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EXECUTIVE SUMMARY

1. FXFCUTIVE SUMMARY

As we advance our climate action goals, we recognize our responsibility to honour local Indigenous Knowledge Systems, worldviews and protocols and to be in right relationship with all people, beings, lands and waters. Our commitment to climate action is deeply rooted in these responsibilities and reflects the university's broader dedication to reconciliation, sustainability and social accountability.

Since 2010, the University of Victoria has participated in the BC Carbon Neutral Government (CNG) Program, meeting the requirements of British Columbia's Climate Change Accountability Act by measuring, reducing and offsetting our greenhouse gas (GHG) emissions to achieve carbon neutrality, as required of all provincial public sector organizations. This year's report marks a significant expansion in scope. The university is including metrics in this report that go beyond compliance, and reflect our commitments as a signatory to the United Nations Race to Zero Global Campaign and our alignment with voluntary frameworks such as the AASHE Sustainability Tracking, Assessment & Rating System (STARS) and the Times Higher Education (THE) Impact Rankings. These efforts underscore the university's dedication to transparency, accountability and continuous improvement, providing the insights needed to define and achieve the university's ambitious climate targets.

In 2024, the university reported 11,749 tonnes of CO_2 equivalent (t CO_2 e) under the CNG regulation, marking a 14% increase over 2023. This rise reflects our commitment to a more accurate and comprehensive emissions inventory, with significant changes related to the first-time inclusion of fugitive refrigerant emissions from hydrofluorocarbons (HFCs). Emissions remain concentrated at the Gordon Head Campus, which accounted for 94% of total emissions and continues to be the focus of the university's decarbonization strategy.

The preparation of this report marks a milestone in institutional collaboration, staff across administrative and operational units including, Campus Planning and Sustainability, Facilities Management's Energy Services and Fleet Management, Transportation and Commuting Services, Treasury and Risk Management, and Purchasing Services, worked together to compile thousands of data points and build a detailed and transparent inventory. This effort goes beyond reporting; it represents a shared commitment by passionate people working together at the university toward real climate solutions.

Organized in three parts, this report outlines the university's emissions profile, performance against net zero targets and next steps for managing Scope 3 emissions across our value chain. It also highlights how our climate reporting metrics are aligned with the United Nations Sustainable Development Goals (SDGs), the Times Higher Education (THE) Impact Rankings, and the AASHE STARS framework.

As the university advances its climate goals, this report stands as both a record of action and a reflection of the shared values and collaboration that drive climate leadership on our campus.

Andrew Coward Associate Vice-President, Financial Planning and Operations, University of Victoria May 31, 2025

2. INTRODUCTION

The University of Victoria (UVic) is committed to addressing the causes and impacts of climate change through coordinated action across operations, investments and partnerships. Guided by the <u>Climate and Sustainability Action Plan 2030</u>, this report outlines the university's Climate Change Accountability and Reporting Framework highlighting key climate commitments, actions taken in 2024 and plans for 2025 and beyond.

CLIMATE COMMITMENTS

RACE TO ZERO

NET ZERO BY 2040

As a signatory to the United Nations Race to Zero (RtZ) campaign, the University of Victoria is committed to achieving net zero greenhouse gas (GHG) emissions from campus operations by 2040. The interim target is a 50% reduction in emissions from the 2010 baseline by 2030. The long-term goal is to become a climate-positive campus by 2050. These targets are embedded within the Climate and Sustainability Action Plan (CSAP) 2030.

Carbon Neutral

CARBON NEUTRALITY

The University of Victoria has participated in the <u>BC Carbon</u> Neutral Government (CNG)

Program since 2010, reporting and offsetting institutional GHG emissions in accordance with the <u>Climate Change Accountability Act</u> and <u>Carbon Neutral Government</u> Regulation. This framework ensures consistent measurement, reduction, and offsetting practices across the public sector.



RESPONSIBLE INVESTMENT

In 2020, the university became a signatory to the <u>UN Principles</u> for Responsible Investment (<u>PRI</u>) and adopted a <u>Responsible Investment Policy</u> that incorporates climate-aligned investment goals. Ongoing responsible investment reporting tracks progress toward climate-related financial performance indicators.

2.1 The University of Victoria's climate commitments

The University of Victoria takes a comprehensive approach to climate action through a combination of legislated reporting, institutional targets and responsible investment strategies. Together, these commitments form a multi-faceted approach to institutional climate action, extending from emissions produced on campus to those embedded in the university's investment portfolio.

2.2. The evolving climate and sustainability reporting landscape

Since 2010, the university has tracked and offset greenhouse gas (GHG) emissions under the <u>Climate Change Accountability Act</u>, which mandates public sector organizations (PSOs) to measure, reduce and offset emissions from buildings, equipment and select paper.

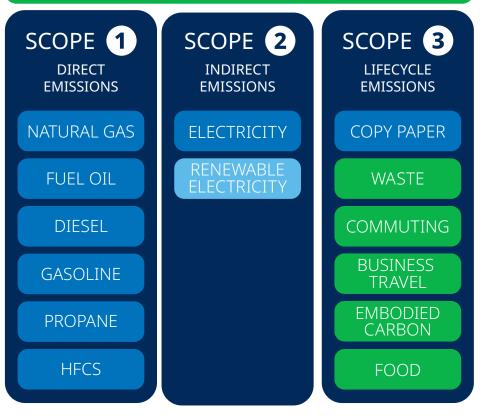
For the 2024 reporting year, the university expanded the scope of its Climate Change Accountability Report (CCAR)¹ to include sustainability metrics beyond those required by the <u>BC Carbon Neutral Government (CNG)</u> Program.

The CCAR now functions as a living framework, with new metrics added based on baseline data availability, strategic relevance and alignment with voluntary reporting frameworks like AASHE Sustainability Tracking, Assessment & Rating System (STARS)², Times Higher Education (THE) Impact Rankings³ and the United Nations Race to Zero Campaign (RtZ)⁴.

2.2.1 Emissions sources and emerging reporting requirements

UNIVERSITY OF VICTORIA

EMISSIONS SOURCES AND EMERGING REPORTING REQUIREMENTS



- Annually reported and offset through BC Carbon Neutral Program
- Climate and Sustainability Action Plan Goal 11; aligned with AASHE STARS
- Times Higher Education (THE) Impact Rankings

¹ The public sector Climate Change Accountability Report (CCAR) is an annual report due on May 31 each year as part of the BC CNG Program.

² STARS is a transparent, self-reporting framework developed by AASHE for colleges and universities to measure their sustainability performance.

³ The Times Higher Education (THE) Impact Rankings assess universities' contributions to the United Nations Sustainable Development Goals (SDGs).

⁴ Race to Zero for Universities and Colleges is a global campaign that encourages higher education institutions to commit to achieving net zero carbon emissions by 2050 at the latest.

2.3 The University of Victoria's Climate Change Accountability and Reporting Framework

The university's Climate Change Accountability and Reporting Framework reflects the interrelationships of internal policy, external legislative mandates and voluntary reporting frameworks ensuring coordinated action across operational and administrative units, while maintaining compliance with provincial and federal regulations. The governance structure is formalized through project agreements and reporting procedures that uphold data integrity, shared accountability and transparency. Oversight, implementation and reporting responsibilities are highlighted below.

CLIMATE CHANGE ACCOUNTABILITY AND REPORTING FRAMEWORK



POLICY & PROCESS DRIVERS

- Booking of University Space Policy
- Building and Grounds Usage Policy
- Campus Plan
- Climate and Sustainability Action Plan
- Cycling Plan
- Enterprise Risk Management Policy
- Flexibility Framework Principles
- Furnishing, Fitting, Finishes and Artwork Policy
- Motor Vehicle Policy
- Purchasing Policy
- · Responsible Investment Policy
- Risk Appetite Framework
- Strategic Framework (Distinctly UVic)
- Strategic Energy Management Plan (FGMT)
- Supplier Code of Conduct
- Sustainability Policy
- Working Capital Investment Policy



ASSOCIATE VICE-PRESIDENT FINANCE AND OPERATIONS

Provides strategic oversight and reviews the university's climate reporting, including the CCAR.

CAMPUS PLANNING & SUSTAINABILITY

Coordinates CCAR development and leads climate reporting by aligning policy, external standards, and cross-departmental data to support accountability and net zero goals.

FACILITIES MANAGEMENT

The Executive Director acts as CCAR project sponsor and implements data-driven decision making. The department manages building energy, water, fleet fuel, and refrigerant emissions data for the Gordon Head campus, and sets technical standards aligned with climate policies.

PROJECT PARTNERS

Departments such as Treasury and Risk Management, Transportation and Commuting Services, and Purchasing Services provide data, services, and support that contribute to climate action and sustainable operations.

POLICY & REGULATORY DRIVERS

- BC Carbon Neutral Government Program & Regulation
- BC Climate Change Accountability Act
- BC Hydro / FortisBC Agreements
- BC Step Code
- BC Zero-Emission Vehicles Act & Regulation
- Climate Resilience Framework and Standards (BC Government)
- ESG Framework for Capital Projects
- Federal Halocarbon Regulations (2022)
- Local Government (Green Communities) Act
- Modern Slavery Act
- Ozone Depleting Substances & Other Halocarbons Regulation
- Post-Secondary Capital Project Guidelines
- Principles for Responsible Investment (PRI)
- University Act
- Zero Carbon Step Code (Saanich)

2.4 Policy and regulatory alignment

The University of Victoria's climate reporting and decision-making are shaped by both external regulations and internal policies. External policies and regulations establish the compliance landscape, defining emissions scope, infrastructure standards and long-term decarbonization expectations. Internal plans and policies translate these obligations into actionable processes by embedding climate metrics into capital planning, procurement and day-to-day operations. The following tables outline the key external regulations and internal policies that served as influential drivers in this year's Climate Change Accountability Report.

Table 1. External regulatory drivers					
Policy / Regulation	Focus area				
• BC Carbon Neutral Government Program & Regulation	Public sector emissions reporting and offsetting.				
 BC Climate Change Accountability Act 	Legislative basis for climate targets and reporting.				
 BC Hydro / FortisBC Agreements 	Utility energy supply agreements and incentives.				
• <u>BC Step Code</u>	Building energy performance and carbon standards.				
 BC Zero-Emission Vehicles Act & Regulation 	Mandates increasing sales of zero-emission vehicles.				
 Climate Resilience Framework and Standards (BC) 	Infrastructure adaptation to climate risks.				
 ESG Framework for Capital Projects 	Environmental, Social and Governance criteria.				
 <u>Federal Halocarbon Regulations (2022)</u> 	Govern the use, handling and reporting of halocarbons.				
 Local Government (Green Communities) Act 	Local government climate planning requirements.				
 Modern Slavery Act (Federal) 	Supply chain transparency and ethical procurement.				
• Ozone Depleting Substances and Other Halocarbons Regulation (BC)	Governs the use, handling, storage and disposal of halocarbons.				
 Post-Secondary Capital Project Guidelines 	Planning and approval of funded capital projects.				
 Principles for Responsible Investment (PRI) 	ESG integration in investment decision-making.				
• <u>University Act</u>	Legal framework for university governance.				
 United Nations Race to Zero 	A global campaign to achieve net zero emissions by 2050.				
 Zero Carbon Step Code (Municipal) 	New buildings reach zero emissions by 2030 (Saanich Municipality).				

Table 2. Internal policies and process drivers

Pol	licy / Plan	Purpose	Purpose
0	Booking of University Space (BP3440), Building and Grounds Usage (BP3105)	Policy	Directs the use and maintenance of buildings and grounds with operational efficiency in mind.
0	<u>Campus Plan</u>	Plan	Embeds sustainability in land use, mobility and campus infrastructure planning.
0	Capital Planning Guidelines		Guidelines to prioritize and address capital needs efficiently.
0	Climate and Sustainability Action Plan 2030 (CSAP)	Plan	Sets net zero and climate-positive targets; identifies 11 strategic areas of action.
0	Cycling Plan	Plan	Provides a comprehensive approach to support cycling as a preferred mode of transportation.
0	Enterprise Risk Management (GV0225)	Policy	Ensures climate risks are evaluated in institutional planning.
0	Flexibility Framework Principles		Supports workplace flexibility, particularly regarding remote and hybrid work arrangements.
0	Furnishing, fitting, finishes and artwork (BP3130)	Policy	Ensures all furnishings, fittings and finishes conform to standards, codes and regulatory requirements.
0	Motor Vehicle (AD2315)	Policy	Guides fleet asset management and support fleet decarbonization goals.
0	Purchasing (FM5105)	Policy	Outlines process and procedures associated with the procurement of goods and services.
0	Responsible Investment (FM5215)	Policy	Outlines approach to managing working capital investments with a focus on sustainability and responsible investment practices.
0	Risk Appetite Framework		Outlines the university's tolerance for operational disruption and infrastructure risk.
0	Strategic Energy Management	Plan	Outlines Facilities Management's plan to achieve GHG reductions targets.
0	Strategic Framework (Distinctly UVic)	Plan	Identifies climate action and sustainability as institutional core values.
0	Supplier Code of Conduct		Establishes the minimum ethical, social and environmental standards expected of the university Suppliers.
0	Sustainability (GV0800)	Policy	Framework for incorporating sustainability into decision making.
0	Working Capital Investment (FM5200)	Policy	Ensures the responsible stewardship, planning, utilization and reporting of university-owned assets.



AASHE STARS PLATINUM RATING

In 2024, the University of Victoria earned a <u>Platinum</u> rating from the <u>AASHE STARS</u> program meeting Target 2 of the <u>Climate and Sustainability Action Plan</u>.

STARS offers a structured framework to assess sustainability performance, including emerging Scope 3 emissions. While provincial reporting focuses on Scope 1 and 2, the university's integration of STARS data into this Climate Change Accountability Report signals a deeper commitment to transparency and long-term climate action.

2.5 Report structure

This report provides a structured, centralized framework for reporting on climate and sustainability performance within campus planning and operations at the University of Victoria. It not only fulfills the university's legislative obligations under the <u>BC Carbon Neutral Government</u> (CNG) Program but also serves as a planning resource for operational units within the Vice-President Finance and Operations (VPFO) portfolio, helping to integrate climate considerations into policy, budgeting and project development.

The report is organized into three parts, summarized below:

Report Structure

PART 1

CARBON NEUTRALITY UNDER THE BC CNG PROGRAM

Fulfills legal reporting requirements for GHG emissions, offsets, and compliance with CNG Regulation. PART 2

OPERATIONAL EMISSIONS & NET ZERO PATHWAY

Outlines UVic's Scope 1 and 2 decarbonization strategy for Gordon Head Campus. **PART**

3

MITIGATING CLIMATE IMPACTS ACROSS THE VALUE CHAIN

Highlights voluntary actions and emerging reporting areas beyond direct and indirect emissions.

PART 1

CARBON NEUTRALITY
UNDER THE BC CARBON
NEUTRAL PROGRAM

Declaration Statement:

This PSO Climate Change Accountability Report for the period January 1, 2024, to December 31, 2024, fulfills legislated reporting requirements under the Climate Change Accountability Act.

It summarizes the university's 2024 greenhouse gas (GHG) emissions and associated carbon offset obligations, outlines actions taken to reduce emissions during the reporting year, and identifies plans to further reduce emissions in 2025 and beyond.

3.1 Carbon offsets and the BC Carbon Neutral Government Program

A carbon offset represents a verified reduction or removal of greenhouse gas (GHG) emissions from the atmosphere that is used to compensate for emissions that occur elsewhere. To be valid, an offset must be real, measurable, permanent and independently verified. These reductions are quantified in tonnes of carbon dioxide equivalent (tCO₂e) and are recorded in an official registry to ensure transparency and prevent double counting.

Under the BC <u>Carbon Neutral Government</u> (CNG) Program, public sector organizations (PSOs), including the university, are required to achieve carbon neutrality annually⁵. This is accomplished by:

- **1. Measuring emissions** from owned and leased buildings, fleet vehicles, refrigeration systems and eligible paper purchases;
- **2. Reducing emissions** through operational improvements;
- **3.** Offsetting remaining emissions through purchased verified carbon offsets with the <u>BC</u> <u>Carbon Offset Registry</u>⁶.

3.1.1 Retirement of offsets statement

In accordance with the requirements of the <u>Climate Change Accountability Act</u> and the <u>Carbon Neutral Government Regulation</u>, the University of Victoria (**the Organization**) is responsible for arranging for the retirement of the offsets obligation reported below 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.

⁵ Verified offsets are issued and retired in accordance with the <u>Greenhouse Gas Industrial Reporting and Control Act</u> [SBC 2014] c. 29, which governs the issuance of offset units for each tonne of emissions reduced or removed.

⁶ The provincial government retires offsets annually on behalf of BC public sector organizations as part of the Climate Change Accountability Act.

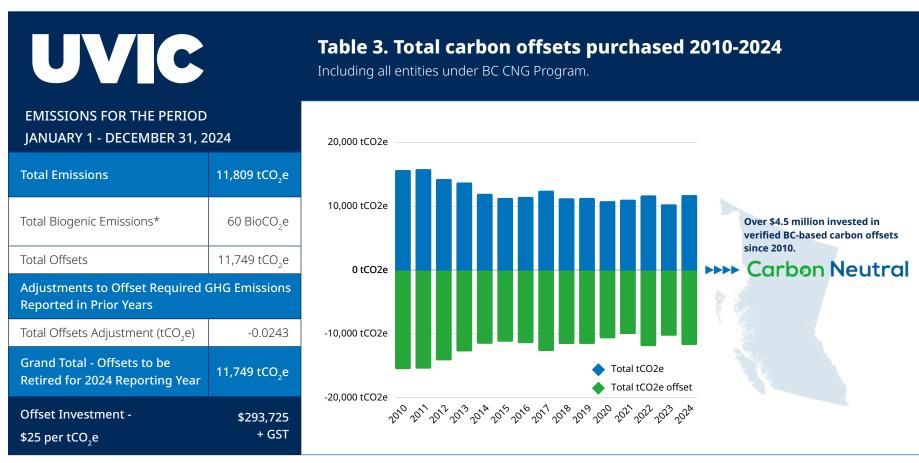
3.1.2 The University of Victoria's 2024 GHG emissions and offsets summary

The following table summarizes the university's GHG emissions and offset requirements for the 2024 reporting year.

3.1.3. Offset portfolio and investment

As of 2025, the university will have invested over \$4.5 million dollars in verified carbon offsets to displace approximately 182,838 tonnes of CO₂ equivalent (tCO₂e). These funds are registered under the BC Carbon Offset Registry and support provincially approved emissions reduction projects across sectors such as forestry, agriculture and low-carbon energy.

An overview of the university's cumulative investment in carbon offsets is presented below.



^{*} $BioCO_2$ is included in Total Emissions but not Total Offsets.

3.2 BC Carbon Neutral Program reporting scope

The BC CNG Program defines emissions scope through standardized boundaries that determine what must be reported and offset. The table below was *adapted* from the 'Scope Summary for B.C. Public Sector Greenhouse Gas Emissions' and summarizes what is considered in-scope and out-of-scope under the BC Carbon Neutral Program.

Table 4. Scope summary for BC Carbon Neutral Program						
Scope Category	In-Scope	Out-of-Scope				
Greenhouse Gas Emissions	CO ₂ , CH ₄ , N ₂ O, SF ₆ , PFCs, HFCs.	HCFCs, halons and other unlisted gases.				
Organizational Boundaries	Entities financially controlled by the PSO and included in audited financial statements.	Contractors, municipalities, BC Ferries, Canadian Blood Services and other PSOs.				
Operational Boundaries	Emissions from PSO-owned or leased buildings, equipment, vehicles and joint assets by ownership share.	Contractor-owned assets, minor joint assets and employee work-from-home emissions.				
Stationary Sources	Direct and indirect emissions from owned/leased buildings, including fugitive HFCs.	Energy sold to other PSOs; buildings under capital lease to non-GRE entities.				
Mobile Sources	Emissions from PSO-owned/leased vehicles, off-road equipment, marine vessels, aircraft, transit, school buses (reportable, not offsetable).	Employee and contractor vehicles; commuting.				
Office Paper	20 lb. multipurpose copy paper (all colours, sizes, recycled content).	Other weights/types, envelopes, specialty or pre- printed paper, instructional or resale materials.				

3.2.1 The University of Victoria's GHG inventory for BC Carbon Neutral Program

The first step in <u>becoming carbon neutral</u> under the BC CNG Program is to establish the <u>organizational boundary</u> for designing the university's GHG inventory. The university applies a financial control approach, which includes all entities reflected in its <u>financial statements</u>. Once the organizational boundary is defined, emissions are measured and reported across key operational boundaries.

Table 5. Entities included in carbon n	neutral greenh	ouse gas inventory

Financial Statement Entities (2024)	Included in GHG inventory	Reporting Scope	Total tCO₂e	% of Total Emissions	Total Gross Floor Area (m²)	Estimated No. Buildings
University of Victoria*	Yes	Comprehensive – all in-scope emission sources	11,062	94%	428,000 m ²	70
Vancouver Island Technology Park Trust	Yes	Partial* – building energy	488	4.2%	19,134 m²	3
UVic Properties Investments Inc.	Yes	Partial* – building energy	58	0.5%	4,857 m²	3
Heritage Realty Properties Ltd	Yes	Partial* – building energy	63	0.5%	5,575 m ²	6
Ocean Networks Canada Society (ONC)	Yes	Partial* – building & mobile energy	11	0.1%	-	43
WCUMSS - 20% ownership	Yes (equity share)	Pro-rated – building energy use	8	0.1%	8,399 m²	22
TRIUMF -1/21st ownership	Yes*	Pro-rated – building energy use	58	0.5%	-	-
UVic Industry Partnerships	No	No in-scope assets or emissions data	a available.			
Pacific Climate Impacts Consortium	No	Occupies university buildings; emissions captured under parent entity.				
UVic Foundation Entities (3 total)	No	No in-scope assets or emissions data available.				
Byron Price & Associates Ltd	No	No in-scope assets or emissions data available.				
GSB Executive Education Inc	No	Occupies university buildings; emissions captured under parent entity.				

- Footnotes and Clarifications
- **Partial Scope:** Emission sources estimated to contribute less than 1% of the PSOs total GHG emissions may be deemed out-of-scope under the BC Carbon Neutral Program if the effort to collect or estimate data is disproportionately onerous. Mobile, fugitive and paper emissions are excluded for entities outside the university's operational control under the small emissions sources rule.
- **TRIUMF:** Although not listed in the university's financial statements, TRIUMF is included to maintain alignment with SFU and UBC, who report jointly. The university reports 1/21st of emissions based on its legacy share.
- Ocean Networks Canada (ONC): Emissions attributed to ONC primarily reflect energy use from over 40 remote shore stations and seismic sensing units across Canada; ONC building and mobile emissions are captured in the UVic Properties and the University of Victoria's emissions inventory.
- **University of Victoria:** Emissions attributed to the university include: academic and residential buildings associated to the Gordon Head Campus, leased office spaces in buildings not-owned by the university, the Venus Shore Station in Port Alberni as well as, mobile, fugitive, and paper emissions. Other entities may be financially affiliated with the university but are not under its operational control. <u>An operational control approach</u> is another approach to developing GHG inventories but not the chosen framework of the <u>BC CNG Program</u>.

3.3 University of Victoria GHG emissions trends

The university's GHG emissions inventory is prepared using the Clean Government Reporting Tool (CGRT), an Online platform powered by <u>Sphera</u>, provided by the government to support public sector organizations in measuring and reporting greenhouse gas emissions. CGRT is updated with current emissions factors and calculation methodologies from the Province's '<u>Best Practices Methodology for Quantifying Greenhouse Gas Emissions</u>' and includes data validation tools to ensure completeness and consistency.

3.3.1. Emissions overview

In 2024, the university reported 11,749 tonnes of CO₂ equivalent (tCO₂e) under the <u>BC CNG Program</u> a 14% increase from 2023. This reflects the inclusion of previously unreported fugitive refrigerant emissions, expanded asset coverage and minor increases in fuel use.

94% (11,062 tCO₂e) of total emissions originated from the Gordon Head Campus. The remainder came from affiliated entities under the university's financial control, primarily through building energy use.

KEY CHANGES IN THE 2024 INVENTORY:

- Fugitive refrigerant emissions from hydrofluorocarbons (HFCs) were included for the first time, adding 1,387 tCO₂e to the inventory.
- **Mobile emissions** increased slightly to **272 tCO₂e**, driven by greater use of a diesel-powered academic vessel.
- Fuel oil emissions rose to 233 tCO₂e due to the procurement of fuel oil for the District Energy Plant during periods of Natural Gas curtailment
- Ocean Networks Canada's inventory expanded to include 40+ remote shore stations and seismic units, improving coverage of distributed research assets.

Table 6. 2024 emissions by category						
Emissions category	Tonnes of CO₂ equivalent	% change fro 2023				
Building	10, 034 tCO₂e	+ 0.5%				

1,387 tCO₂e

272 tCO₂e

56 tCO₂e

+ 100%

+ 5%

-5%

Table 7. 2024 emissions	hy fuel tyne
	by ideitype

Emissions source	Unit of measure	Tonnes of CO₂ equivalent*	% change from 2023
Natural gas	182,321 Gj	9,120 tCO₂e	-1%
Refrigerants (HFCs)	1,060 Kg	1,387 tCO₂e	+ 100%
Renewable	216,976 Gj	597 tCO₂e	-11%
hydroelectricity			
Fuel oil (light)	87,772 Litres	233 tCO₂e	+ 75%
Gasoline	81,951 Litres	181 tCO₂e	+ 11%
Diesel	59,364 Litres	153 tCO₂e	+ 28%
Paper		56 tCO₂e	-5%
Propane	8,149 Litres	13 tCO₂e	-18%
Nova Scotia - electric*	32 Gj	6 tCO₂e	+ 100%
Off-grid diesel - electric*	38 Gj	4 tCO₂e	+ 100%

^{*} Rounded to the neared whole value.

Fugitive

Mobile

Paper

^{*} Ocean Networks Canada requires electricity from non-renewable sources to operate some remote shore stations.

Table 8. Total emissions reported under BC Carbon Neutral Program from 2010-2024¹ Reporting Tonnes of CO₂ equivalent 20,000 tCO2e 2010 15,675 tCO₂e 25% reduction from 2010 baseline 2011 15,824 tCO₂e 15,000 tCO2e 2012 14,272 tCO₂e 2013 13,727 tCO₂e 10,000 tCO2e 2014 11,952 tCO₂e 5,000 tCO2e 11,306 tCO₂e 2015 2016 11,464 tCO₂e 0 tCO2e 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2017 12,442 tCO₂e Reporting Year Tonnes Carbon Dioxide Equivalent (tCO2e) 2018 11,252 tCO₂e 2019 11,306 tCO₂e 2020 10,798 tCO₂e 2021 11,032 tCO₂e 2022 11,707 tCO₂e 2023 10,302 tCO₂e 2024 11,749 tCO₂e

¹ Emission values may differ from those published in earlier reports due to updates made to historical data within the Clean Government Reporting Tool. Figures reflect reporting-year exports as of 2025 and incorporate retroactive adjustments, including changes to the Electricity Emissions Intensity Factor (EEIF) introduced in 2021.

PART 2:

PATHWAYS TO NET ZERO

From Pledge to Plan⁷

As a signatory to the United Nations Race to Zero (RtZ) campaign, the University of Victoria has formally pledged to achieve net zero greenhouse gas (GHG) emissions from campus operations by 2040. This commitment is supported by an interim target to reduce Scope 1 and 2 emissions by 50% below 2010 levels by 2030, and a longer-term goal to become a climate-positive campus by 2050.

7. RtZ outlines five key principles: <u>Pledge, Plan, Proceed, Publish, and Persuade</u>, which guide institutions in setting and delivering credible net zero targets. These principles ensure commitments are science-based, actionable, transparent, and aligned with broader climate goals.

4.1 Background

In 2022, Facilities Management's Energy Services team completed the **Carbon Reduction Plan: Technical Pathways Report**, which outlined a long-term decarbonization strategy based on a detailed review of campus infrastructure, energy use, emissions and projected growth. The analysis included baseline data and forward-looking scenarios incorporating new construction, campus expansion and climate change impacts.

The report identified decarbonization measures aimed at transitioning the campus energy supply to low emitting sources (e.g. natural gas to renewable electricity) and reducing energy demand. These decarbonization measures were bundled to form the *technical pathways* which the university could pursue to achieve its 2030 and 2040 goals.

KEY FINDINGS THAT SUPPORT THE 2040 NET ZERO TARGET INCLUDE:

- **Eliminate fossil fuel use –** substantial reductions in natural gas use at the District Energy Plant (DEP) is required as direct on-site combustion is not a credible offset for net zero.
- **Rapid electrification -** is critical to meet the university's 2030 interim goal and must be paired with energy efficiency improvements to avoid high operating costs and major electrical infrastructure upgrades.
- **Heat pump investment –** supports both emissions reduction and climate resilience by enabling space cooling.

The next step is to develop a phased implementation plan that aligns with the university's capital planning process. The plan will help coordinate required upgrades to aging energy infrastructure with utility capacity needs and emissions reduction goals.

4.2 Net zero commitment and framework

The University of Victoria's long-term climate strategy is guided by net zero principles, which prioritize reducing direct emissions within the university's operational control⁸ and addressing material⁹ Scope 3 sources, with verified carbon offsets used only for unavoidable emissions.

The university meets carbon neutrality requirements under the provincial framework and also reports through voluntary platforms such as <u>STARS</u>, the <u>Times Higher Education Impact Rankings</u> and the <u>UN Race to Zero campaign</u>.

CARBON NEUTRALITY VS. NET ZERO

Although often used interchangeably, carbon neutrality and net zero are different approaches:

- **Carbon neutrality,** under BC's <u>Climate Change Accountability Act</u>, means measuring emissions and purchasing carbon offsets to "neutralize" emissions across all university entities.
- **Net zero**, as defined by the <u>UN Race to Zero Lexicon</u>, means focusing on deep, direct reductions in emissions from sources the university controls¹⁰ and its broader value chain, in line with science-based targets.

NET ZERO

Defined by the Race to Zero Lexicon (aligned with the Science Based Targets initiative and the IPCC)

OPERATIONAL CONTROL

(Gordon Head Campus)

DEEP REDUCTIONS

Scope 1, 2, material 3

SCOPE 3
Material emissions

OFFSET RESIDUAL Voluntary

CARBON NEUTRALITY

Defined by Climate Change Accountability Act and BC Carbon Neutral Government

FINANCIAL CONTROL (all UVic entities)

MEASURE & REPORT

Scope 1, 2, limited 3

SCOPE 3 Copy paper only

PURCHASE OFFSETS

Mandated annually



⁸ Under B.C.'s Climate Change Accountability Act, the university reports emissions using a financial control model, which includes all assets owned or leased by entities listed in its financial statements. An operational control model, by contrast, includes only emissions from assets the university manages on a day-to-day basis. As a result, some emissions reported as Scope 1 or 2 under the financial model would be considered Scope 3, Category 13 (Downstream Leased Assets) under an operational control approach.

⁹ Material Scope 3 emissions within the Race to Zero campaign require participating institutions to identify and prioritize high-impact Scope 3 emissions categories and align reductions with the 1.5°C target.

¹⁰ The choice of boundary (operational control, financial control, or equity share) is up to the reporting organization.

4.3 Decarbonizing the Gordon Head Campus

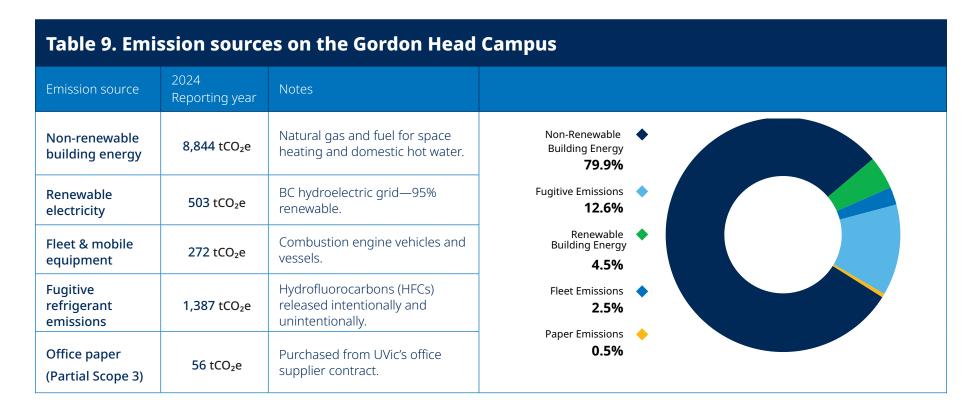
The Gordon Head Campus represents the university's largest carbon footprint and the most significant source of emissions. In 2024, around **94%** of the university's total GHG emissions can be attributed to the Gordon Head Campus, primarily from building heating systems (stationary emissions), campus fleet operations (mobile emissions) and refrigeration equipment (fugitive emissions).

By prioritizing the largest source of emissions, the university can advance targeted actions for significant, scalable reductions, demonstrating visible climate leadership to the campus community and in the post-secondary sector. tCO_2e

FIVE ACTION AREAS:

- 1. Fuel switching (natural gas to electricity)
- 2. New building design and construction
- 3. Energy and fuel management
- 4. Halocarbon management
- 5. Fleet electrification

The sections below summarize the university's emissions reduction actions in 2024 and outline the metrics, governance structures and reporting processes that support consistent and transparent performance tracking to accelerate climate action in 2025 and beyond.







Case Study:

District

Energy Plant

(F)

FUEL SWITCHING

Electrify systems / eliminate fossil gas

Prioritize capital projects for renewable energy

OFFSET WHERE NECESSARY



ENERGY MANAGEMENT

Reduce Energy Intensity (GJ/m²⁾

Continuous optimization of existing systems

Case Study:

Engineering

Expansion



Track progress

toward interim

targets (e.g.,

2030 CSAP

goals)

BUILDING DESIGN

Design for near-zero operational emissions

Third-party certifications (LEED Gold, ZCB)

Align with government mandates & policies Benchmark energy use (ESPM, CGRT)

INNOVATION & ON-SITE SOLUTIONS

Renewables, storage, sequestration Advance campus as a Living Lab

PATHWAY TO NET ZERO •••



4.4 Operational emissions mitigation

4.4.1 Fuel switching - natural gas to electricity

Metric:

Renewable energy performance







REGULATORY DRIVERS

BC Climate Change Accountability Act

BC Carbon Neutral Regulation

BC Hydro / FortisBC Agreements

Public Sector Carbon Offset Requirements

ACCOUNTABILITY

CSAP 2030

 Target 1: 50% reduction from 2010 baseline by 2030, Net zero operational emissions by 2040

REPORTING

BC Carbon Neutral Program
UN Race to Zero
AASHE STARS:

- **OP-5:** Greenhouse Gas Emissions
- **OP-6:** Clean and Renewable Energy

RATIONALE

University owned-buildings rely on purchased electricity from BC Hydro and purchased energy in the form of natural gas, diesel and fuel oil for building generators.

BC Hydro generates 95% of its power from clean or renewable resources resulting in a near '0' emission factor¹¹. As a result, fuel switching (replacing natural gas with electric systems, is one of the university's immediate strategies to drive down emissions from building operations at the Gordon Head Campus.

"Reducing the overall energy consumption of UVic's existing buildings is the foundation of UVic's GHG reduction strategy. The programs managed by UVic's Energy Management team have resulted in a consistent downward trend in campus energy consumption and improved energy efficiency of the whole campus. While fuel switching and new building efficiency will get UVic to its 2030 GHG reduction goal energy efficiency of the whole campus will be the key focus for UVic to achieve net zero by 2040."

- Brent Dallimore, Operations Project Manager, Energy Services

¹¹ BC Hydroelectricity's emission factor was 0.0000099 tCO2e/kWh in 2024 [CNG and LGCAP Emission Factor Catalogue]

PERFORMANCE

In 2023 and 2024, over **50%** of Gordon Head Campus¹² energy came from renewable electricity supplied by BC Hydro (Table 11).

Despite this strong baseline, direct fuel combustion, primarily used for space heating and hot water, continues to drive emissions, with natural gas and building generators contributing approximately 8,820 tCO₂e, or 95% of building-related emissions on the Gordon Head Campus (Table 10).

Tracking the proportion of energy from renewable sources helps evaluate the university's progress toward long-term emissions goals and identifies where further investment is needed to support a more resilient, low-carbon energy system.

Table 10.

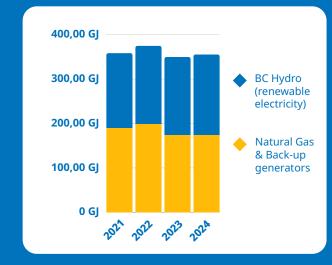
Annual Scope 1 and 2 emissions on campus



12,000 tCO₂e						
10,000 tCO₂e						
8,000 tCO₂e					•	Scope 2: BC Hydro (renewable
6,000 tCO₂e						electricity)
4,000 tCO₂e					•	Scope 1: Natural Gas
2,000 tCO₂e	-					& Back-up generators
0 tCO₂e						
rail rail rail rail						

Year	Direct emissions (Scope 1)	In-direct emissions (Scope 2)
2021	9,574 tCO₂e	452 tCO₂e
2022	9,990 tCO₂e	561 tCO₂e
2023	8,778 tCO₂e	550 tCO ₂ e
2024	8,820 tCO₂e	496 tCO ₂ e

Table 11. Annual energy consumption on campus



Year	Natural Gas & Back-up generators	BC Hydro (renewable electricity)
2021	190,466 GJ	167,825 GJ
2022	198,903 G J	175,781 GJ
2023	174,362 GJ	175,260 GJ
2024	174,724 GJ	180,521 GJ

¹² Total building emissions for Gordon Head Campus were calculated using the BC Carbon Neutral Clean Government Reporting Tool, based on utility and fuel data from utility accounts and fuel purchased for campus building generators. Emissions from off-campus leased offices and the Port Alberni Cable Station were excluded in performance calculations.



CASE STUDY:

DISTRICT ENERGY PLANT ELECTRIFICATION PROJECT

The <u>District Energy Plant (DEP)</u> is the university's centralized plant that provides hot water to approximately **70% of campus**. Buildings connected to the DEP use the hot water for space heating and domestic hot water. In 2024, the District Energy Plant accounted for approximately **38% of the total energy** delivered to Gordon Head Campus and **78% of the campus's natural gas consumption**, making it the single largest source of stationary emissions at the University of Victoria.

To address this, the university has initiated a project to switch one of the natural gas boilers with two electric boilers. This project is expected to reduce emissions by approximately **5,200 tCO₂e** per year and contribute to a **57% reduction in emissions** from 2010 levels by 2026.

This transition represents a significant milestone in the university's path to net zero operations and demonstrates how targeted infrastructure upgrades can accelerate campus-wide decarbonization.

"Managing peak energy demand, especially during the winter months, remains a critical challenge. While projects like boiler electrification represent important progress, fuel switching is only one part of a broader strategy for reducing emissions and transitioning to net zero operations."

- David Adams, Associate Director, Energy Services

WHY ELECTRIC BOILERS

- Supports CSAP GHG targets.
- Significant capital incentives secured from BC Hydro and the Low Carbon Economy Fund.
- Sized for integration with future low-carbon energy systems.
- Avoids campus-wide electrical upgrades.
- Simple, reliable technology with lowest implementation risk.

78%



4.4.2 New building design and construction

Metric:

Percentage of new floor area that meets or exceeds energy and climate resiliency standards







REGULATORY DRIVERS

BC Energy Step Code
Climate Resilience Guidelines
ESG Framework for Capital Projects
Post-Secondary Capital Project Requirements
University Act
Zero Carbon Step Code

ACCOUNTABILITY

CSAP 2030

• Target 1: 50% reduction from 2010 baseline by 2030, Net zero operational emissions by 2040

CSAP Strategy

- 10.1.2: Financing low-carbon systems
- 10.1.3: LEED Gold/equivalent for all new builds
- **10.1.8:** Green design guidelines by typology

REPORTING

BC Carbon Neutral Program
Public Sector Climate Leadership
Survey

UN Race to Zero

AASHE STARS

• **OP-1:** Building Design and Construction

RATIONALE

As the campus grows, the university must align infrastructure expansion with climate mitigation, energy performance and long-term climate change resilience standards¹³.

PERFORMANCE

Since 2021, the gross floor area of the Gordon Head Campus¹⁴ has grown by approximately **7.8%**, while associated emissions have **decreased by 7.1%**. This inverse trend highlights the impact of energy-efficient building practices and the benefits of BC's renewable electricity grid in reducing emissions despite campus expansion.

In 2025 the university adopted new <u>Capital Planning Guidelines</u>, which make a conscious shift toward space optimization and building renewal, recognizing that rethinking how existing space is used is one of the most impactful ways to advance sustainability, reduce emissions and make efficient use of limited capital. All major new projects are expected to:

- Meet or exceed LEED Gold certification.
- Undergo GHG emissions and energy impact assessments.
- Pass climate resilience scenario analysis for 2050 and 2080 climates.

¹³ Third-party standards such as LEED Gold or equivalent, Passive House and Zero Carbon Certification.

¹⁴ Total gross floor area data was contributed by Energy Services Facilities Management. Total building emissions for Gordon Head Campus were calculated using the BC Carbon Neutral Clean Government Reporting Tool, based on utility and fuel data from campus utility accounts and fuel purchased for building generators. Emissions from off-campus leased offices and the Port Alberni Cable Station were excluded from performance calculations.

LEADERSHIP IN GREEN BUILDING DESIGN

Over the past decade, the University Of Victoria has completed <u>12 LEED Gold-certified buildings</u> on the Gordon Head Campus. Among these, two student housing buildings, Čeqwəŋín ?éʔləŋ (Cheko'nien House) and Sŋéqə ?éʔləŋ (Sngequ House), have also achieved Passive House certification.

In total, the university's green-certified buildings account for 17.5% of the campus's gross floor area (GFA), demonstrating a long-standing commitment to high-performance building standards.

YEAR	GREEN	TOTAL	PERCENT
	BUILDING	CAMPUS	CAMPUS LEED
	GFA	GFA	CERTIFIED
2024	75,075 m ²	428,000 m ²	17.5%

"The university is developing a Sustainability Framework for Capital Projects to guide a consistent process that aligns each project with the university's sustainability and climate goals. While each project is unique, the framework will help identify strategies to address shared priorities like reducing greenhouse gas emissions, improving energy performance and enhancing climate resilience. It will also support better coordination across teams and ensure sustainability is embedded early in project planning and design."

- Mike Wilson, Director, Office of Campus Planning and Sustainability



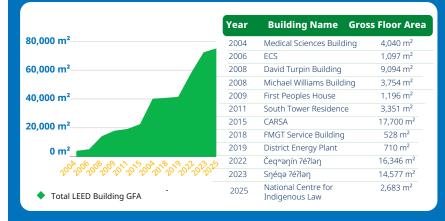
Table 12. Annual building emissions & campus growth



Year	Building Emissions	Gross Floor Area
2021	10,026 tCO ₂ e	397,000 m²
2022	10,552 tCO ₂ e	409,000 m ²
2023	9,328 tCO ₂ e	424,000 m ²
2024	9,316 tCO ₂ e	428,000 m ²

Table 13. LEED building GFA on Gordon Head Campus







CASE STUDY: ENGINEERING EXPANSION PROJECT

The University of Victoria's <u>Engineering Expansion Project</u>, set for completion in Fall 2026, is designed to be a model for low-carbon campus development. The project is aiming for top green building certifications, including <u>LEED v4 Gold and Zero Carbon Building Design</u> and <u>Performance</u>, from the Canada Green Building Council.

Guided by a bold vision, to be a beacon of innovation, collaboration and learning for an adaptive and sustainable future, the project focuses on both operational energy and the carbon footprint of construction materials. It includes energy-efficient design features, a shift toward renewable power and lower-emission materials.

A major feature is its on-site solar energy system. Across several rooftops and building features, over 670 solar panels will be installed to enable the new High Bay Research and Structures Lab (HBRSL) building to achieve the internationally recognized Zero Carbon Certification from the International Living Future Institute.

This project directly supports the university's Climate and Sustainability Action Plan by helping reduce emissions from new construction and moving the campus closer to net zero emissions by 2040.





ILFI Zero Carbon Certification for the HBRSL will require close collaboration between architects and UVic's Energy Services team to ensure the project incorporates the following key sustainability components.



Reduce annual operational energy use relative to a project-specific baseline.



Offset 100% of remaining operational energy through onsite renewables or the BC Carbon Neutral Program.



Conduct a full life cycle assessment (LCA) to measure Scope 3 embodied carbon - primary materials.



Offset 100% of Scope 3 embodied carbon emissions for primary materials to achieve ILFI certification.

4.4.3 Campus energy management

Metric:

Total campus energy use and energy use intensity (EUI).







REGULATORY DRIVERS

BC Hydro / FortisBC Agreements

Public Sector Carbon Offset Requirements

University Policies

- Space Planning, Management and **Optimization Policy**
- **Buildings and Grounds** Usage Policy

ACCOUNTABILITY

CSAP 2030:

Target 1: 50% reduction from 2010 baseline by 2030, Net zero operational emissions by 2040

CSAP Strategy

- **10.1.5**: Standardize building temperature
- **10.1.10:** Promote efficient space use

REPORTING

BC Carbon Neutral Program Public Sector Climate Leadership Survey UN Race to Zero

AASHE STARS:

- **OP-5**: Energy Use
- **OP-6**: Greenhouse Gas Emissions

RATIONALE

Emissions from building energy systems have historically contributed to the majority of the university's carbon footprint.

Tracking both total energy consumption (GJ) and energy use intensity (GJ/m²) offers a clear lens into the university's institutional energy profile, reflecting both operational discipline and the effectiveness of the Strategic Energy Management Plan.

As the university advances toward its net zero target, this metric serves as a reliable indicator of how aggregated efforts are driving climate progress.

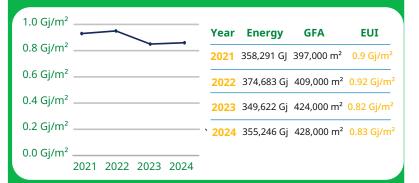
PERFORMANCE

Since 2021, total energy use on campus has generally declined relative to the growing gross floor area, indicating improved energy efficiency at the institutional level.

This trend is reflected in Table 14.. where campus Energy Use Intensity (EUI)¹⁵, which has **decreased from 0.90** GJ/m² to 0.83 GJ/m².

These improvements reflect the ongoing efforts of Facilities Management's Energy Services team, whose programs focus on the continuous optimization of energy use in existing buildings.

Table 14. m² Annual energy use intensity on campus



¹⁵ Energy Use Intensity (EUI) is a standard metric for assessing energy efficiency across buildings. It measures total annual energy consumption (in gigajoules, GJ) per square meter of gross floor area. For Gordon Head Campus, Site EUI is used to monitor building performance and guide emissions reduction strategies.

4.4.4 Fugitive emissions mitigation

Metrics:

- 1. Consistent reporting of total emissions and total mass released
- 2. Complete and accurate equipment inventory



REGULATORY DRIVERS

BC Carbon Neutral Regulation

BC Climate Change Accountability Act

Federal Halocarbon Regulations, 2022

Ozone Depleting Substances and Other Halocarbons Regulation (BC)

Public Sector Carbon Offset Requirements

ACCOUNTABILITY

CSAP 2030

 Target 1: 50% reduction from 2010 baseline by 2030, Net zero operational emissions by 2040

REPORTING

BC Carbon Neutral Program
Public Sector Climate Leadership Survey
UN Race to Zero
AASHE STARS:

• **OP-6**: Greenhouse Gas Emissions

RATIONALE

Fugitive refrigerant emissions are attributed to the release of GHGs, typically in the form of hydrofluorocarbons (HFCs¹⁶) from refrigeration equipment into the atmosphere. At the University of Victoria, these primarily come from refrigeration, air conditioning and heat pump systems that use hydrofluorocarbons (HFCs).

Fugitive refrigerant emissions are classified as direct Scope 1 emissions and have global warming potential (GWP)¹⁷ hundreds of times higher than natural gas, making them a priority in emissions management.

Developing a complete and accurate inventory of refrigerant-containing equipment is essential for consistent, transparent reporting under the <u>BC Carbon Neutral Regulation</u> and <u>Ozone Depleting Substances and Other Halocarbons Regulation (BC)</u>. This work also supports the university's Climate and Sustainability Action Plan, which targets a 50% emissions reduction by 2030 and net zero operational emissions by 2040.

"UVic's Halocarbon Management Plan takes a proactive approach to tracking refrigerant emissions by developing a tiered inventory system that goes beyond provincial requirements for the affective management and reporting of all halocarbon releases, significant single release or through permeation."

- Ron Granados, Director, Maintenance & Operations

¹⁶ HFCs refrigerants are the most common type of refrigerant. Two other common categories of GHG refrigerants are Ozone Depleting Substances (ODSs) and Perfluorocarbons (PFCs). ODSs are out-of-scope under the BC CNG Program. [B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions 2024]

¹⁷ Global Warming Potential (GWP) reflects the relative climate impact of a gas compared to carbon dioxide (CO₂).

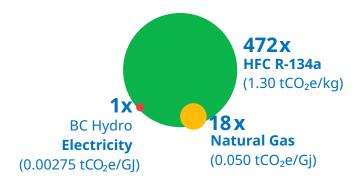
PERFORMANCE

The University of Victoria included fugitive refrigerant emissions associated to hydrofluorocarbons (HFCs) in its greenhouse gas inventory for the first time for the 2024 reporting year representing 12% (1,387 tCO2e) of the university's total reported emissions. Of this total, 84% (1,170 tCO2e) of total fugitive emissions were a result of a large, one-time release form a single system. The remaining 16% (217 tCO2e) emissions can be attributed to estimated fugitive emissions using the BC CNG programs Nameplate Method¹⁸.

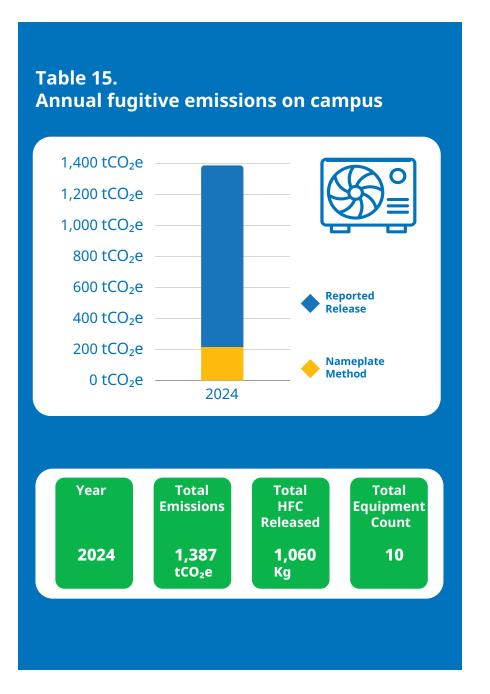
In 2024, Facilities Management's Maintenance and Operations department initiated the development of a formal inventory of refrigerant-containing equipment, beginning with **systems charged with 10 kg** or more of refrigerant.

Emissions were reported for 10 refrigeration units in 2024, however the inventory will continue to grow in future reporting years. The total number of systems and refrigerant mass will be reported annually to demonstrate progress toward a complete and consistent inventory, supporting improved emissions reporting over time.

Illustrative example highlighting the climate impact of refrigerants *such as HFC R-134a* relative to hydro-electricity and natural gas per activity unit.



¹⁸ Nameplate Method: An estimation method that uses proxy values to approximate a system's refrigerant leakage.[Best Practices Methodology for Quantifying Greenhouse Gas Emissions, 2024]



4.4.5 Fleet electrification

Metric:

Total GHG mobile emissions by fuel type







REGULATORY DRIVERS

BC Carbon Neutral Regulation CleanBC Go Electric Transportation Plan

Climate Change Accountability Act Public Sector Carbon Offset Requirements

Zero-Emission Vehicles Act (BC)

University Policies

- Purchasing Policy
- Motor Vehicle Policy

ACCOUNTABILITY

CSAP 2030

 Target 1: 50% reduction from 2010 baseline by 2030, Net zero operational emissions by 2040

CSAP Strategy

 9.3.6: Establish purchasing guidelines for low-emissions vehicles and equipment.

REPORTING

BC Carbon Neutral Program

Public Sector Climate Leadership Survey

UN Race to Zero

AASHE STARS:

- **OP-6:** Greenhouse Gas Emissions
- OP-13: Vehicle Fleet

RATIONALE

A transition to zero-emission vehicles (ZEVs) supports the university's GHG targets and aligns with evolving provincial regulations, including the <u>BC Zero-Emission Vehicles Act</u>, which requires that 90% of new light-duty vehicle purchases be ZEVs by 2030.

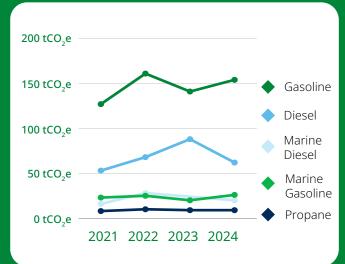
By tracking both the number of ZEVs in the fleet and overall fuel consumption, the university can assess progress toward institutional and regulatory targets, identify opportunities for vehicle replacement and ensure that electrification is paced appropriately with available funding, departmental needs and EV infrastructure capacity.

Electrification metrics provide the data foundation necessary to guide planning, prioritize investments, and measure the impact of fleet decarbonization over time.

"Our commitment to sustainability drives every fleet decision we make. As we work toward our goal of having 90% of new light-duty vehicle purchases be zero-emission vehicles by 2030 and net zero operational emissions by 2040, we evaluate each vehicle purchase through the lens of long-term environmental impact, operational efficiency and alignment with UVic's climate action priorities."

- Matthew Uganecz, Associate Director, Maintenance & Operations

Table 16. Annual mobile emissions



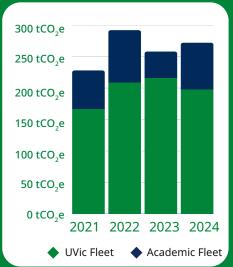
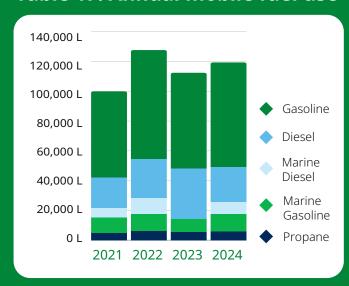


Table 17. Annual mobile fuel use





Year	Total Emissions	Total Litres
2021	228 tCO ₂ e	99,936 L
2022	292 tCO ₂ e	127,712 L
2023	258 tCO ₂ e	112,459 L
2024	272 tCO ₂ e	119,404 L

PERFORMANCE

In 2024, mobile equipment emissions totaled 272 tCO₂e, a 1% increase from the previous year. While total emissions rose slightly, The UVic fleet, managed by Facilities Management and Campus Security, achieved a meaningful 8.3% emissions reduction from 2023 to 2024.

The **UVic fleet** accounts for **73%** of mobile emissions and includes operational vehicles tracked through fuel invoices and accounting summaries.

The **academic fleet**, managed by research and academic departments, contributes **27%** of mobile emissions and includes insured vehicles and marine vessels used for academic and athletic purposes.

Gasoline remains the dominant fuel, accounting for over **56%** of mobile fuel use in 2024.

While electrification metrics are not included in this report, they will be incorporated in future reporting cycles.

"As managers of the University Motor Pool, Campus Security performs a thorough needs assessment prior to purchasing a vehicle. This important step looks at the vehicle use requirements and matches those findings against available options in the market. Where possible, EVs are prioritized in purchasing decisions."

- Patrick Seward, Associate Director, Parking & Commuter Services



CASE STUDY:

SUSTAINABILITY SCHOLARS PROGRAM – GREEN FLEET PROJECT

Fleet electrification is more than a compliance measure, it offers opportunities to improve local air quality, lower long-term fuel and maintenance costs and reinforce the university's leadership in low-carbon transportation across the public sector.

In 2024, the Office of Campus Planning and Sustainability sponsored a graduate internship through the <u>Sustainability Scholars Program</u> to launch the <u>Green Fleet Project</u>. The project sought to identify practical steps to support a continuous transition from internal combustion engines (ICE) to electric vehicles (EVs). **167 vehicles were reviewed** and the project found that over **44% were zero-emission vehicles (ZEVs)** as of 2024.

"The best part of my experience at UVic so far is the way my supervisors are guiding me. It's more than I expected. They have been helping me out at every step."

- Akash Mohanty, Sustainability Scholar, UVic

A key recommendation was to adopt a phased electrification strategy supported by centralized data governance and clear, data-driven replacement metrics. This approach would guide vehicle retirement and procurement based on:

- Vehicle age and utilization,
- Market availability,
- Infrastructure readiness,
- Departmental demand and
- Budget constraints.

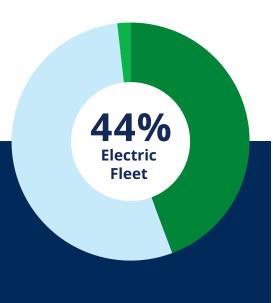
Building on this work, a **Green Fleet Working Group** will be launched in 2025 to set targets aligned with the university's Climate and Sustainability Action Plan (<u>CSAP 2030</u>). This group will help shape a formal Green Fleet Strategy and update the <u>Motor Vehicle Policy</u> to incorporate demand management and right-sizing strategies.



The project identified 20 ICE vehicles within the UVic fleet which could be considered for replacement based on age.



The project identified 8 ICE vehicles within the UVic fleet which could be considered for replacement based on km driven per year.



PART 3:

MITIGATING CLIMATE IMPACTS ACROSS THE VALUE CHAIN

As outlined in Goal 11 of the Climate and Sustainability Action Plan (CSAP) 2030, the University of Victoria is advancing Scope 3 emissions tracking to strengthen climate accountability. These emissions represent key long-term impact areas. Initial reporting in 2024 focuses on categories with available data and leadership, laying the groundwork for expanded engagement and future integration into institutional planning.

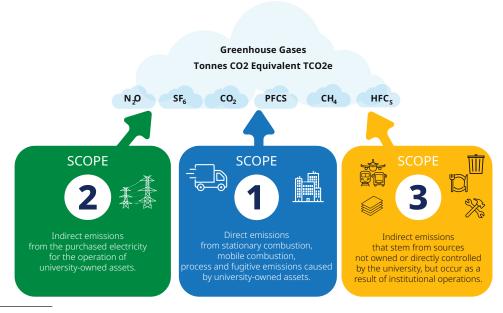
5.1 Beyond Scope 1 and 2 emissions

The University of Victoria recognizes that true climate leadership extends beyond operational boundaries. As a signatory to the <u>UN Race to Zero campaign</u> and in alignment with Goal 11 of the <u>Climate and Sustainability Action Plan</u>, the university is committed to identifying material¹⁹ Scope 3 emissions and advancing mitigation efforts across its value chain.

While the immediate priority of the university is achieving net zero operational Scope 1 and 2 emissions at the Gordon Head Campus, evaluating and reporting on the university's impact across the value chain is an essential first step to reducing global emissions in line with science-based targets.

5.1.1 What are Scope 3 emissions?

Scope 3 emissions represent the indirect greenhouse gas emissions that result from activities not owned or directly controlled by the university but that occur as a consequence of the university's operations. These include, but are not limited to, business air travel, commuting, waste, food systems, investments and embodied carbon in construction.



¹⁹ Material emissions are those that make up a significant portion of an organization's total greenhouse gas footprint. According to the <u>Science Based Targets initiative</u> (SBTi), Scope 3 emissions are considered material if they represent more than 40% of total Scope 1, 2 and 3 emissions.

5.2 Scope 3 emissions

Although a comprehensive baseline has not yet been finalized, the sections below present the university's preliminary Scope 3 emissions reporting. The university recognizes that Scope 3 reporting is an iterative process and will continue to expand as data availability and quality improve.

PROGRESS TO DATE:

- Baseline development Initiated in 2019 for key Scope 3 categories.
- **Best practice review** Conducted in-depth analysis of institutional approaches.
- Gap analysis Mapped internal data sources and identified data limitations.
- **Cross-departmental alignment** Established partnerships to embed sustainability metrics into operational systems.









14 LIFE BELOW WATER





















6 CLEAN WATER AND SANIFATIO





THE EVOLVING APPROACH TO SCOPE 3:

The university's evolving approach to Scope 3 emissions will be guided by the GHG Protocol's core principles of relevance, completeness, consistency, transparency and accuracy. Scope 3 reporting should serve as an engagement tool to advance climate literacy, inform procurement and operational decisions, and build shared accountability with suppliers, contractors and internal partners.

The following thematic areas are guiding the university's early work and will inform the continued evolution of a Scope 3 methodology and reporting.

TABLE 18. THEMATIC AREAS GUIDING SCOPE 3 METHODOLOGY						
Criteria	Focus					
Long-term data integrity	Establish cross-departmental partnerships to embed sustainability metrics into operational systems, with a focus on data governance and benchmarking.					
Campus as a Living Lab	Leverage academic programs like the Sustainability Scholars Program (SSP) and applied research to advance targeted Scope 3 methodology projects.					
Accurate and transparent reporting	Test and refine methodologies, ensure access to reliable emission factors and publicly disclose Scope 3 inventories.					
Strategic engagement	Utilize Scope 3 insights to engage suppliers, contractors and internal partners to support shared responsibility for emissions reduction					
Policy alignment	Embed climate mitigation into institutional policy using internationally recognized metrics and indicators.					

5.3. Responsible investment – working capital investment

Metrics:

- 1. Carbon intensity investment portfolio²⁰
- 2. Percentage investment pool allocated to positive sustainability investments











REGULATORY DRIVERS		ACCOUNTABILITY	REPORTING	
University Act	 University Policies Responsible Investment Policy Working Capital Investment Policy 	 Responsible Investment Policy Reduce carbon intensity of investments by at least 50% by 2030. Invest at least 30% of the assets in impact investments aligned with the university's plans and in opportunities that work toward addressing societal challenges that further the SDGs. CSAP Strategy 9.1.1: Develop financial climate tools 9.1.2: Integrate ESG in investments 9.1.3: Support TCFD disclosures 9.1.4: Invest to cut emissions 9.1.5: Ensure transparent reporting 	 AASHE STARS: PA-4: Sustainable Investment Program PA-5: Investments holdings UN Principles for Responsible Investment (PRI) Internal reporting 	

RATIONALE

The University of Victoria holds a responsibility to honour local Indigenous laws and protocols and to be in right relationship with all people, beings, lands and waters. The university's goal is to be a global leader in environmental and societal sustainability including responding to the critical global issue of climate change.

Aligning investment practices with climate and sustainability goals supports the university's broader commitment to risk management, transparency and long-term resilience. Responsible investing allows the university to address the financial risks of climate change, influence positive corporate behaviour through stewardship and contribute to global sustainability outcomes such as the SDGs. This approach recognizes sustainable investment as a meaningful tool for institutional leadership and accountability.

²⁰ Based on a three-year rolling average

PERFORMANCE

CARBON INTENSITY PORTFOLIO

In 2022, the carbon intensity of the university's working capital investment portfolio dropped to 46 tCO $_2$ e /\$1,000,000 sales, representing a 50% reduction from the 2019 baseline. In 2024, the intensity further declined to 32, reflecting an 80% reduction from the baseline. The most recent reduction was largely driven by a new allocation to a fossil fuel free corporate bond fund.

SUSTAINABILITY INVESTMENTS

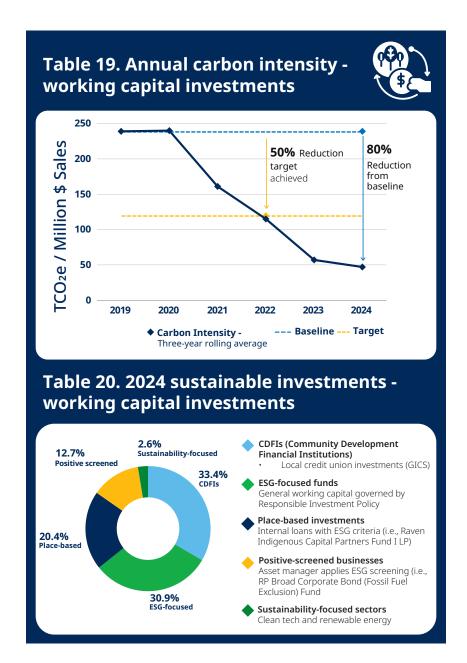
100% of the university's working capital investment pool²¹ is aligned with positive sustainability criteria under the <u>Responsible Investment Policy</u>. This includes allocations to ESG-integrated funds, positively screened businesses, community-based financial institutions (CDFIs) and place-based investments, each classified according to <u>AASHE STARS</u> definitions.

The investment portfolio reflects not only the university's operational financial objectives (capital preservation, liquidity and low volatility) but also its commitment to responsible investing, in particular, impact investing.

"By embedding ESG investment standards across the entire working capital investments portfolio and targeting an explicit allocation to impact investments, UVic seeks to demonstrate that measurable sustainability performance and financial stewardship can be achieved simultaneously offering a model to follow for public institutions seeking to align capital with climate accountability."

- Raymond Aoki, Treasurer, Treasury and Risk Management

²¹ The working capital pool reflects funds arising from university operations—such as insurance reserves, deferred operating budgets and capital project reserves—and is managed by external investment professionals. It is distinct from pensions, endowments and the Student Investment Fund, which are governed separately.





CASE STUDY:

OPTIWATT – SMART HOME ELECTRICITY OPTIMIZATION

Active Impact Fund II invests in companies that support the global transition to a carbon neutral economy, focusing on themes including clean energy and transportation, smart infrastructure, sustainable food and water and circular economy. The fund's investments have **avoided 88,186 tonnes of CO2** equivalent emissions and **saved 271.1 million litres** of water in 2023.

Optiwatt is a smart home app that reduces emissions and energy costs by shifting electric vehicle and heat pump use away from peak demand times. Working with utilities in Canada and the U.S., it helps users save - up to 70% on EV charging and ~\$300 annually on home heating/cooling.

"If we can solve the issues with these energy consuming resources for customers, we could control load, and by controlling load we could help the grid, the energy, and climate. For the end consumer, we bridge the gap between the cost of electricity and the electricity consuming device."

- Casey Donahue, Founder & CEO, Optiwatt





Sustainability-focused sectors (Active Impact Fund II focused in North America)



1,386
GHG
emissions
avoided
since investment

In total Active Impact Fund II has avoided 164,878 tCO₂e.



2.3
million
litres water
saved
per year

In total Active Impact Fund II saved 271.1 million litres in 2023.

5.4 Transportation and commuting

Metrics:

- 1. Commute mode split²²
- 2. Number of on campus EV charging stations









REGULATORY DRIVERS ACCOUNTABILITY REPORTING CleanBC Go Electric University **CSAP Strategy AASHE STARS: Transportation Plan** Policies • **10.3.3**: 70% commute mode split • **OP-6**: Greenhouse Flexibility **Climate Change** Gas Emissions • 10.3.6: Charging infrastructure for electric vehicles (EVs) Framework **Accountability Act** (Scope 3) **Principles** • 10.3.7: Explore new policies and IT supports to reduce demand for travel. Zero-Emission • **OP-14**: Commute • 10.3.1: Strategically implement push/pull policies for sustainable travel Vehicles Act (BC) Modal Split

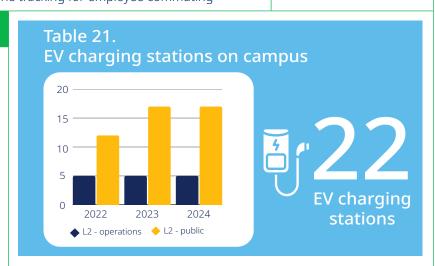
- 10.3.2: Provide commuters with greater flexibility in transportation choices. CSAP
- Goal 11 Established baseline tracking for employee commuting

PERFORMANCE

EV CHARGING STATIONS

Between 2022 and 2024, the university expanded its **public EV charging infrastructure** from **12 to 17 Level 2 public charging stations**, while maintaining **five level 2 charging stations** for university fleet vehicles.

Table 21 illustrates growth in public EV charging infrastructure on campus and highlights the university's investment to support ZEV adoption under the BC Zero-Emission Vehicles Act.



²² Percentage of students and employees commuting by modes other than single-occupancy vehicles.

COMMUTE MODE SPLIT

The university conducts a biannual transportation survey to understand how students, staff, and faculty travel to and from campus. Table 22 shows trends in sustainable commuting, including carpooling, transit, cycling, walking, and skateboarding or roller blading, from 2000 to 2023. A dotted line marks the university's **goal of reaching 70% sustainable mode** share.

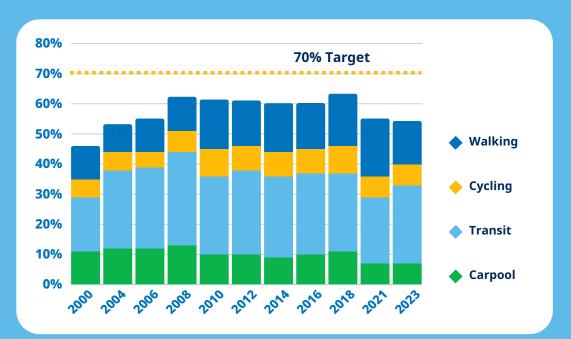
In 2023, **54% of commuters used sustainable modes**, an increase from 2010 levels. This gradual shift has been supported by initiatives such as subsidized <u>transit passes</u>, <u>improved cycling and pedestrian infrastructure</u>, <u>e-bike pilot programs</u>, and access to <u>car share</u> vehicles on campus. The next survey in fall 2025 will help inform future programs and support efforts to reduce emissions from commuting.

"Collecting transportation data is essential to support strategic decision-making, shape policy, and advance the university's sustainability goals. The survey helps track progress and ensures that investments in infrastructure and programs respond to actual travel patterns and barriers. It is a critical tool for guiding integrated, campus-wide strategies that promote low-carbon, accessible, and sustainable transportation options."

- Alannah Rodgers, Planner, Office of Campus Planning and Sustainability

Table 22. Biannual commuting behaviour





Year	2000	2004	2006	2008	2010	2012	2014	2016	2018	2021	2023
Drive Alone	54%	47%	44%	38%	39%	40%	40%	40%	38%	45%	46%
Carpool	11%	12%	12%	13%	10%	10%	9%	10%	11%	7%	7%
Transit	18%	26%	27%	31%	26%	28%	27%	27%	26%	22%	26%
Cycling	6%	6%	5%	7%	9%	8%	8%	8%	9%	7%	7%
Walking	11%	9%	11%	11%	16%	15%	16%	15%	17%	19%	14%

CASE STUDY

Campus as a Living Lab -Student GIS Project



STUDY:

CAMPUS AS A LIVING LAB – STUDENT GIS PROJECT

The Office of Campus Planning and Sustainability partnered with the Department of Geography in the Winter 2024 semester to have a fourthyear GIS class analyze transportation data and develop recommendations to improve the university's sustainable mode share and achieve the 70% **commute** mode target set out in the <u>Climate and Sustainability Action</u> Plan.

Students reviewed a range of data including commuter origins, campus parking capacity and modal preferences, along with a review of policy mechanisms that can influence mode share.

They provided evidence-based solutions to enhance sustainable commuting options, optimize campus parking strategies and support the university's long-term transportation planning goals. The recommendations are being used to by the administration as part of transportation planning and advocacy efforts.

"Students in Advanced Topics in GIS had a unique opportunity to collaborate directly with the Office of Campus Planning on real-world climate solutions. This engaged learning experience not only enhanced their understanding of sustainable transportation, green infrastructure and campus safety, but also prepared them to develop tangible, impactful solutions—demonstrating how GIS can be a powerful tool in addressing pressing environmental challenges."

-Chris Bone, Associate Professor, Department of Geography.



Programs support sustainable commuting behaviour at UVic.



BIKE HUB BIKE LOAN PROGRAM

LEARN MORE

UVic's volunteer-led program refurbishes used bikes and loans them at low cost to students and staff.



U-PASS FOR UVIC STUDENTS

LEARN MORE

Unlimited access to BC Transit at roughly 33% off regular price. Included in the tuition for on-campus students.



E-PASS FOR UVIC EMPLOYEES

LEARN MORE

UVic offers monthly BC Transit passes at 50%+ off regular price.

Employee E-Bike Loan Program

LEARN MORE

Campus Cycling Plan **MORE**

LEARN

5.5 Sustainable procurement

Metric:

Total GHG paper emissions





REGULATORY DRIVERS		ACCOUNTABILITY	REPORTING		
Climate Change Accountability Act Modern Slavery Legislation Zero-Emission Vehicles Act (BC) University Policies Supplier Code of Conduct Purchasing Policy		 CSAP Strategy 9.3.3: Establish metrics to assess and monitor the performance of major suppliers on sustainability dimensions. 	BC Carbon Neutral Program Public Sector Climate Leadership Survey Modern Slavery Legislation		
		 9.3. 2: Engage faculty, staff, suppliers and service providers to understand and consider the social and environmental impact of procurement decisions. 9.3.4: Develop training programs in Purchasing Services to promote and support sustainable procurement practices. 	 Modern Slavery Legislation AASHE STARS OP-6: Greenhouse Gas Emissions (Scope 3) OP-10: Purchased Goods and Services 		

RATIONALE

The University of Victoria reports paper-related GHG emissions in accordance with the <u>BC Carbon Neutral Program</u>, where copy paper is one of the few Scope 3 categories with standardized quantification methods and legislated reporting requirements. Although paper contributes minimally to total emissions, it offers a clear starting point for value chain emissions tracking, with centralized data, consistent emission factors and established methodology.

Purchased goods and services represent a significant portion of institutional Scope 3 emissions. While broader reporting in this category is still emerging, the university is adopting an approach prioritizing data integrity, policy alignment, supplier engagement and integration into operational systems. This work also supports the university's reporting under **AASHE STARS OP-10**, which uses spend-based metrics to evaluate procurement sustainability.

"Sustainable purchasing is more than a procurement strategy – it is a commitment to responsible stewardship. Making sustainable purchasing decisions allows us to align our spending with the university's values, reduce our environmental footprint and contribute to a more resilient, ethical supply chain."

- Michelle McArthur, Associate Director, Purchasing Services

PERFORMANCE

In 2024, paper purchases²³ resulted in **0.5%** (56 tCO₂e) of the university's total emissions. These emissions are calculated using lifecycle emission factors²⁴ and include only purchases made through the university's central office supply contract (Staples)²⁵. Virgin paper (0% post-consumer recycled content) accounted for **75% of paper-related emissions** due to its higher emissions factor compared to recycled alternatives. In 2024, the university purchased over 4.5 million sheets of paper (9,136 reams). Notably, orders of 30% post-consumer recycled (PCR) paper more than doubled, rising from 744 reams in 2023 to 2,144 in 2024. This upward trend reflects growing awareness and a shift toward lower-carbon paper choices across the university community.

Table 23. Annual paper emissions



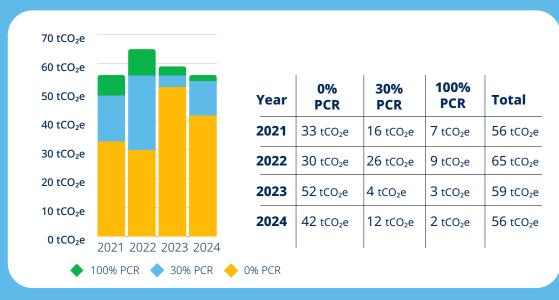
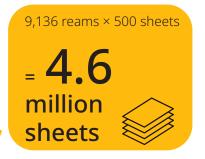


Table 24. Annual paper purchases (x 500 sheets)

_	Year	0% PCR	30% PCR	100% PCR	Total Reams	
	2021	4,971	2,801	1,775	9,547	
_	2022	4,595	4,093	2,183	10,871	
	2023	7,988	744	728	9,460	
	2024	6,484	2,144	508	9,136	



Emissions and volumes are not inclusive of printer paper re-sold on campus (i.e., the Print Shop)

²³ Under the BC Carbon Neutral Government Regulation and B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions guidance, paper products that are purchased and resold—such as those sold by the UVic Bookstore, Libraries, ZAP Copy and UVic Print Shop—are considered out-of-scope for institutional emissions reporting. This includes paper sold to students for personal or course-related use and paper used in the production of educational materials for resale. Specialty paper products such as envelopes, notepads, card stock and pre-printed forms are also excluded. This boundary interpretation is based on 'B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions' and has been confirmed through precedent with peer institutions such as UBC.

²⁴ Lifecycle emissions account for all emissions relating to the production, use and disposal of a product, including the extraction of raw materials, product manufacturing and intermediate transport steps. [2024 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions]

6. Climate risk management

Climate change poses both direct and indirect risks to university operations, infrastructure, financial health, community well-being and reputation. Proactively managing these risks is essential for achieving net zero, supporting institutional resilience and upholding the university's commitments to climate leadership.

6.1 Governance and oversight

Climate risk management is embedded within the university's governance structure in the following ways:

- The Board of Governors and senior leadership receive annual updates on strategic climate risk and resilience through the university's <u>Risk Appetite Framework.</u>
- The Campus Planning and Sustainability Office supports the coordination of cross-departmental efforts to assess, monitor and mitigate climate risks.
- Climate risk considerations are integrated into key planning documents, including the Climate and Sustainability Action Plan (CSAP 2030) and campus master plans.

RECENT AND ONGOING INITIATIVES:

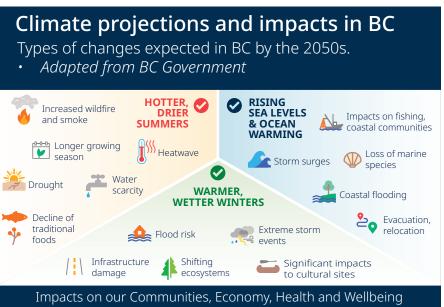
- 2023 The University of Victoria added climate change risk to its Strategic Risk Register, granting the Board of Governors and its Audit Committee oversight of how the university manages climaterelated risks
- 2024 The university applied for funding through the <u>Federation of Canadian Municipalities (FCM)</u> to conduct a comprehensive climate risk and vulnerability assessment for the Gordon Head Campus. The university is awaiting a response to its application and plans to begin the assessment in 2025 if successful.
- 2024 The university completed a high-level climate risk assessment as part of the Provincial Business Case for the Student Housing Expansion Project.

6.2 Scenario analysis and climate risk identification

The university utilizes regional climate data and projections, including resources from the <u>Capital Regional District</u>, <u>District of Saanich</u> and the university's own <u>Pacific Climate Impacts Consortium (PCIC)</u> to ensure resilience under projected 2050 climate conditions. The university also consults resources such as the <u>Province of BC's Climate Resilience Framework</u> and the <u>ESG Guidelines</u> for capital projects.

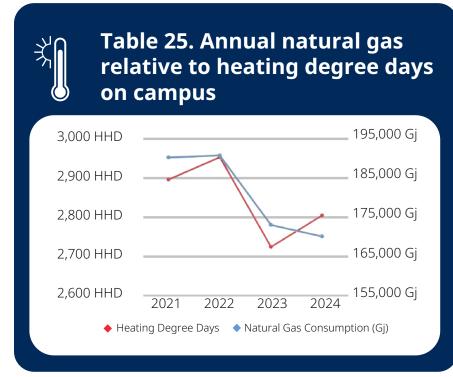
The university systematically identifies and assesses climate-related risks across the institution including:

- **Physical risks** that could disrupt campus operations, infrastructure and community well-being. For example: extreme weather, flooding, heatwaves, wildfire smoke.
- Transition risks that may affect the university's finances, procurement, and reputation. For example: regulatory shifts, carbon pricing, and supply chain disruptions.



6.3 Heating degree days and energy use

Heating Degree Days (HDD) measure how cold the outside air is over a period of time and indicate the demand for energy needed to heat buildings. The higher the number of HDD in a given year, the greater the expected heating demand. Tracking HDD alongside natural gas consumption on the Gordon Head Campus helps assess how changing winter temperatures affect energy use and supports climate risk management and adaptation planning.



	2021	2022	2023	2024
Heating Degree Days	2,897 HHD	2,954 HHD	2,726 HHD	2,806 HHD
Natural Gas	190,313 Gj	190,833 Gj	173,174 Gj	170,254 Gj

CLIMATE RESILIENCE IN PLANNING AND OPERATIONS

The University of Victoria embeds climate risk considerations into the following key areas:

- Business continuity and emergency response: Climate-related disruptions are addressed across the workplace, workforce, IT and supply chain, with lessons from incidents improving future response.
- Maintenance and operations: Preventative maintenance is evolving to address climate-related risks to drainage, HVAC and energy systems.
- Capital planning and infrastructure: New builds and major renewals incorporate adaptive design and thermal comfort modeling, guided by <u>Capital Planning Guidelines</u> (2024).
- **Energy Transition:** The DEP Electrification Project will aim to drive down emissions while enhancing energy system resilience.
- Policy alignment: Climate risk data informs updates to policies, capital planning, and investment decisions to strengthen institutional adaptability.

7. Continuous improvement and transparency

The University of Victoria is committed to annual disclosure of climate risks and adaptation progress through the Climate Change Accountability Report and other channels, consistent with emerging national and international standards. This adaptive approach allows for ongoing refinement as new data, projections and operational insights emerge.

The university recognizes that engagement with external partners, including local governments and Indigenous rights holders, is essential for a holistic, place-based approach to climate risk management. While this work is at an early stage, the university acknowledges the importance of collaborative, place-based adaptation. Strengthening these relationships is a key priority and future efforts will focus on building relationships, sharing data and best practices and collaborating on regional resilience strategies.