Royal Roads
UNIVERSITY

2025 PSO CLIMATE CHANGE ACCOUNTABILITY REPORT

Royal Roads University - May 2026

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CLIMATE CHANGE ACCOUNTABILITY REPORT OVERVIEW

Declaration Statement

This PSO Climate Change Accountability Report for the period January 1, 2025 to December 31, 2025 summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2025 to minimize our GHG emissions, and our plans to continue reducing emissions in 2026 and beyond.

Overview

Climate action and sustainability are core commitments at Royal Roads University (RRU). In addition to reducing emissions in alignment with the Carbon Neutral Government Regulation, RRU is also working to meet its own reduction targets and broader climate commitments. The following report details RRU's 2025 GHG emissions, showcases actions undertaken, and lays out our plans for continued mitigation, adaptation and sustainability initiatives.

As outlined in Table 1, in 2025 Royal Roads produced emissions totalling 1,055 tonnes of carbon dioxide equivalent (tCO_2e), including 826 tonnes of biogenic emissions (mostly from RRU's designation of renewable natural gas (RNG)). Of RRU's total emissions, 229 tCO_2e require offsets in accordance with provincial reporting guidelines. Since 2010, RRU has reduced total GHG emissions by 28% (compared to a baseline of 1,465 tCO_2e).

2025 Emissions and Offset Summary

Table 1: Royal Roads University 2025 GHG Emissions and Offsets Summary	
GHG emissions for the period January 1 - December 31, 2025	
Total Biogenic Emissions (tBioCO2)	826
Total Emissions (tCO_2e)	1055
Total Offsets (tCO_2e)	229
Adjustments to Offset Required GHG Emissions Reported in Prior Years[1]	
Total Offsets Adjustment (tCO_2e)[2]	-9
Grand Total Offsets for the 2025 Reporting Year	
Grand Total Offsets (tCO_2e) to be Retired for 2025 Reporting Year	220
Offset Investment ($25 per tCO_2e)	$5,500

[1] Emissions reported in previous years are updated because of new information becoming available, errors discovered in previously entered data, emission factor corrections or consumption adjustments made by energy providers.

[2] Fugitive emission factors for HFC-404a and HFC-507 were corrected by the Clean Government Team, leading to a reduction of our 2024 emissions by 9.115 tCO_2e, thereby decreasing our overall offsetable emissions from 302 to 293 tCO_2e.

Retirement of Offsets

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, Royal Roads University (**the Organization**) is responsible for arranging for the retirement of the offsets obligation reported above for the 2025 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.

Executive Sign-Off:

Signature	**Date**
Alex Kortum	Vice President Finance and Operations Royal Roads University
Name	**Title**

May 28, 2026

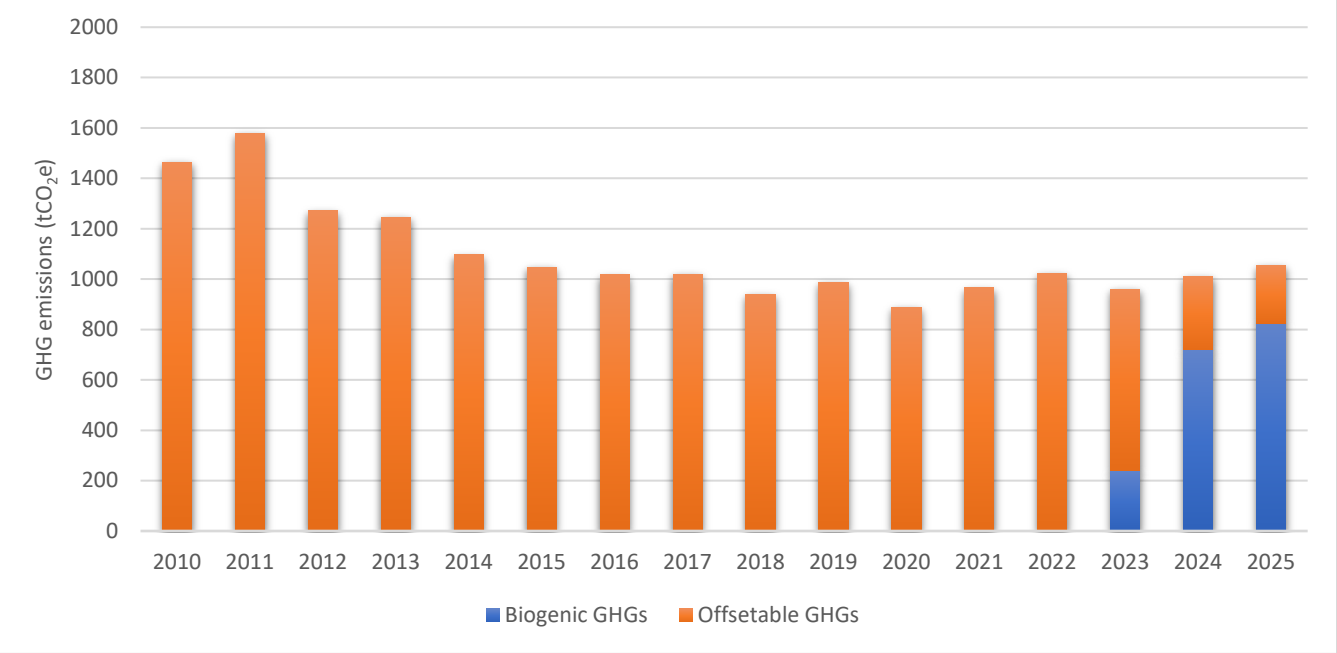
2025 GREENHOUSE GAS EMISSIONS PROFILE

In 2025, Royal Roads University's total GHG emissions were 1,055 tCO_2e, representing a 28% reduction from the 2010 baseline (1,465 tCO_2e). Of this total, 826 tonnes are biogenic emissions ($tBioCO_2e$), and 229 tonnes are emissions requiring offsets. Aside from purchased paper, these provincially reported totals do not include Scope 3 emissions.

Offsetable emissions have been reduced by 84% since the 2010 baseline of 1,462.5 tCO2e due to electrification, energy upgrades and, most substantially, RRU's recent designation of RNG as a fuel source for buildings. Since 2024, RRU's total offset amount has decreased by 22% (293 tCO2e) since the RNG designation was applied to the full year rather than a portion of it.

RRU's GHG trend is outlined in Figure 1. This reduction has been achieved mostly through the university designating its methane gas[3] consumption as renewable natural gas (also known as RNG or biomethane). Through this program, the university designated 100% of its fuel as a biomethane[4] blend and thereby reduced offsetable GHG emissions associated with direct fuel consumption. Although not visible in the graph until 2023, biogenic emissions are included and ranged between one to three tCO_2e until 2022.

Figure 1: RRU's GHG Emissions Trend 2010 – 2025 (Scope 1, 2 and paper)



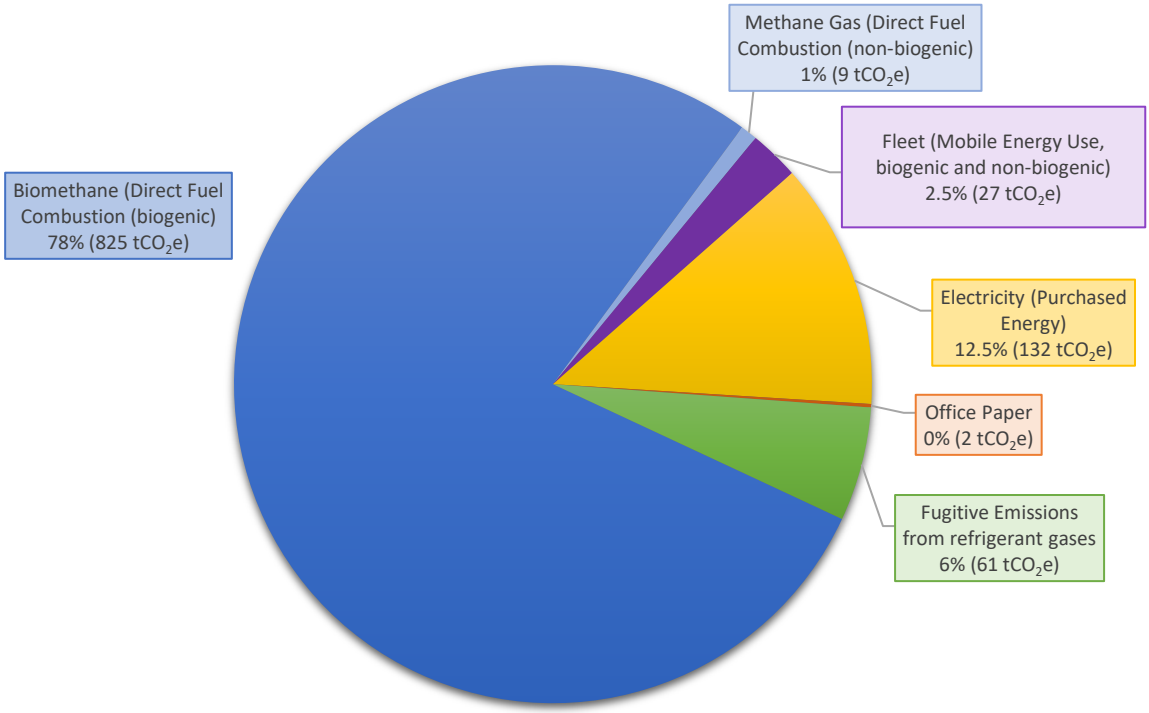
[3] Methane gas is also known as "natural gas." RRU's source for this fuel is FortisBC, which supplies gas that is 95% methane (FortisBC). Methane has a global warming potential 28 times stronger that CO_2 (BC Ministry of Environment and Climate Change, 2023). Studies have shown that using the terminology of "natural gas" implies a clean source of energy and an undeservedly positive public perception (Yale, 2022). In recognition of these factors, RRU has changed its terminology.

[4] Biomethane is another name for Renewable Natural Gas (RNG). In keeping with our use of "methane gas" in place of Natural Gas, we will use terminology that acknowledges the methane content of this biogas.

Emissions by Source

Building heating by direct fuel combustion accounts for the largest source of RRU's GHG emissions, followed by electricity (purchased energy), fleet (mobile energy use), and paper (see Figure 2, next page).

Figure 2: Percent Total GHG Emissions by Source (tCO_2e), 2025



As the chart above illustrates, direct fuel combustion of methane gas (biogenic and non-biogenic) from building heating contributes the most significant portion of RRU's climate impact for operational emissions. Fugitive refrigerant emissions, mobile energy use (primarily from our fleet) and office paper combined comprise less than 10% of our overall emissions. Although consumption remained relatively stable, emissions from purchased energy have seen a threefold increase due to Electricity Emission Factors (EEF) increases due to droughts. The droughts impacted BC's hydropower sources and resulted in more gas-fired generation and electricity imports, resulting in the higher EEF.

Scope 3 Emissions

Scope 3 emissions are those emissions that are considered as part of the up- and downstream of the university's value chain. Through its *Climate Action Plan 2025-2030* and as a signatory to the UN Race to Zero, RRU has committed to measure, track and reduce scope 3 emissions. Except for paper, BC's Carbon Neutral program does not require public sector organizations to report on, reduce, or offset emissions associated with scope 3. However, these emissions are a significant part of the university's climate impact. RRU has determined preliminary baselines of scope 3 categories including business air travel, student air travel (both domestic and international), purchased goods and services, investments, waste and commuting. Please see the Scope 3 section on page 11 for additional information on next steps.

Stationary Sources - Fuel and Energy for Buildings

Royal Roads University is responsible for three locations: Colwood campus, the John Horgan campus in Langford, and a Salt Spring Island property (which is not yet being used for programming). Building energy emissions make up over 90% of RRU's overall emissions. See Table 2 below for a breakdown of specific amounts.

The Colwood Campus is comprised of 26 buildings including seven with Federal Heritage Designations and 11 constructed prior to the Second World War. The Colwood campus buildings have a combined total area of 46,908 m^2 and are powered by electricity (BC Hydro) and methane gas (Fortis BC). There is one building on the John Horgan Campus and it has an area of 9,619 m^2 and is powered by electricity and solar power.

Table 2. Building emissions (offsetable and total)

	Offsetable emissions (non biogenic), tCO_2e	Total emissions (including biogenic), tCO_2e
Direct fuel combustion (methane gas)	9	834
Electricity	132	132
Total building emissions	141	966
Total from all sources	**229**	**1055**

Since 2023, Royal Roads has opted into FortisBC's Renewable Natural Gas (RNG) program and designates 100% of its gas consumption as biomethane. RNG is biomethane that has been captured from decomposing organic waste from landfills and wastewater facilities. RNG produces biogenic emissions which do not require offsets under the Carbon Neutral program. RRU's participation in the RNG offset program has been an interim step within a broader decarbonization strategy to reduce GHGs. Efforts to increase energy efficiency, reducing energy consumption, and transition to low carbon and renewable energy systems remain a priority for the university.

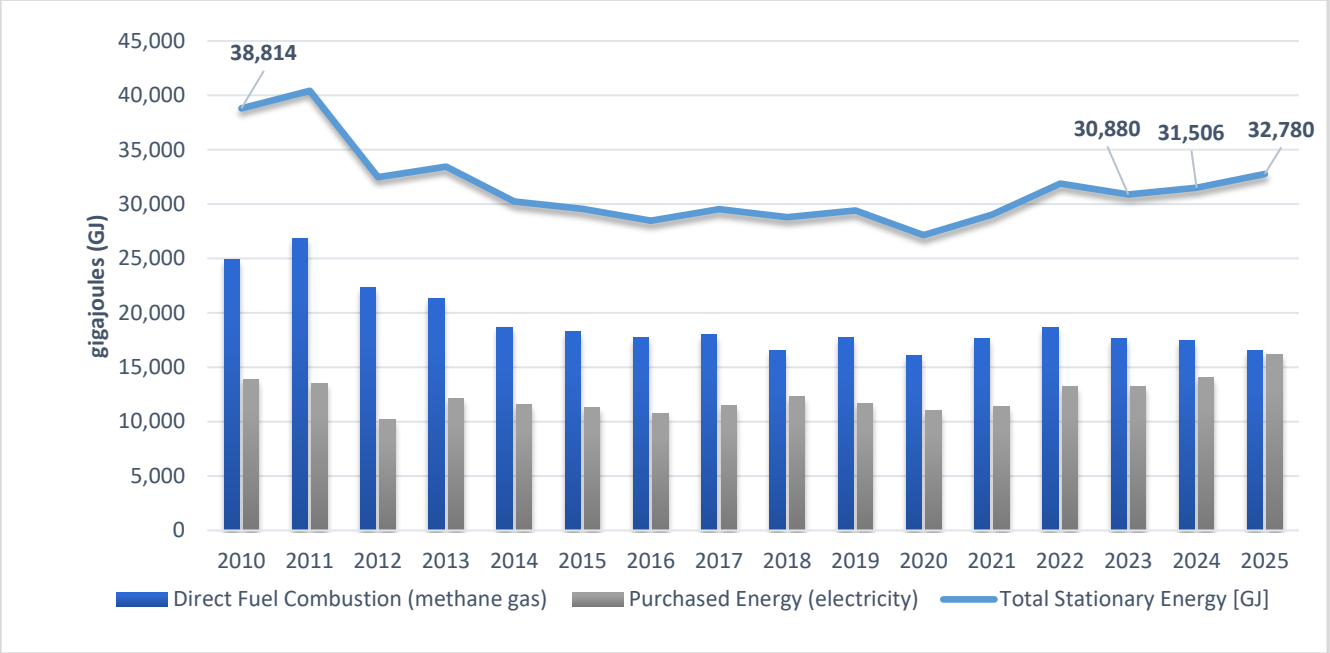
Building Energy Consumption Trends

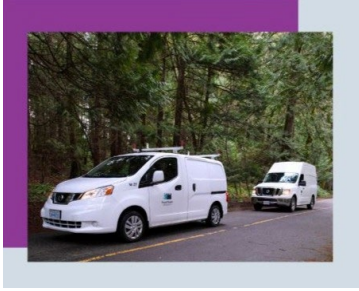
Building energy consumption data (measured in Gigajoules or GJs) is a way to monitor understand energy use over time (compared to tCO_2e which can shift annually with changes to emission factors). RRU's stationary energy use trends are illustrated in Figure 3 below.

Purchased energy (electricity) consumption has seen a steady increase since 2020. This has been an anticipated increase as RRU transitions from fossil fuels to greater electrification. To counteract this upward trend, RRU aims to improve its energy management practices.

Direct fuel consumption (of both methane and biomethane gas) has been reduced 33% since 2010. Consumption rates have been relatively static since 2014, ranging in the 16,000 to 18,000 GJ range. RRU is adding building metering and improving energy monitoring to take a more data-informed approach to building optimization and energy efficiency.

Figure 3: Stationary Energy Use (GJs), 2010 – 2025





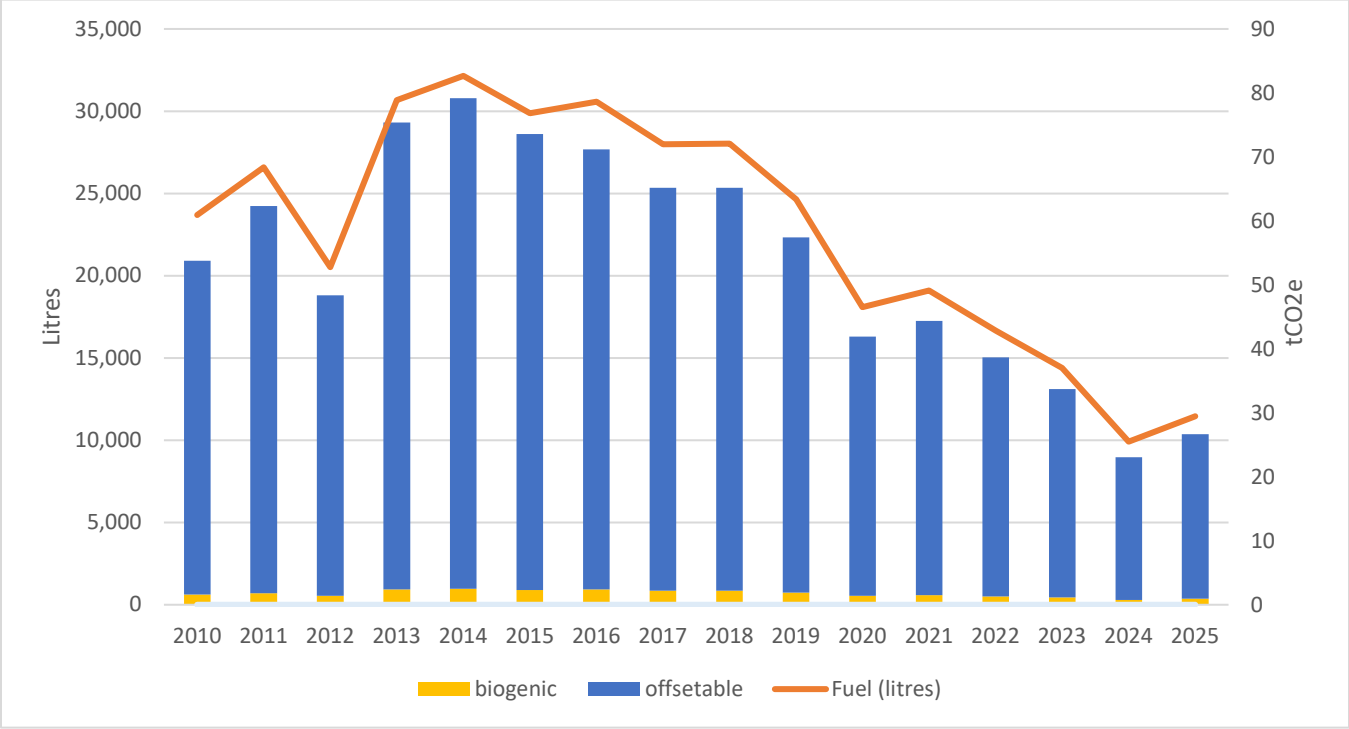
Mobile Sources – Fleet Energy Use

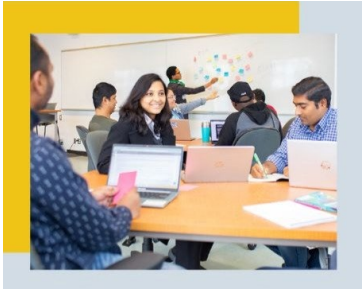
In 2025, RRU fleet accounted for 2.5% of the university's total GHG emissions (27 tCO_2e). Since 2010, RRU has reduced fleet associated GHGs by 51% – a difference of 26.5 tCO_2e (Figure 4). Through continued fleet management and the retirement of gas-powered vehicles, RRUs fleet emissions have trended downward but did see a slight increase in the last year.

Currently, the university has a mixed fleet that includes:

- 9 gas-powered vehicles (utility vans, trucks, and minivans).
- 6 hybrid electric vehicles (minivans and SUVs)
- 2 electric utility vehicles
- 31 electric golf carts
- 7 gas-powered working vehicles (tractors, mowers, and garden utility vehicles)
- 1 diesel-powered heavy-duty vehicle (dump truck)

Figure 4: Mobile Energy Use, 2010-2025 (litres and tCO_2e)

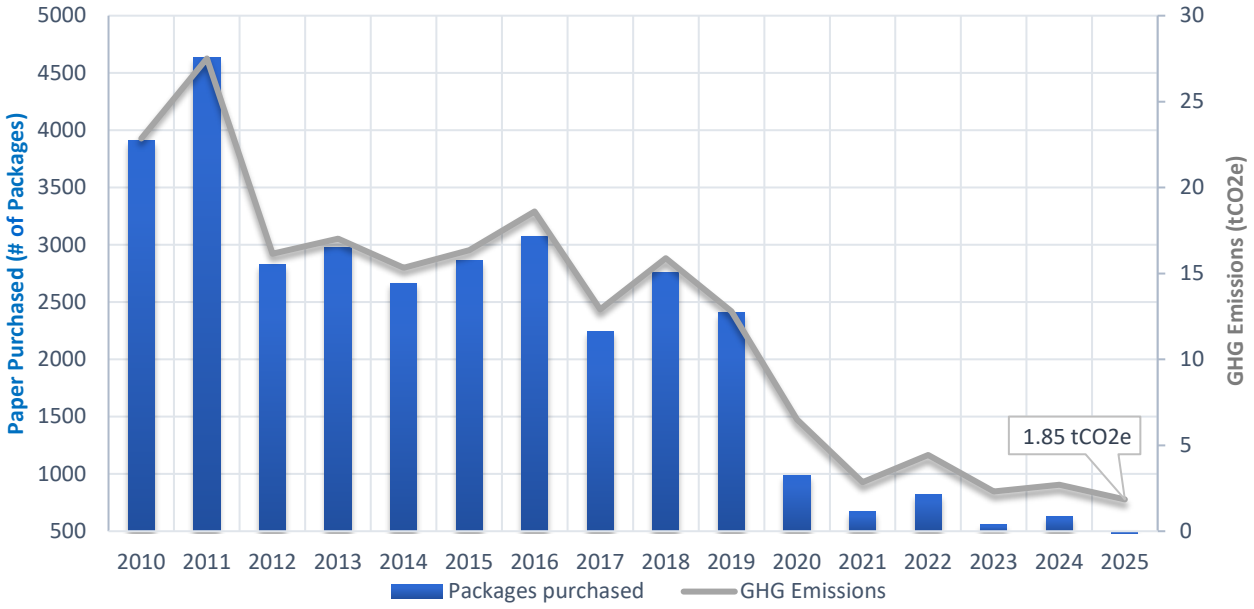




Paper Consumption

In 2025, emissions associated with office paper accounted for less than 2 tCO_2e. RRU's standard procurement practice is to select sugarcane bagasse paper for all 8 ½" x 11" paper orders. This use of low-emissions paper and the continued shift towards online academic and administrative processes, have resulted the university's substantial reductions in this category (see Figure 5). In 2025, RRU purchased 450 units of paper, a decrease from the 630 units purchased in 2024.

Figure 5: Paper Purchased and Associated GHG Emissions, 2010-2025



Fugitive Sources

RRU's 2025 fugitive emissions were 61 tCO_2e. Fugitive emissions result from refrigeration equipment gas leaks and are an important category of direct emissions since they have a much higher global warming potential than carbon dioxide[5]. Refrigerant equipment includes household fridges, commercial chillers, heat pumps and air conditioning systems. Equipment monitoring and maintenance to mitigate leaks is the best course of action for ensuring these emissions are kept to a minimum.

While asset-based average emissions were applied at the other campuses, more sophisticated tracking systems at the new John Horgan Campus (JHC) enabled RRU to use a unit-based methodology for tracking refrigerant emissions. Additionally, refrigerators selected for JHC also use less harmful refrigerants. Both factors led to lower-than-expected fugitive emissions for the new campus.

Going forward, monitoring and tracking will be improved, allowing for more refined reporting. Larger equipment will also undergo checks and regular maintenance to avoid and detect leakages where possible. Moving forward, RRU will continue to prioritize procurement of low scope 3 emission refrigerant equipment as existing equipment reaches end of life.

Scope 3 Emissions

In line with its renewed *Climate Action Plan* and commitments to the UN Race to Zero, RRU has committed to prioritize and reduce scope 3 emissions. These indirect emissions are created by sources not directly owned or controlled by the organization but are part of the university's value chain. Value chain activities generate a significant amount of GHG emissions and offer an opportunity to significantly reduce the overall climate impact of our organization.

Although the advancement of scope 3 work was paused during the refresh of the university's Climate Action Plan, RRU has re-committed to halving scope 3 emissions by 2030. Table 3 below lists RRU's scope 3 categories of focus and initial baselines. Next steps to address scope 3 emissions include:

- Prioritizing scope 3 focus areas and actions that are feasible and have the highest impact.
- Increasing awareness of scope 3 categories, their impacts and mitigation actions.
- Implementing ongoing tracking for scope 3 priority areas.
- Developing processes and policies that lead to reductions in scope 3 emissions.

Table 3. Summary of Scope 3 Baselines

Scope 3 Category	Baseline (tCO_2e)	Baseline year
Business air travel	1,208	2019
Commuting	570	2024
Student Air Travel, Domestic and International	4,520	2019
Purchased goods and services	152	2022/3
Investments	348 (or 12,629 with investee scope)	2022/3
Waste	-31	2022

[5] HFCs and PFCs are a class of powerful greenhouse gases with global warming potential (GWP) values that are typically 1,000 times greater than that of CO_2 (US EPA, Greenhouse Gas Inventory Guidance, 2014)

Climate Risk and Resilience

In 2024, Royal Roads undertook its first climate risk assessment. This one-year process helped improve understanding of the highest risks facing the university and set out a resilience roadmap to chart a path forward. The assessment is a critical precursor to adaptation and resilience planning. The top five climate hazards identified for RRU are:

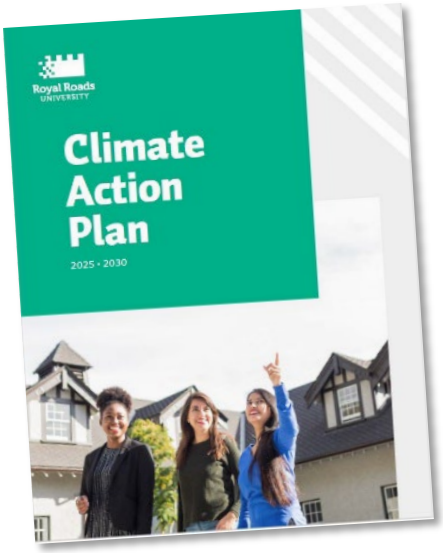
1. Interface wildfire
2. Extreme heat
3. Poor air quality
4. Extreme wind and storms
5. Drought and water shortage

Risks were identified across a variety of sectors from health and wellness, culture and heritage, biodiversity and ecosystem services, infrastructure and built systems, university administration, and economic conditions and revenue streams. RRU is in the process of developing a resilience and adaptation plan. In 2025 several initiatives supported the advancement of this work including:

- An employee information session and preparedness webinar on extreme heat, smoke and fire.
- Identification of campus, community and ecosystem resilience as a key goal in the 2025 - 2030 Climate Action Plan.
- Ongoing network building and learning with local and regional partners.
- Integration of “climate leadership” into the organization’s competency framework which will support professional development/training and be embedded across role profiles.
- Opening of the new John Horgan Campus, a Net Zero Design standard facility which incorporates resilience features into its design and function.

2025 Success Stories

Climate Action Plan Refocusing

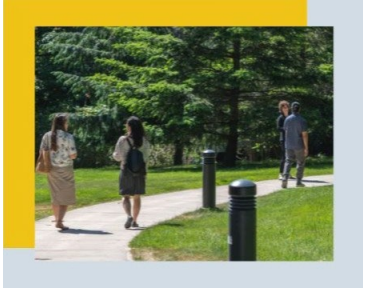


In 2025, RRU updated its *Climate Action Plan.* Global contexts have shifted, and the post-secondary sector is facing unprecedented challenges. The new plan refocused the university's climate actions and strategies, allowing it to remain responsive to emerging issues and new information.

RRU's new Climate Action Plan 2025-2030 was approved in Summer 2025. Spanning across five goal areas, the university aims to 1) equip learners for a climate-resilient future, 2) strengthen climate action engagement and collaboration for community impacts, 3) advance campus, community, and ecosystem resilience, 4) reduce emissions and accelerate clean energy transitions, and 5) embed climate into institutional structures and culture.

John Horgan Campus

During the Summer of 2025, RRU opened the John Horgan campus in Langford. This five-story mass timber was built to LEED v4 Gold certification and Zero Carbon Building Design certification standards. It now operates as a collaborative regional learning hub. Design features included low-carbon concrete, rooftop solar, maximized rainwater filtration and landscaping with native vegetation to reduce irrigation demands. Undergraduate and other programming is offered by RRU, Camosun College, the University of Victoria, the Justice Institute of British Columbia, and the Sooke School District 62. This campus offers flexible classrooms, shared spaces an Indigenous centre and a studio for the new Westshore Innovation and Startup Hub.



Other Climate & Sustainability Initiatives

CAMPUS INFRASTRUCTURE & OPERATIONS

Energy Management

To increase energy use monitoring and efficiency on the Colwood Campus, RRU initiated projects that include lighting upgrades and the addition of mechanical meters in the Library and Sequioa buildings. These upgrades were integrated into lifecycle replacements and deferred maintenance projects.

Building Retrofits and Upgrades

In 2025, a key upgrade that supported energy efficiency and climate targets was the installation of a CO_2 heat pump for the Nixon building. This highly efficient, electric-gas hybrid system uses R744, a non-toxic refrigerant with a lower-than-average global warming potential. Methane power is only used as backup energy, if required. The new heat pump will heat the building's hot water and is expected to reduce RRU's emissions while also promising lower operating costs.

CAPACITY BUILDING & COLLABORATION

Climate Education and Training

In addition to its existing suite of climate and sustainability-related education and training, RRU is developing a *Climate Justice and Equity* course that will be ready in 2026. This self-guided course will offer a deeper dive into issues of human rights in the face of the climate crisis and other intersecting challenges. It will be freely available to Royal Roads employees as well as open to the wider public.

Climate Leadership Competencies

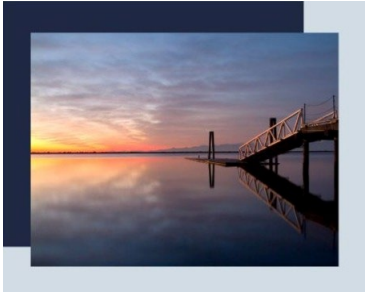
Climate Leadership was added an employee competency in RRU's restructured professional development framework. With this new framework, "Climate Leadership" will be integrated into employee role profiles and climate-related education and training for staff, faculty will be developed. These measures will help to ensure RRU employees have the skills and knowledge to become a resilient, climate-ready workforce.

Biodiversity Celebration

In 2025, RRU partnered with the City of Colwood and the Capital Regional District to host a regional *Biodiversity Celebration* at the university. The event featured an online panel discussion followed by an in-person gathering that included walks, talks and a showcase of biodiversity and related projects from around greater Victoria. With over twenty organizations hosted booths and exhibits to share their inspiring work with the broader community. The celebration was well-received by those attending and fostered connections and relationship-building for those working on biodiversity in the region.

Climate Network Map

RRU's Climate Network Map was developed with generous assistance from colleagues at RRU's Cascade Institute. This interactive map profiles the broad range and of climate expertise, projects and activities being undertaken by RRU faculty and staff in a connected web. As an ongoing project, the network map will serve as a tool to support greater collaboration and capacity-building for the RRU community and with partners, prospective students, and the public.



Climate and Sustainability Plans for 2026 and Beyond

CLIMATE LEADERSHIP

Climate Action Plan Implementation

In 2026, RRU will dive into its new Climate Action Plan (CAP) which builds off the foundation of its previous CAP. In the Spring of 2026, a large campus-wide conversation will be hosted to engage employees and garner support for the actions and initiatives planned. RRU's CAP is distributed in nature with multiple points of engagement for people across the organization so this broader kick-off is intended to rally support for the coming years.

Revisiting Scope 3 reductions

Considering the work to update the university's climate action plan and other competing priorities, the focus on developing scope 3 emission tracking was paused in 2025. Next steps for scope 3 emissions include establishing tracking processes, determining our methodology, and prioritizing key categories for reductions. One early task will be the development of a sustainable business travel guide to provide additional background and decision-making information to employees traveling for university business.

Renewable Natural Gas

In 2026, RRU will move away from designating its methane as Renewable Natural Gas (RNG). Although the RNG designation reduced our reported emissions, it was not a true reduction of the university's fossil fuel use. In the coming months, RRU will determine pathways ahead for more robust energy management, electrification, and other decarbonization initiatives.

PROGRAMS & OUTREACH

Continuing to foster a culture of agency and engagement through:

- **A series of special events offered twice annually**, including Earth Week in April and a Climate Week or Biodiversity Celebration in the Fall. The sessions and events offered to RRU students, employees and the broader public provide engaging education, share diverse perspectives, and build greater connections.
- **Healthy Planet Program**: through support from the WWF *Go Wild Grants* program, monthly opportunities that engage the RRU community offer hands-on stewardship sessions, biodiversity education, and nature-based reconnection events. The upcoming year will develop new sessions to reach broader audiences.
- Monthly **Resiliency and Reconnection Circles** for interested staff and faculty with Professor and Ecopyschotherapist, Hilary Leighton, to acknowledge and work through emotions, gain insights, and cultivate increased resilience and reconnection through community.
- **Solidarity Coalition**: with RRU as an anchor organization, the Solidarity Coalition is a community-centered network of individuals and organizations addressing different aspects of the polycrisis across the Greater Victoria area. The coalition seeks to build resilience and empowerment amongst its membership group by increasing partnerships, relationships, mutual aid, and collaboration for climate action leadership.

Expanding RRU programming

Established through a generous donation from the late Susan Bagley Bloom, RRU Salt Spring Island represents the first physical presence of a post-secondary institution on the Gulf Islands and presents an opportunity to expand learning, teaching, and research to communities in that region. Working collaboratively with on-island partners and local Indigenous communities, the collective vision for RRU Salt Spring Island is to offer one-of-a-kind experiences focused on regenerative sustainability and transformative learning.

The Farm as a Living Lab

Dedicated to sustainable agriculture, food education, and community connection, the Farm has grown into a vital living lab. Inside RRU Colwood's walled garden, unused lawns were converted into a Giving Garden, Market Garden, Indigenous Medicine Garden, and Polyculture Orchard. Beyond significant food production, the Farm offers hands-on opportunities for students, staff, faculty, volunteers, and the greater community to engage in regenerative farming practices that promote learning related to climate action, sustainability, food sovereignty and ecological stewardship.

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