

Environmental Sustainability Report

UNIVERSITY OF WATERLOO

2026

RELEASED SEPTEMBER 2026



UNIVERSITY OF
WATERLOO

TABLE OF CONTENTS

Overview

Highlights from 2025	3
Stories from 2025	4

Academic Mission

Curriculum Integration	5
World Class Research	6
Green Entrepreneurship	7

Operational Practices

Net Zero Emissions	8
Zero Waste	10
Sustainable Mobility	11
Campus Biodiversity	12
Water Protection	13
Sustainable Food	14
Sustainable Procurement	15

Campus Engagement

Culture of Sustainability	16
Community Partnership	17

Territorial Acknowledgement

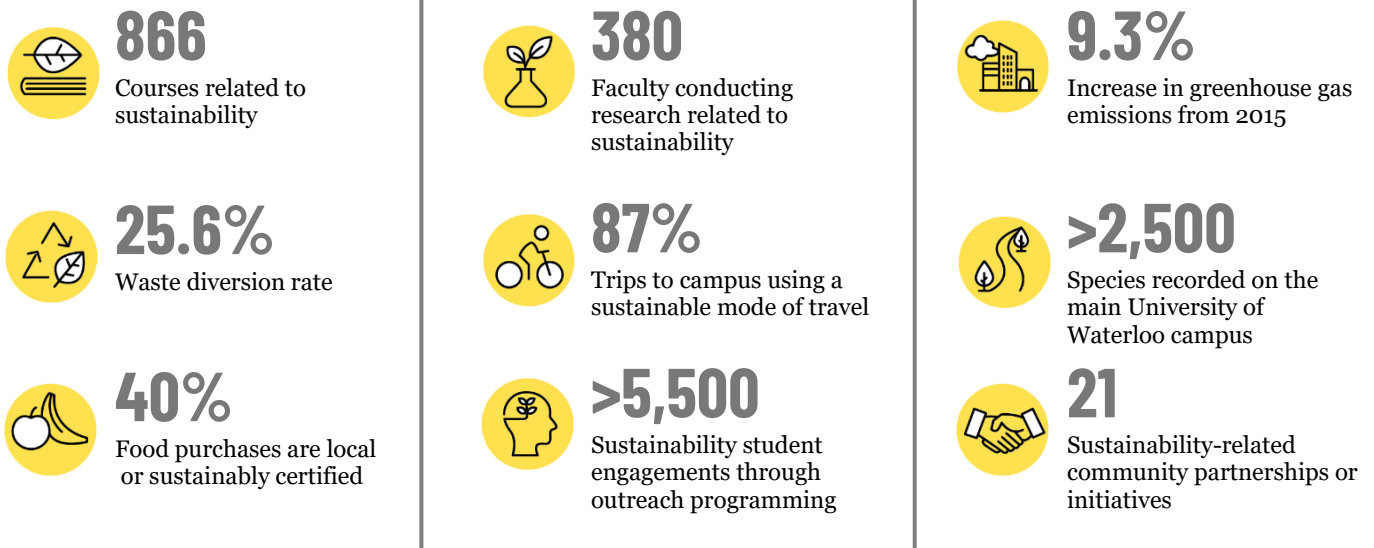
The University of Waterloo acknowledges that it operates on the traditional territory of the Attawandaron (Neutral), Anishinaabeg, and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, the land promised to the Six Nations that includes ten kilometers on each side of the Grand River. Our active work toward reconciliation takes place across our campuses through research, learning, teaching, and community building, and is co-ordinated within the Office of Indigenous Relations.

HIGHLIGHTS FROM 2025

This report highlights examples of action towards each of the 12 core directions that were established in 2026 through [Waterloo's Environmental Sustainability Strategy](#). Since these core directions are different from the previous strategy's objectives and this report covers up to December 2025, there are some transitional indicators and descriptors used while updated measurements are developed.

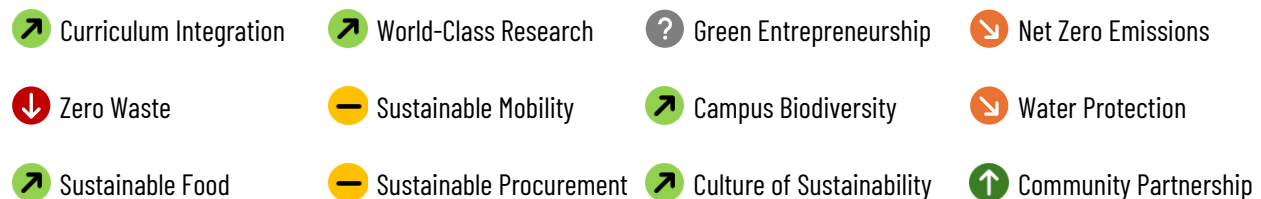
For each core direction, a summary of progress and details on specific indicators are provided. Additional indicators and measurement will be developed over the coming years.

For full data and details on each objective and indicator, consult the interactive data dashboards and methodologies, available at uwaterloo.ca/sustainability/report.



CORE DIRECTIONS PROGRESS SUMMARY

Each core direction includes an overall progress marker, as summarized below. Each section of the report provides a more detailed explanation of the actions, successes, and challenges related to the direction and trends influencing progress.



Legend:



STORIES FROM 2025

Embedding sustainability into the Campus Plan

Waterloo's new [Campus Plan](#) – the guiding framework for how our physical campus will develop over time – has embedded sustainability in its long-term vision and guiding principles. In particular, the new Campus Plan emphasizes environmental stewardship and restoration of green spaces, carbon neutrality in campus operations, and a pedestrian-oriented, accessible campus that supports health and wellbeing.

Optimizing energy use through innovation

Energy efficiency and conservation are core pillars of Waterloo's transition to net zero emissions, as outlined in the [Shift:Neutral](#) climate action plan. In 2025, the MC/QNC heat recovery project was officially completed, connecting the year-round cooling needs of Math and Computers' (MC) Graham Data Centre and the heating needs of the Quantum Nano Centre's (QNC) hydronic heating loop.

Expanding support for more sustainable mobility

Waterloo released its first sustainable transportation plan, [Shift:Mobility](#), after several years of coordinated planning and community consultation. The plan outlines Waterloo's approach to supporting and reducing barriers to sustainable transportation choices over the short, medium, and long term across our campuses, with a focus on improving options, strengthening safety and accessibility, reducing greenhouse gas emissions, and optimizing efficient use of University assets.

Integrating sustainability into curriculum through SIC grants

As part of Waterloo's efforts to expand sustainability across its curricula, the institution piloted a Sustainability Integration in Curriculum (SIC) grant in 2025. To date, six units have received funding, including Applied Math, Chemical Engineering, Management Sciences, School of Pharmacy, Systems Design Engineering, and United College.

Fostering sustainability leaders through co-curricular certificate

Waterloo celebrated its first cohort of 'Sustainability Leaders' through the [Sustainability Leadership Certificate](#) in fall 2025. The certificate provides formal recognition for co-curricular experiences related to sustainability learning, leadership, professional development, and personal action through a self-guided, self-paced course on LEARN. The certificate is open to students of any discipline at Waterloo and has more than 300 students working toward their certification.



ACADEMIC MISSION



CURRICULUM INTEGRATION

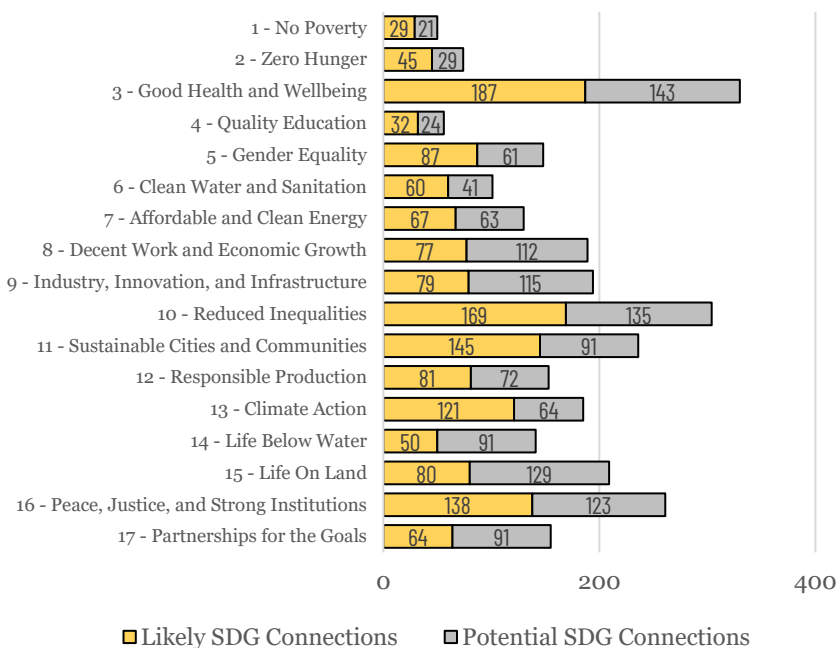
Overall progress: Improving

Waterloo offers an expanding variety of ways for students to learn about and build future-ready sustainability skills and experiences. Through specialized programs focused on sustainability, sustainability electives across many departments and programs of study, experiential learning and capstone opportunities, and co-curricular learning, Waterloo is preparing the next generation of sustainability leaders.

In 2025, Waterloo supported new grants to support departments in integrating sustainability in curriculum, and launched the Sustainability Leadership Certificate to help students track their progress. More programs have also integrated sustainability content within required courses, ensuring that students are receiving discipline-specific knowledge.

Future efforts will be needed to expand integration across all programs of study.

Figure 1: Courses Related to the UN SDGs



DIRECTION:

Integrate meaningful sustainability competencies for student learning

ACTIONS COMPLETED:

- Launch of the [Sustainability Leadership Certificate](#)
- Expansion of [Sustainability Integration in Curriculum Grants](#)
- [Accelerating Climate Change Education](#) for the Next Generation of Professionals project
- Students connect with industry at [clean energy transition event](#)
- [Interdisciplinary Capstone](#) deepens collaboration on sustainability topics
- Continued support for [SDGs at Work](#) activity

INDICATORS



23.6%

Graduates with required sustainability competencies



62.8%

Co-op work term positions that impact at least 1 SDG



45%

Students passed the sustainability literacy assessment



WORLD CLASS RESEARCH

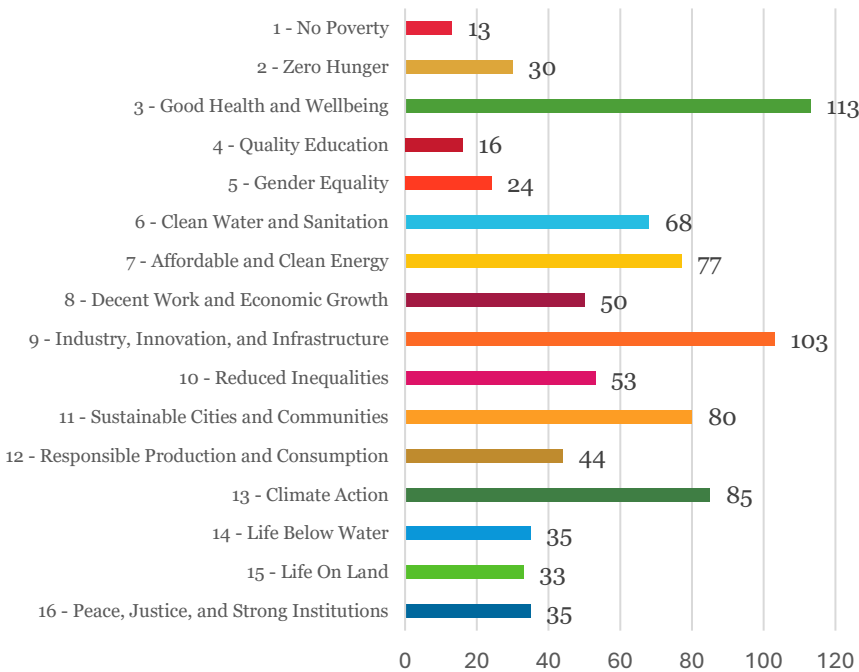
Overall progress: Improving

Waterloo continues to develop deeper understanding of and solutions toward key sustainability challenges. With deep strengths in natural and physical sciences, technology, innovation, policy, and governance, researchers across campus are supporting partnerships across multiple sectors that mobilize the University's expertise.

In 2025, Waterloo's Global Futures Fund supported numerous sustainability focused research projects, while researchers across campus continued to tap into public and private sector funding opportunities. From climate adaptation to effective water management, and from sustainable energy to advanced materials sciences, these research outputs are translating to meaningful impacts across communities.

Additional opportunities to coordinate research across disciplines and identify further collaborations on and off campus continue to be explored.

Figure 2: Number of Faculty with Publications Related to the UN SDGs



DIRECTION:

Deliver world-class research in support of sustainability

ACTIONS COMPLETED:

- Waterloo researchers [contribute to global climate conversations](#)
- Sustainability research projects among those funded through [Canada Foundation for Innovation](#), [Federal Tri-Agency Funding](#), [FedDev Ontario](#), and new [Global Futures Fund](#)
- [Waterloo research](#) helps municipalities manage extreme heat
- National partnership [creates guide](#) for local climate budgeting
- Waterloo researcher among [authors of report](#) on monitoring microplastics in Great Lakes
- Brazil-Canada partnership advances [water solutions for resilient cities](#)

INDICATORS



8,166

Journal articles published connected to the UN SDGs



380

Faculty members publishing research advancing the UN SDGs



2.47

Field-weighted Citation Impact within SDG themes (Elsevier)



GREEN ENTREPRENEURSHIP

Overall progress: To be determined ?

University of Waterloo has longstanding strengths in innovation and entrepreneurship, with multiple programs that help founders start new companies and organizations.

Waterloo’s innovation ecosystem, including Velocity, the Conrad Centre for Entrepreneurship, GreenHouse, and more, is uniquely positioned to help new companies plan for the long-term sustainability impacts, regulations, and market needs that they will face as they scale.

GreenHouse, the University of Waterloo’s social impact incubator based at United College, continued to be a hub for environmental and climate-focused student ventures throughout 2025. These ventures were supported through the GreenHouse Social Innovators in Training program, as well as the Youth Climate Action Fund, a new municipal partnership with the City of Kitchener and Bloomberg Philanthropies.

INDICATORS



4

Student-led projects supported by the Sustainability Action Fund

DIRECTION:

Embed sustainability in entrepreneurship

ACTIONS COMPLETED:

- Piloted Student Innovation stream through the [Sustainability Action Fund](#)
- GreenHouse funded 4 student-led environmental and climate-focused ventures during the Social Impact Showcases
- GreenHouse partnered with the City of Kitchener to support over 20 youth-led climate projects across Waterloo Region, including 4 led by Waterloo students



OPERATIONAL PRACTICES



NET ZERO EMISSIONS

Overall progress: At risk 

Waterloo has set ambitious goals to reduce greenhouse gas emissions from campus operations to zero by 2050. This will involve significant transformation of spaces and infrastructure, and changes to many ways of working and learning.

Over the past year, Waterloo has finalized the updates to its climate action plan, Shift:Neutral, which provide additional detail on how the campus will enact these transformations.

Through improvements to building efficiency, replacement of the Central Plant with a nodal district energy system, integration of renewable energy, and strategies to reduce indirect (Scope 3) emissions, the University can take meaningful action to address the climate crisis while improving energy security and campus resilience. Waterloo has also implemented numerous energy efficiency projects to continue making early progress and setting the stage for deeper action, reducing direct (Scope 1) emissions by over 11% from their 2019 peak.

Despite these efforts, Waterloo saw a large increase in both energy use and emissions in 2025. As shown in **Figure 3** below, a large portion of the increase in emissions came from the campus' purchasing of electricity, which has continued to get more carbon-intensive at the provincial level. This trend reverses the improvements that were achieved as coal power was phased out. Each unit of electricity used today is now more than 3.5 times as emissions-intensive than it was in 2017, as Ontario uses more gas-fired power generation in the short to medium-term.

Weather also played a large role in the 2025 emissions and energy increase. It was the coldest winter since before the pandemic, except for 2022 when Waterloo was not yet back to full occupancy, while also having the highest summer time heating demand since 2022. This resulted in an increase in gas use for campus heating, and electricity use for campus cooling.

Although weather will fluctuate each year, it is expected that, over time, there will be increasingly mild winters but hotter summers. Adapting to this anticipated shift is a large part of Waterloo's climate, energy, and resiliency efforts.

DIRECTION:

Reduce greenhouse gas emissions to net zero by 2050

ACTIONS COMPLETED:

- Updated Shift:Neutral 2.0
- Completed installation of MC/QNC heat recovery system
- Completed PAC demand control ventilation
- Implemented lighting retrofits in DWE and CIF
- Insulated pipes within the main campus district energy system
- Initiated Phase 3 and 4 of campus-wide building-level metering
- Completed Phase 2 and started Phase 3 of campus-wide recommissioning
- Electrified domestic hot water production at pilot buildings
- Completed district energy decarbonization and building conversion feasibility studies

INDICATORS



43,575 tCO₂-e
Scope 1 and 2 GHG emissions



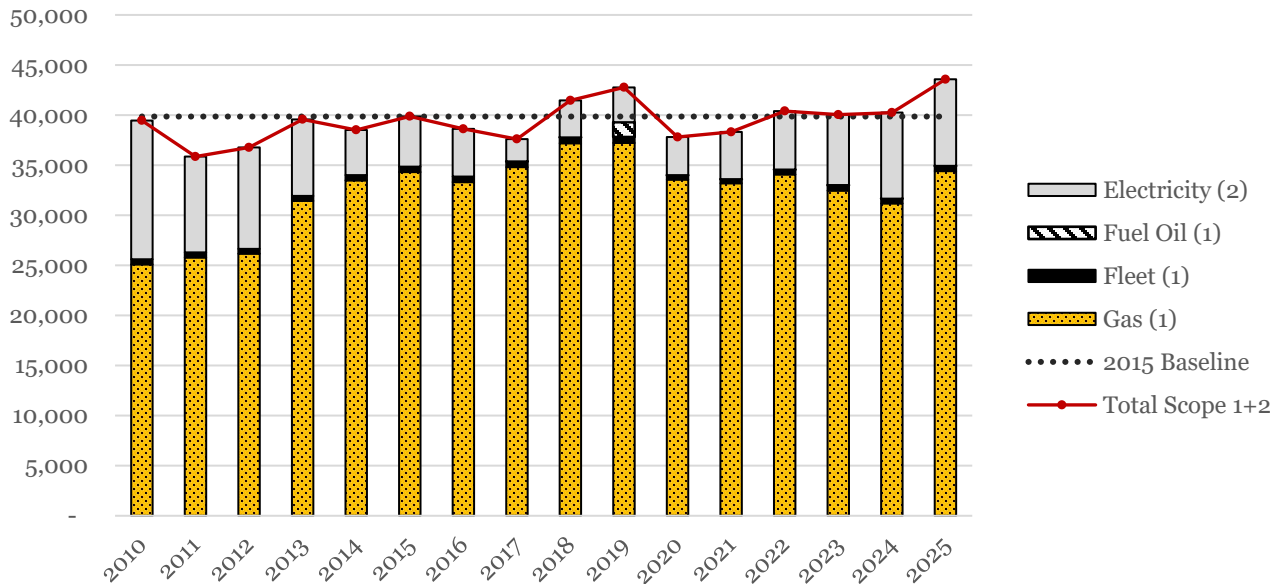
225,000 tCO₂-e
Estimated emissions from Scope 1 and 2, and known Scope 3 sources



9.3%
Increase in Scope 1 and 2 emissions from 2015 baseline

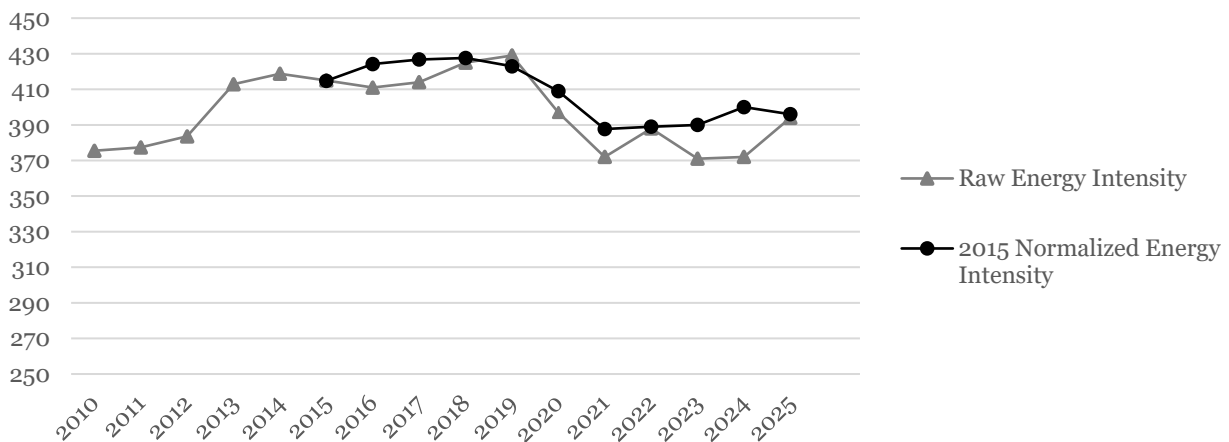
Figure 3 shows the change in Scope 1 and 2 emissions (those which are directly related to campus buildings and fleet energy). Shift:Neutral adds more detail about other Scope 3 sources of emissions, and additional data and reporting on Scope 3 emissions estimates are available on the Sustainability Office website.

Figure 1: Greenhouse Gas Emissions, 2010-2025, tCO₂-e



Emissions from gas in 2025 mostly correlates with the colder outdoor temperatures. As shown in **Figure 4**, when normalized for weather, energy intensity actually decreased slightly in 2025 compared to 2024. While this is positive, it was expected that the projects implemented over the past several years would have achieved higher savings. Additional work is underway to understand other changes to operational practices that may also be influencing energy efficiency.

Figure 2: Energy Intensity (ekWh/m²)



317,689 eMWh

Total energy use across all buildings



396 ekWh/m²

Weather-normalized energy intensity



3.3%

Increase in total energy use from 2015 baseline



ZERO WASTE

Overall progress: Off track

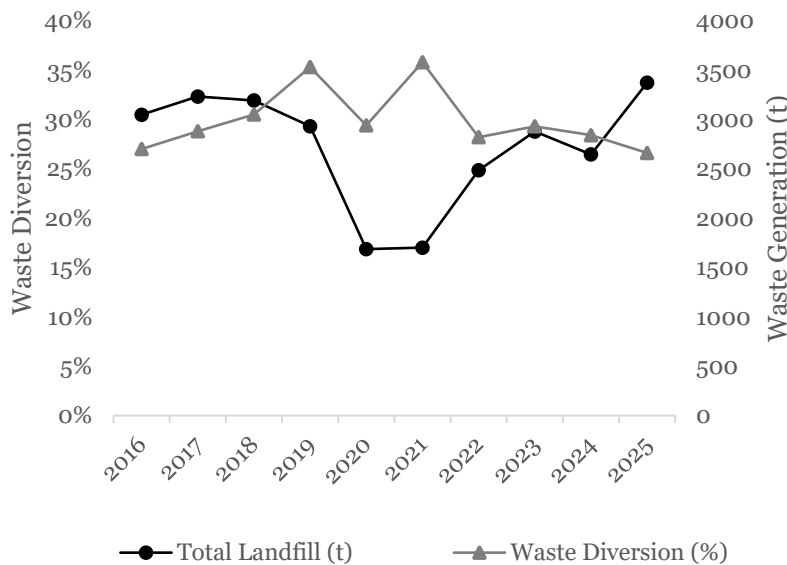
Waterloo operates more than 20 unique waste diversion programs and initiatives, providing opportunities to reuse, reduce, and recycle many types of materials across campus. Many of these are longstanding, dating back to the 1980s and the early days of the recycling industry.

In addition to diversion programs, many efforts have been made to integrate educational campaigns into student residence experience, upgrade receptacles and signage to make sorting as easy as possible, and provide online resources to train students and employees on campus waste programs and services.

Despite these efforts, Waterloo's overall waste diversion rate remains persistently low. A large amount of waste continues to be sent to landfill, due to contamination at various levels of collection and sorting. Annual waste audits consistently find that a large majority of items currently landfilled could have been diverted through other programs. Waterloo also tracks overall waste generation as well as waste per capita, both of which have seen increases over the last several years after declining during the pandemic.

Waterloo will continue to formalize the current *Shift:Zero* waste action plan, and explore additional opportunities to strengthen waste programming, policies, and engagement efforts.

Figure 3: Waste Diversion Rate (%) and Landfill Weight (t)



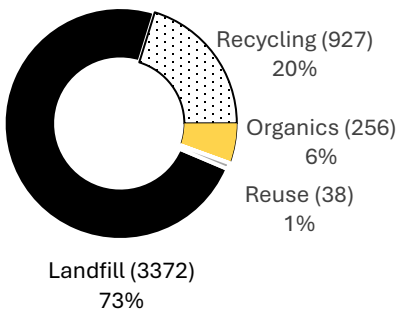
DIRECTION:

Achieve a zero-waste campus (90% diversion) by 2035

ACTIONS COMPLETED:

- Organized annual move-out drive in Campus Housing
- Funded Repair Café events to encourage reuse
- Organized eco-container program for residences
- Piloted signage, bin placement, and collection improvements in MKV and REV
- Funded concrete waste diversion for Civil Engineering

Figure 4: 2025 Waste Composition (tonnes in brackets)



25.6%

Waste diversion rate (solid non-hazardous)



91.8 kg

Waste generation per capita



SUSTAINABLE MOBILITY

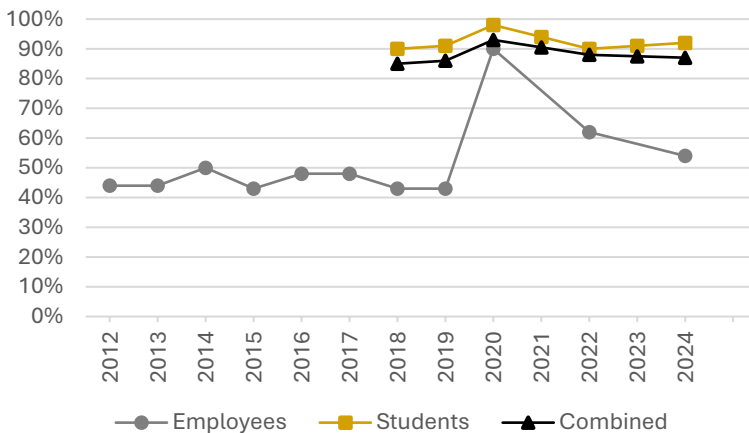
Overall progress: No change —

Over 40,000 students, employees, and visitors travel to, from, and between Waterloo's campuses each day. To support walking, cycling, public transit, carpooling, electric vehicles, and other sustainable modes of travel, Waterloo recently completed and released *Shift:Mobility*, its inaugural sustainable transportation plan.

Shift:Mobility outlines key actions for Waterloo to strengthen programs, services, and other supports for commuting, inter-campus travel, parking, and the campus fleet. Throughout 2025, these actions included expanded secure bike parking infrastructure, initiation of the fleet planning process, and direct advocacy with Grand River Transit to maintain and improve transit service levels for students and employees.

Waterloo measures commuting changes through a biennial travel survey, which will be updated in 2026. The University will continue to monitor the percentage of trips to campus by sustainable modes of travel, including impacts of the revised Flexible Work Guideline.

Figure 7: Sustainable Trips to Campus (% of Total)



DIRECTION:

Support a sustainable transportation system

ACTIONS COMPLETED:

- Conducted extensive engagement including a working group, open houses, and focus groups with 400+ participants to prepare *Shift:Mobility*, Waterloo's Sustainable Transportation Plan
- Launched global bike registry Project 529, gaining 150 bike registrations in the first 6 weeks of launch
- Opened new secure bike parking room in East Campus
- Developed and launched winter bike rack maintenance plan in collaboration with Plant Operations' Grounds team to support year-round cycling
- Completed parking lot utilization studies to understand commuting and parking patterns and work towards land and service optimization

INDICATORS



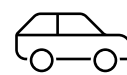
87%

Combined student and employee trips to campus using a sustainable mode



19%

Land used for roadways and parking on main campus



512 tCO₂-e

Emissions from campus fleet



CAMPUS BIODIVERSITY

Overall progress: Improving 

Waterloo has over 1,200 acres of property directly or indirectly managed through the University. Areas like the Environmental Reserve, the Healing Forest, and the Laurel Creek Corridor are well-loved features of the campus, as well as critical areas of biodiversity and serve important ecological functions in the wider community.

The protection of green spaces, both natural and managed, is an important direction within the updated Campus Plan. These areas serve as hubs for recreation, relaxation, community building, and spiritual connection to nature, as well as the habitat for more than 2,500 identified species.

Throughout 2025, Waterloo expanded biodiversity supports by planting more than 500 native trees and plants, as well as installing bird and bat boxes and habitats in the Environmental Reserve.

Waterloo's [Sustainable Land Care Standard](#) provides additional detail on maintenance practices and procedures that support sustainable approaches to land maintenance, including biodiversity protection, soil and vegetation management, fertilizers and pesticide use, water management, snow and ice management, and equipment.

DIRECTION:

Steward campus biodiversity and greenspaces

ACTIONS COMPLETED:

- Installed 30 tree swallow boxes, 10 bat boxes, 2 wood duck boxes and 1 purple martin hotel at Waterloo's North Campus Environmental Reserve
- Planted over 500 native trees, shrubs and herbaceous plants, and removed thousands of common buckthorn saplings in the Healing Forest



>2,500

Species recorded on main campus



76.25h

Naturalized/semi-naturalized greenspace on main and north campus





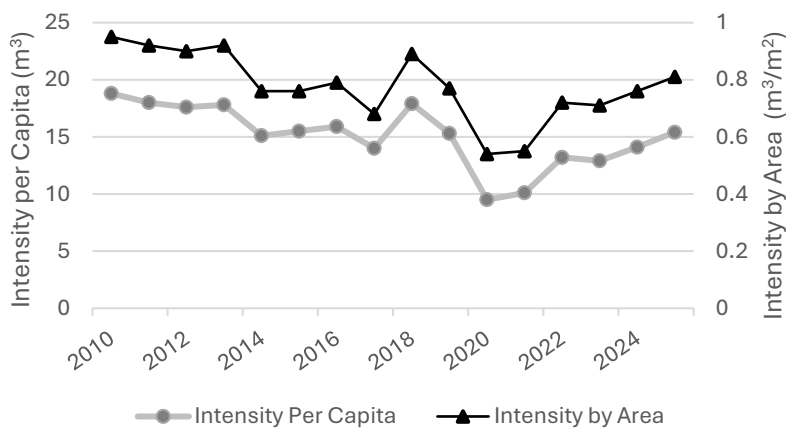
WATER PROTECTION

Overall progress: At risk

While southwestern Ontario is generally blessed with abundant freshwater resources, water conservation efforts are important for protecting the groundwater that supports the local community, especially in light of recent water supply constraints.

Water usage declined in the early 2020s during the pandemic, but has risen steadily over the past several years, in both absolute terms and by intensity. The campus will conduct additional auditing and metering over the coming year to identify areas of high water use with greater detail, as well as opportunities to improve efficiency.

Figure 9: Water Intensity by Area and Per Capita



DIRECTION:

Protect water quality and local water ecosystems

ACTIONS COMPLETED:

- Continued water submetering project throughout campus
- Supported project for Reverse Osmosis system in Chemical Engineering
- Planted trees and shrubs along Laurel Creek to improve riparian buffer
- Monitored water quality of Laurel Creek through coursework

INDICATORS



0.81 m³/m²

Water use intensity



15.4 m³/FTE

Water consumption intensity per capita



648,936 m³

Total water consumption





SUSTAINABLE FOOD

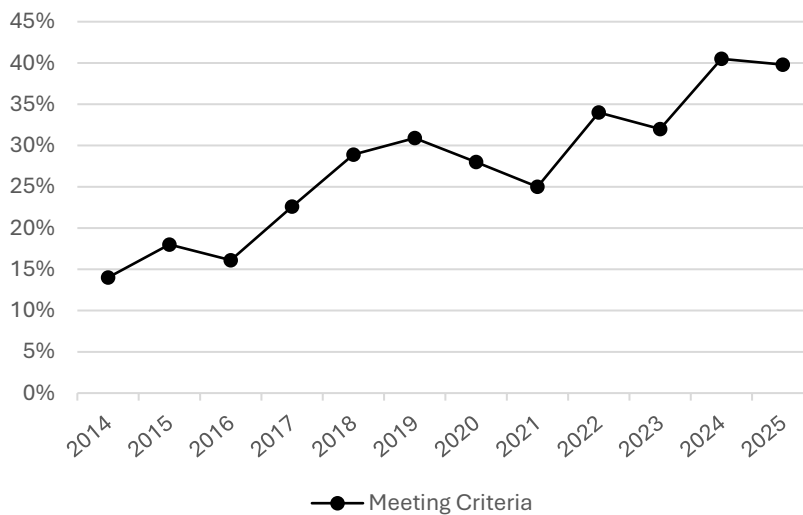
Overall progress: Improving 

Waterloo serves tens of thousands of meals each day for students, employees, and visitors who live, study, and work on campus. Food consumption has large upstream impacts on ecosystems and biodiversity, water use, pollution, and greenhouse gas emissions, so the food choices made in dining halls and on menus are important.

Through the work of staff in Food Services, Waterloo continues to procure local and sustainably certified food products such as Marine Stewardship Council certified seafood and Fairtrade Certified coffee, tea, and chocolate. Longstanding partnerships with local vendors builds community resiliency and economic impact, while minimizing the distance that food travels to reach the University.

In 2025, Waterloo supported on-site food production with over 45 community garden plots on campus, creating meaningful opportunities for students and employees to connect with nature and improve food security.

Figure 10: Food Purchases Meeting Target Criteria (% of Total)



DIRECTION:

Prioritize sustainably certified, local, equitable, and plant-based food systems

ACTIONS COMPLETED:

- Maintained Fair Trade Campus Certification
- Supported 45 community garden plots on main campus and North campus
- Sold 8,240 bundles of local produce at Fruit + Veg market
- Continued purchasing through Elmira Produce Auction Co-operative

INDICATOR



39.8%

Food that is local, sustainably certified, and/or grown onsite





SUSTAINABLE PROCUREMENT

Overall progress: No change —

As a large organization, the supply chain of materials, technology, and commodities that support campus operations can have large impacts in their production, extraction, and transportation.

Waterloo continues to track the percent of sustainably-certified paper, electronics, and cleaning products that are purchased by the campus, and has implemented guidelines and user guidance to support sustainable purchasing across units. Ongoing implementation of the Lifecycle Costing Guideline also ensures that purchasing decisions support long-term efficiencies, in addition to short-term cost savings.

Additional opportunities exist to develop a more centralized and formal sustainable procurement policy, while further integrating sustainability requirements within procurement scoring.

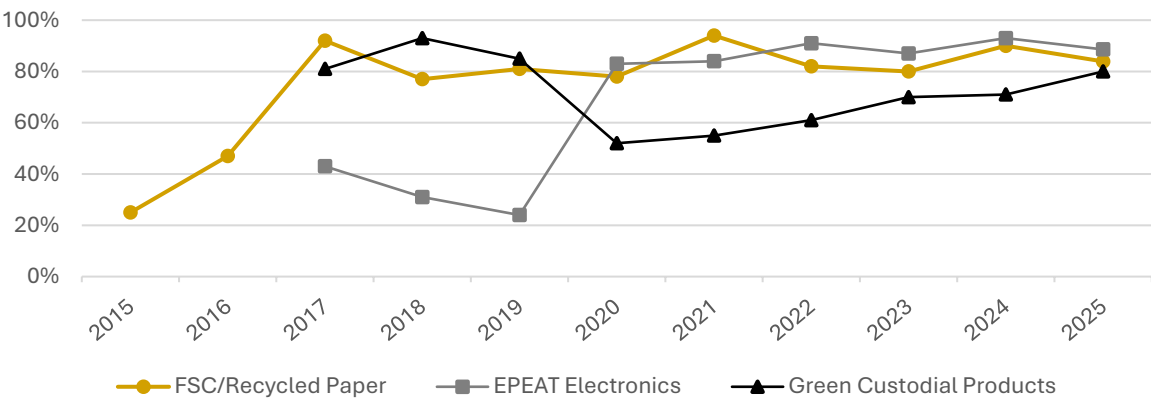
DIRECTION:

Factor sustainability requirements into all major purchasing decisions

ACTIONS COMPLETED:

- Sustainable Events Checklist added to Community Relations + Events central resource bank

Figure 11: Purchases Meeting Sustainability Criteria (% of Total)



83.9%

Of paper purchases have FSC certification and/or contain recycled content



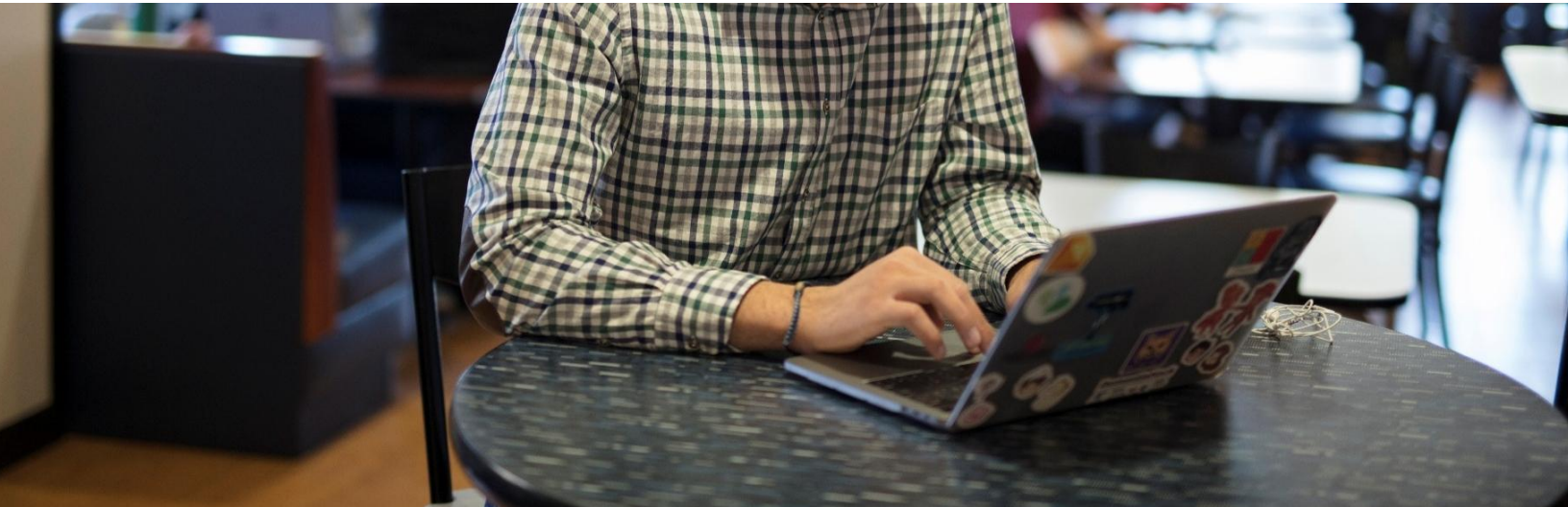
88.6%

Of all major electronic purchases are certified to a minimum of EPEAT silver



80.0%

Of all janitorial cleaning and paper products bear an environmental certification



CAMPUS ENGAGEMENT

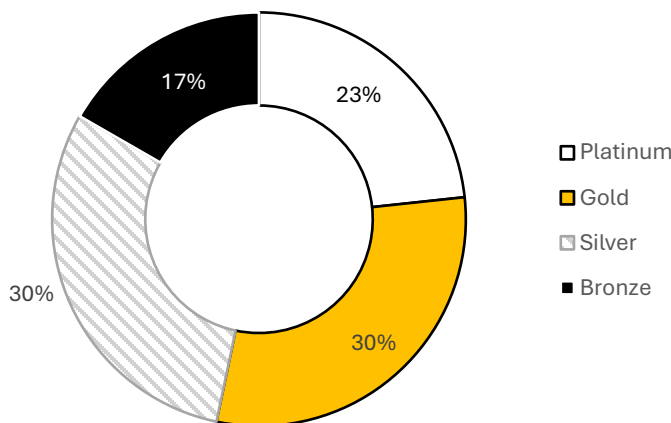


CULTURE OF SUSTAINABILITY

Overall progress: Improving

Students and employees are critical agents of change on campus, all with an important role to play in Waterloo’s short- and long-term sustainability directions. Waterloo has continued to expand sustainability engagement efforts, from interactive workshops and applied learning, to leadership development programming and community building events. While participation across the campus community has remained relatively stable, Waterloo will continue to explore opportunities for more meaningful, lasting engagement that supports a culture of sustainability on campus.

Figure 12: Certified Green Offices



DIRECTION:

Foster a culture of sustainability engagement and accountability

ACTIONS COMPLETED:

- Delivered [Green Residence](#) program with Campus Housing, to engage students on sustainability
- Strengthened [Green Office](#) program to deepen opportunities for unit sustainability action
- Promoted co-curricular sustainability action through [Sustainability Leadership Certificate](#)
- Integrated sustainability into first-year orientation through leader training and pop-up booths

INDICATORS



13.5%

Employees who have completed sustainability training



21%

Departments certified in Green Office Program



8

Labs certified in Green Labs Program



5,500+

Student engagements through sustainability outreach and programs





COMMUNITY PARTNERSHIP

Overall progress: On track 

University of Waterloo was founded by the local community, and has been an important partner in the development of the Region of Waterloo ever since. As the neighborhoods, cities, and regions around the campus increasingly focus on sustainability transitions, there is ample opportunity to deepen the partnerships with a focus on sustainability.

Waterloo remains actively involved in numerous local sustainability partnerships, including with the City and Region of Waterloo, local non-profit organizations, school boards, and other community groups.

From holding educational events for youth, to facilitating important dialogues and conversations related to sustainability, to supporting staff and faculty participation on boards and advisory committees, to leveraging academic expertise toward real-world community challenges, Waterloo remains deeply involved in and committed to supporting local sustainability action.

DIRECTION:

Strengthen community partnerships to leverage campus and local action

ACTIONS COMPLETED:

- Climate Action Youth Forum with Learning for a Sustainable Future
- SDG Expo with Waterloo Region District School Board, and
- Envirothon with Forest Ontario
- Multiple staff and faculty serve on boards and local planning committees related to climate and sustainability

INDICATORS



21

Sustainability partnerships or community initiatives



5

Sustainability community outreach activities or events



UNIVERSITY OF
WATERLOO



This annual report was prepared by the Sustainability Office.

For further information regarding this report, please contact
the Sustainability Office by email at:
sustainability@uwaterloo.ca

UNIVERSITY OF WATERLOO

200 UNIVERSITY AVE. W., WATERLOO, ON, CANADA, N2L 3G1

uwaterloo.ca/sustainability