higher Education (AASHE). STARS (Sustainability Tracking, Assessment and Rating System) measures and encourages sustainability in all aspects of higher education from academics to operations to engagement and innovation. Selkirk College is proud to have received this silver rating again this year, and will be using the results of the report when planning next steps towards a more sustainable future.

Waste Reduction and Diversion

During 2019 new recycling stations were installed on all remaining Selkirk campuses. Recycling programs are now streamlined college-wide. Efforts to reduce contamination with recycling streams continue, while simultaneously striving to eliminate sources of non-recyclable or challenging to recycle items.

The compost program at Castlegar campus continued, diverting approximately 2500 kilograms of organic waste from the landfill. The program employed two part-time work study students and the material will be used in garden beds on campus.



Figure 3. Members of the Sustainability Committee and Environment Club.



Figure 4. Environment Club students conduct our annual waste audit.

Paper Use

Selkirk developed Paper Usage Procedures which are now appended to the College's Environmental Sustainability Policy. Associated environmental impacts of paper include deforestation, carbon emissions, water pollution and land filling. There is opportunity to reduce Selkirk's environmental footprint by addressing paper sourcing, paper use, and paper recycling efforts. The Procedures outline how the College will use paper resources efficiently, source and purchase more sustainable products, and reuse and recycle responsibly. In the fall of 2019, Selkirk streamlined charges for printing and increased communications regarding monthly paper use via an internal website and desktop widget.

Student Involvement

Selkirk's student-based Environmental Club continued to be active both on and off campus. These students contributed to existing sustainability initiatives on campus, hosted events for students and staff, and volunteered with the community.

PLANS TO CONTINUE REDUCING EMISSIONS IN 2020 AND BEYOND

Selkirk College will continue to work towards carbon neutrality throughout 2020.

Projects will include:

- Installation of a ground mounted solar array connected to the Mir Centre at the Castlegar Campus
- Replacement of uninsulated overhead doors (5) in the North Trades Building at the Silver King Campus with energy efficient doors
- Switches to paper sources with higher recycled component
- Energy conservation campaign directed at staff during heating season
- Efforts to incorporate lessons of sustainability into Selkirk College courses



Figure 5. Student Sustainability Ambassadors provide outreach to students and staff

EMISSIONS AND OFFSETS SUMMARY:

Selkirk College GHG Emissions and Offsets for 2019 (tCO₂e)

As per the Directive issued March 31, 2020, each PSO will use their 2018 GHG Emissions as a placeholder for the purposes of their 2019 CNAR.

Total Emissions (tCO ₂ e)	1,162
Total BioCO ₂	1.38
Total Offsets (tCO ₂ e)	1,161
Offset Investment (\$25 per tCO ₂ e)	\$29,025

RETIREMENT OF OFFSETS

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, Selkirk College (the Organization) is responsible for arranging for the retirement of the offsets obligation reported above for the 2019 calendar year, together with any adjustments reported for past calendar years. The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy 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

SIGNATURE 

May 19, 2020

DATE

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