

# 2024 PSO CLIMATE CHANGE ACCOUNTABILITY REPORT



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Legislative Reporting Requirements

*This PSO Climate Change Accountability Report for the period January 1, 2024 to December 31, 2024 summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2024 to minimize our GHG emissions, and our plans to continue reducing emissions in 2025 and beyond.*

Emission Reductions: Actions & Plans

STATIONARY SOURCES

Selkirk College’s Sustainability Plan actions are working to reduce building associated emissions by 60% from 2010 levels by 2027. The college has decreased emissions by 41% since 2010 and will need to accelerate emissions reduction efforts to meet the 60% target by 2027. Numerous actions were undertaken in 2024, and are planned for 2025 and beyond, to reduce emissions from stationary sources including upgrades to lighting, buildings, and energy-intensive equipment and appliances, as well as implementing green building practices and standards.

Lighting

Upgrading existing fluorescent lighting to LED fixtures and installing occupancy sensors are ongoing at

Castlegar Campus and Trail Campus. These lighting improvements will continue in 2025 and beyond until all campuses have been fully converted.

### *Building Retrofits*

Solar shades, which help regulate temperatures in both the summer and winter seasons, were installed within the Silver King Campus electrical shop, the Castlegar Campus administrative building, and numerous classrooms at Castlegar Campus. Four main entryway doors were replaced at Trail campus and door replacements are planned for Castlegar Campus. Roof replacements and upgrades, which include insulation replacements and air sealing, were completed at Silver King Campus' North and South Trades buildings, Castlegar Campus' A-wing, B-wing, administration building, gymnasium and cafeteria, and Tenth Street campus' Mary Hall and further roof replacements are planned for three Castlegar Campus buildings and the Trail campus.

### *Equipment Upgrades*

Numerous energy-intensive appliances and mechanical equipment were replaced in 2024. A new condenser, a new furnace, and two new rooftop units were installed at the Castlegar Campus daycare building. Rooftop unit coil replacements were completed at the Tenth Street Mary Hall building and Silver King North and South Trades buildings and a rooftop air handling unit replacement was completed at the Castlegar Campus Gym. New washing and drying machines were installed at the Castlegar Campus Kekuli housing and at the Tenth Street Campus housing. An HVAC system coil and a chiller are planned to be replaced at our Trail campus in 2025. Our HVAC specialist is going over any additional HVAC upgrades that may be required, but we are mostly up to date with HVAC upgrades. We are in the preliminary stages of exploring a deep energy retrofit for Castlegar Campus that will include upgrades to the building envelope and window replacements.

### *Ongoing Contributors*

Infrastructure improvements completed in previous years, such as the installation of 275 solar panels on the Castlegar Campus Library and the implementation of a biomass boiler at the Silver King Campus, continue to significantly reduce greenhouse gas emissions. Additionally, the college's commitment to renewable energy is evident in projects like the ground-mounted solar installation at the Mir Centre for Peace, which also utilizes geothermal heating.

## **MOBILE SOURCES (E.G. FLEET VEHICLES, OFF-ROAD/PORTABLE EQUIPMENT)**

Selkirk College did not acquire any new zero-emissions vehicles in 2024. One electric vehicle 2024 Chevrolet Bolt was recently purchased in 2025. Selkirk College now owns a total of two battery electric light-duty vehicles. Two double-head level 2 charging stations were installed at the new Castlegar Campus student housing building, and two were installed at the new Silver King student housing building. Both new student housing buildings at Castlegar and Silver King campuses include infrastructure for five double-head level 2 electric vehicle charging stations. Electric push mowers are

utilized at our Silver King and Castlegar Campuses and in 2025 we plan to replace our gas ride-on mowers with electric.

In 2023 our Facilities team began work on an electric bicycle sign-out program for our student housing buildings at Castlegar, Tenth Street, and Silver King campuses. Fourteen electric bicycles were purchased in early 2024 (six for Castlegar, four for Tenth Street, four for Silver King). We are aiming to have a sign-out process in place by fall 2025. This project will reduce transportation barriers for students living in student housing and offer an emissions free transportation option that supports student health and wellbeing.

Selkirk College has committed in our Sustainability Plan to emphasize electric vehicle options where practical when purchasing future fleet vehicles. We have been actively seeking electric options for our School of Environment and Geomatics passenger vans, but we are constrained by market availability. As more electric vehicle models become available, the feasibility of choosing vehicles that meet our operational needs increases. In 2025, we are working to identify and overcome the unique barriers we face as it pertains to fleet electrification, such as electrical capacity constraints. In 2025, we plan to monitor electrical capacity at the Castlegar campus and pursue electrical upgrades if required. Selkirk College has committed in our Sustainability Plan to develop an offsetting program for business travel by 2027.

## **PAPER CONSUMPTION**

Selkirk College's Sustainability Plan set a goal to reduce emissions from paper procurement by 50% below 2010 levels by 2027. In 2020, the college greatly surpassed this goal with an 84% decrease below 2010 levels, but this was attributed to the pandemic and school closures, and paper consumption has been increasing again since 2020. In 2024, the college sits at a 61% decrease in paper consumption below 2010 levels.

In 2025, Selkirk College is launching a paper reduction campaign, encouraging the college community to reduce paper consumption through a series of employee communications that provide detailed data on paper consumption and associated costs, as well as tips to reduce printing and make ethical paper purchasing decisions. A formal decision was passed in early 2025 to disincentivize student printing by removing the defaulted provision of \$10 for printing on student accounts. Previously, students were able to print up to 50 sheets of paper free-of-charge annually. The college also plans to reduce our entire printer fleet by up to 30% by 2026.

Selkirk College continues to use Sugar Sheet paper as an alternative to standard 30% recycled 8.5 x 11 paper wherever possible. Sugar sheet paper is derived from waste fibre produced during sugar cane processing. Sugar cane and bagasse are a renewable resource that can be harvested 2-3 times per year, making sugar sheet paper a "forest free" alternative. It is also free of elemental chlorine and 100% recyclable. Sixty percent of the paper purchased in 2024 (2,000 packs) was sugar sheet paper, which

saved the equivalent of 70 trees from being cut down, and 3.3 metric tonnes of Co2e. All other standard paper purchased is 30% recycled and FSC certified – this is used within our duplicating department. We have tried using sugar sheet paper and paper with higher recycled content in our industrial printers but have experienced issues with machine malfunction due to paper fibers jamming the machines. We will continue exploring alternative paper that is of sufficient quality to use in our industrial printers.

Our Paper Usage policy procedure under our Environmental Sustainability Policy outlines best practices for reducing paper usage, sourcing paper from more sustainable sources, and recycling.

## 2023 GHG Emissions and Offsets Summary Table

### GHG emissions for the period of January 1–December 31, 2023

Total BioCO <sub>2</sub>	85.3
Total Emissions (tCO <sub>2</sub> e)	1,014
Total Offsets (tCO <sub>2</sub> e)	1,014

### Adjustments to Offset Required GHG Emissions Reported in Prior Years

Total Offsets Adjustment (tCO <sub>2</sub> e)	0
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### Grand Total Offsets for the 2023 Reporting Year

Grand Total Offsets to be Retired for 2023 Reporting Year (tCO <sub>2</sub> e)	1,014
Offset Investment (\$)	\$25,350

## RETIREMENT OF OFFSETS

In accordance with the requirements of the *Climate Change Accountability Act* and the Carbon Neutral Government Regulation, Selkirk College (the Organization) is responsible for arranging for the retirement of the offsets obligation reported above for the 2024 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Energy and Climate Solutions (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.

# Public Sector Climate Leadership

## CLIMATE RISK MANAGEMENT

### *Risk Assessment*

Selkirk College has yet to conduct a formal climate risk assessment to determine the extent of the organization's exposure to climate-related risks. However, climate-related risks including wildfire, heat, drought, landslides, and flooding are included in campus-specific risk assessments for our updated Emergency Plan that is expected to be released late 2025. Our Facilities and Health & Safety team is working closely with the Ministry of Emergency Management and Climate Readiness, local governments, and other agencies to ensure our Emergency Plan reflects risks associated with changing climate conditions locally. The College is also receiving direction from the provincial and federal governments on developing new legislation and regulations pertaining to climate risk readiness. Selkirk College is ensuring our emergency response plans and procedures are in alignment with the provincial government and Emergency Management BC, including the BC Public Post-Secondary Education Sector Emergency Management Response and Recovery Planning Guide, Integrated Response Plan for Catastrophic Events, and Bill 31 – Emergency and Disaster Management Act. In 2025, we will identify resources for incorporating climate specific risk assessments into the regular risk assessment process.

### *Operations and Infrastructure*

Selkirk College is making incremental changes to our operations and infrastructure in preparation for climate impacts. Fire smart assessments were completed at Castlegar Campus in early 2023 and our Facilities team is working to address concerns raised through this assessment, including exploring landscaping and irrigation changes to increase resilience to fire and drought. The recommendations from this assessment will be carried out over the five proceeding years (2023-2028). In 2024 we started a waterline infrastructure project to connect the Castlegar Campus to the City of Castlegar water system. The new student housing building was connected in 2024, and the rest of the Castlegar campus will be connected in June 2025. Access to the existing well is being maintained for emergency business continuity purposes as well as to support an emerging irrigation and forest fire mitigation project. Fire hydrants installed along the waterline will improve campus resilience to wildfire. Students in our Forest Technology program work with the Ootischenia Fire Department on ladder fuel reductions within the forests surrounding our Castlegar Campus and in partnership with the City of Castlegar to reduce ladder fuels surrounding the municipality. Back-up generators are in place to ensure that emergency lighting and IT infrastructure remain operational during power outages. The Mir Centre for Peace building at our Castlegar Campus will have its cedar shake roof replaced with fire resistant asphalt shingles. The new student housing buildings at Castlegar and Silver King Campuses meet Step 4 of the BC Energy Step Code and shadow LEED gold standards. All future building construction will follow the new CleanBC Requirements for the Government of British Columbia's Environmental, Social and Governance Framework for Capital.





*Figure 1: Castlegar Campus new Student Housing*



*Figure 2: Silver King Campus new Student Housing*

### *Procedures and Services*

Selkirk College is making changes to our procedures and services in response to impacts driven by climate change and is collaborating and coordinating with local communities on regional emergency preparedness.

Our Health & Safety team is working on training and tabletop exercises to increase staff awareness and emergency response to risks including those associated with heat, drought, fire, and floods. Selkirk College participates in the Province of BC's Annual Emergency Preparedness Week, and the Ministry of Emergency Management and Climate Readiness' Seasonal Preparedness Day. Our Health & Safety Team is also working on developing procedures regarding evacuations and school closures. In 2024, information regarding emergency preparedness was updated on our website and our Health & Safety team worked closely with our Marketing team to publish numerous communications pertaining to emergency preparedness. Procedures and resources for climate-related emergencies are available for all staff to access and include actions in case of fire and wildfire, flooding, extreme weather and power failure. Our Health & Safety Team is also working on improving our emergency notifications systems.

Every spring, we work with the Regional District of Central Kootenay and Emergency Support Services to determine what services we could potentially provide in the case of an emergency. In late July and early August 2024, Selkirk College offered space in the student housing at our Castlegar Campus to serve as a welcome centre and temporary accommodation for people evacuated due to the Slocan Valley wildfires. While we can make some changes to service delivery to accommodate emergencies such as this, we must work within our scope of business and ensure we can still deliver our services.

### *Utilization of Data and Analysis Tools*

Selkirk College utilizes PUMA Utility Monitoring by Prism Engineering to track energy usage and greenhouse gas emissions from stationary sources. PUMA is a web-based utility accounting software and a service developed to meet the unique monitoring needs of its clients. PUMA is a user-friendly

software system that delivers clear, customized reports and is supported by the services of Prism Engineering's energy expertise. PUMA helps interpret utility data, adjusts for weather, and can identify problems sooner so that corrective action can be taken.

## **OTHER SUSTAINABILITY INITIATIVES**

In 2024, Selkirk College advanced our commitment to sustainability through a wide range of initiatives within four key areas: engagement, academics, operations, and planning and governance. These actions were guided by our 2023 Sustainability Plan as well as our commitments to the Sustainable Development Goals (SDG) Accord and the Sustainability Tracking and Assessment Rating System (Selkirk College is striving for a gold STARS rating).

### *Engagement*

Engagement and outreach were a focus in 2024. The college facilitated diverse hands-on workshops aimed at encouraging responsible consumption and production and environmental stewardship, including regular workshops in textiles repair and repurposing, hand-made recycled paper making, sustainable food wrap creation, seed starting, and native plant identification. Outreach efforts included promoting composting and recycling through accessible tutorials, hosting the fifth annual TEDx Selkirk College Countdown highlighting talks on climate action, and hosting SDG Week, an initiative that spread awareness and education about the United Nation's Sustainable Development Goals through events focusing on fair trade and international women's rights. Selkirk College also engaged youth through sustainability tours for elementary and middle school students, while staff and students participated in collaborative working groups and the Impact Climate Challenge.

### *Academics*

Seven academic departments included sustainability in curriculum planning in 2024, with one academic department conducting a workshop on sustainability inclusive learning outcomes. The college also implemented a re-assessment for our annual sustainability literacy assessment among the student population to assess literacy progress throughout the year.

### *Operations*

The college took concrete steps to reduce its footprint in 2024 through operational improvements, with waste management solutions being a focus. New organic waste diversion programs were launched at Silver King Campus, with improvements to organic waste storage infrastructure at the Castlegar Campus. Recycling facilities were developed and expanded at all student housing buildings. Pens, pencils and markers were added to our accepted recycling stream across all campuses. A comprehensive waste audit was performed to better understand opportunities for improved waste management. A reusable cup system was implemented at all college cafeterias, discontinuing the use of disposable cups. As of 2024 Selkirk College no longer serves disposable dishware, aside from grab-and-go options. A thorough inventory of all waste receptacles, as well as small appliances, heaters, and lighting was conducted that is supporting waste diversion and energy conservation efforts. Recently in



2025, a trash bin turn-in campaign was launched, encouraging staff to turn in their office trash bins to reduce trash bag consumption and encourage recycling. Bins will also be removed from most classrooms, and more recycling sorting stations will be added. Policy development regarding the use of personal small appliances and heaters is planned for 2025.

Selkirk College is a member of the new BCNET sustainability procurement committee which functions to drive sustainable procurement practices across the sector. In participating in this committee, the college is supporting sustainable procurement for all BCNET members and improving our own sustainable procurement processes by incorporating sector-wide best practices. In 2024 the college adopted a more sustainable custodial cleaning system, consolidating a multitude of products down to three primary environmentally friendly products and adding approximately 50 dispensers throughout all campuses to cut down on packaging waste and product consumption. This was a major operational change and exemplifies the college's commitment to environmental health. In 2025, the college has also implemented policies through our Amazon Business account to prioritize sustainable and Canadian product purchasing.

In 2024 Selkirk College was recognized in the Sustainable Campus Index for our commitment to organic grounds management. Native plants were planted at the Mir Centre for Peace in 2024, and in 2025, the "Spirit Garden" at our Castlegar Campus (Indigenous) Gathering Place is being rejuvenated with native plants that will provide ecological and cultural values and a new plan for sustainable and cultural management. This project will support plant-pollinator relationships, as well as access to medicines and cultural practices, and will serve as a demonstration project for upholding ecological and cultural integrity in a heavily modified space.



*Figure 3: Native planting at the Mir Centre for Peace*



*Figure 4: Native plant bed at the Mir Centre for Peace*

Switching our water source from well to City of Castlegar water will allow us to begin tracking water consumption which will support water reduction efforts. Ongoing renovations to washrooms at our Castlegar Campus are providing incremental improvements to water-use efficiency.

### *Planning and Governance*

The institution prioritized sustainability at the planning and governance level. In May 2024, the Board of Governors of Selkirk College and the Board of Directors of the Selkirk College Foundation approved moving endowment funds to fully fossil fuel-free and impact + portfolios. The Sustainability Committee oversaw the review and update of the sustainability policy and associated procedures. In January 2025, Selkirk College launched our new Strategic Plan which places sustainability at the heart of institutional priorities and articulates a vision where sustainability is thoroughly imbued across all college functions. Sustainability is a foundational goal of the plan, ensuring that environmental, social, and economic resiliency are embedded across all aspects of the institution. The college is deepening our relationship with the land by strengthening environmental stewardship initiatives, integrating Indigenous ways of knowing into sustainability practices, and fostering a culture of reciprocity and collaboration in sustainability efforts.

### **SUCCESS STORIES**

Our organic waste diversion program continues to be a great success, with 2024 being the first full year of running the commercial FoodCyclers at all three campuses offering food services. The FoodCycler is an organic waste pre-treatment appliance that dehydrates and grinds food waste, reducing its volume by up to 90%. A dry, sterile, nutrient rich, and shelf-stable soil amendment that can be easily packaged, stored, or transported is produced. This program reduces greenhouse gas emissions by diverting food waste from ending up in landfill, which is a major contributor to methane emissions. In 2024, we surpassed our estimated diversion numbers at 6.7 metric tonnes of organic waste being diverted from landfill, or 10.05 tonnes of Co2e. All dehydrated product is given away to local farms to use as a nutrient rich soil amendment. This initiative is a great local example of a circular economy system where our [sustainability efforts help bring local food to the table](#). Clutch Farm, a micro farm based in Salmo BC, is one of three small farms in the region that received the dehydrated material from our Castlegar and Tenth Street campuses. The farm grows more than 60 varieties of vegetables and uses community supported agriculture (CSA) to bring fresh food to local buyers.

In addition to its direct environmental impact, the project aims to raise awareness and encourage lasting behavior change. At Selkirk College, students and instructors in the School of Hospitality & Tourism on the Tenth Street Campus have embraced hands-on learning through waste diversion initiatives. On the Silver King Campus, students in the Steps to Opportunities, Academics & Readiness (SOAR) Program are leading organic waste efforts by collecting compost, operating the FoodCycler, and tracking data. At the Castlegar Campus, a student is hired to manage composting while deepening their understanding of waste diversion.

This project has provided an excellent opportunity for collaboration through innovation, bringing together post-secondary institutions, local governments and businesses to jointly pilot technological solutions to organic waste diversion and greenhouse gas emissions reductions. Pari Johnson, President and CEO of Colleges and Institutes Canada (project funder) remarked that “Selkirk College’s project on waste diversion has set a high standard, demonstrating how colleges and institutes can lead on climate action while enriching their communities. We deeply appreciate the college’s participation and leadership in making this initiative a success.”



Figure 5: Selkirk College sustainability coordinator Kayla Tillapaugh (right, with farm cat Beatrice) and Mel Weston (left) from Clutch Farm stand with an early-winter crop in the greenhouses near Salmo. Clutch Farm uses compost material from commercial

**EXECUTIVE SIGN-OFF**

*Lareena Rilkoff*  
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**Signature**

Lareena Rilkoff  
\_\_\_\_\_  
**Name**

May 29, 2025  
\_\_\_\_\_  
**Date**

Vice President College Services  
\_\_\_\_\_  
**Title**