



**Carleton**  
University

Sustainability

# Sustainability Progress Report

2023-24 Financial Year



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# Reflections

As we look back on the previous year, we are proud to present this annual report, highlighting the significant strides we've made in our ongoing commitment to environmental stewardship. It has been a year of considerable achievements, as we've worked to embed sustainable practices across all facets of university life. We have achieved a year-on-year reduction of 15% in total GHG emissions (Scope 1-3) and an 11.2% decrease in energy and electricity emissions (Scope 1 and 2) compared to our 2005 baseline.

From new waste management initiatives to spearheading innovative energy efficiency projects, our collective efforts are steadily reducing our environmental footprint while fostering a deep-rooted culture of sustainability among students, faculty, and staff alike. One standout example has been our participation in the Race to Zero Waste initiative, where we engaged with staff, students, and visitors to rethink how we handle difficult-to-recycle materials. It was a truly inspiring challenge, one that prompted us to reconsider our approach and left a lasting impact on all involved.

Equally rewarding has been the launch of our new online sustainability training program for staff and faculty. This initiative allowed us to broaden our reach, offering an engaging, informative platform that helps contextualize our sustainability efforts across campus. By bringing more people into the conversation, we've created a stronger, more informed community, aligned with our long-term goals.

This report captures the key milestones of 2023-24, underscoring our steadfast dedication to shaping a sustainable future for Carleton University and beyond. As we look ahead, we remain committed to building on this foundation, striving for excellence in every area of sustainability. Together, we are creating meaningful change—today, and for generations to come.

**Energy and Sustainability Services**  
Facilities Management and Planning  
Carleton University

# Our Sustainability Strategy

Carleton University is committed to working towards a sustainable future. We have created the Comprehensive Sustainability Plan (2020-25), a five-year plan establishing priority actions under six pillars. The plan outlines 20 actions that will help us advance sustainability at Carleton. A summary of our progress on each of the sustainability action items can be found in the Sustainability Plan Progress table.

## Leadership

We will demonstrate leadership by integrating sustainability principles into decision-making and activities, including administration and governance, research, teaching and learning, operations, community engagement and outreach activities.

### Teaching and Learning

We will strive to inspire and support students to be leaders in sustainability and to continue to adapt for a sustainable future.

- Course development
- Curriculum innovation
- Sustainable teaching practice
- Sustainability awareness

### Research

We will focus on collaborative, interdisciplinary research with social, environmental and economic impact.

- Support excellence
- Build expertise and capacity
- Sustainable research practice
- Campus as a living lab

### Operations

We acknowledge the environmental impact of our operations and will work towards a future where our operations exemplify sustainability best practices and innovation.

- Energy efficiency
- Sustainable buildings
- Biodiversity
- Sustainable procurement
- Zero waste
- Travel and transport
- Food and dining

## Engagement and Collaboration

We will demonstrate leadership by integrating sustainability principles into decision-making and activities, including administration and governance, research, teaching and learning, operations, community engagement and outreach activities.

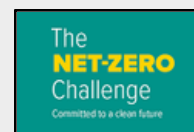
# Commitments, Awards & Recognition

In 2023-24, Carleton continued to be recognized through our public commitments, awards and certifications.

## Commitments to Sustainability Leadership

### Government of Canada's Net-Zero Challenge

Carleton is a participant in the Government of Canada's Net-Zero Challenge, a voluntary initiative that encourages organizations to develop and implement credible plans to transition their facilities and operations to net-zero emissions by 2050.



### University Global Coalition

Carleton is a member of the University Global Coalition, a global platform of universities and other higher education organizations committed to working together and in partnership with the United Nations, in support of the Sustainable Development Goals.



### Nature Positive Universities

Nature Positive Universities are halting and reversing nature loss so that species and ecosystems can start to recover. Being Nature Positive means reviewing species and ecosystems that have effected by our activities and looking to enhance the positive impacts of nature on our campus.



### Race to Zero for Universities and Colleges

Carleton is proud to be a member of the Race to Zero for Universities and Colleges. The campaign is powered by the UN Environment Programme, EAUC & Second Nature - and is a global initiative to rally leadership and action in the education sector.



### Investing to Address Climate Change: A Charter for Canadian Universities

Carleton is a signatory of the Investing to Address Climate Change: A Charter for Canadian Universities. The charter outlines how universities have a responsibility to act constructively to address the challenges of climate change and abide members to set principles and practices.



### United Nations-supported Principles for Responsible Investment

Carleton is a proud signatory to the United Nations-supported Principles for Responsible Investment (PRI), which are considered best practices in the area of responsible investment.



**Sustainability Awards and Certifications**

**World Wildlife Fund - Canada Living Campus**

Carleton has achieved the prestigious Living Campus certification in partnership with WWF-Canada. This certification recognizes our commitment to sustainability, conservation and creating a positive impact on the environment.



**Association for the Advancement of Sustainability in Higher Education (AASHE) STARS**

Carleton is recognised as a holding a Gold rating in recognition of its sustainability achievements from AASHE STARS, Sustainability Tracking, Assessment and Rating system, which measures and encourages sustainability in all aspects of higher education.



**Fair Trade Campus**

Carleton is recognized as a Fair Trade Campus. This designation is bestowed to campuses that have committed to advancing the positive impact of Fair Trade and serve Fair Trade products including Tea and Coffee at university-run outlets.



**Green Globes**

Carleton is committed to ensuring that all new construction and major renovations achieve a minimum rating of 3 out of 5 globes with the Green Globe rating program. To date, 11 buildings on campus have been rated.



**Green Restaurant Association certification**

Carleton is certified by The Green Restaurant Association. The GRA's certification aims to provide technical guidance to dining establishments that want to assess and advance the sustainability of their operations by creating routes for minimizing a restaurant's impact on the environment.



**SPE Certification**

Carleton's has earned a three-star SPE Certification in recognition of its commitment to serving nutritious and environmentally sustainable food, in the Caf. This is the first 3-star rating for a higher education institution in Canada.



**MSC Certified Sustainable Seafood**

All seafood served at Carleton is certified under the Blue Fish label, which is exclusively applied to wild fish or seafood from fisheries that meet the MSC Fisheries Standard, a science-based set of criteria for sustainable fishing



# Goals

Carleton prides itself on being a dynamic research and teaching institution, embracing the power of higher education and innovation, the value of community and collaboration, and the importance of sustainability. Setting ambitious goals is essential to this - to drive innovation and collaboration that makes change possible and to be transparent and accountable to our journey.

## Leadership

**Zero instances of environmental legal non-compliance.**

**Achieve Gold STARS rating.**

**Report to the Carleton community annually and provide continuous updates.**

**Engage stakeholders in decision-making.**

## Energy and Water

**Achieve a 50% reduction in Scope 1 and 2 carbon emissions by 2030, and 100% by 2050.**

**Increase the number of renewable or alternative energy projects on campus.**

**Achieve annual energy (electricity and gas) consumption reductions.**

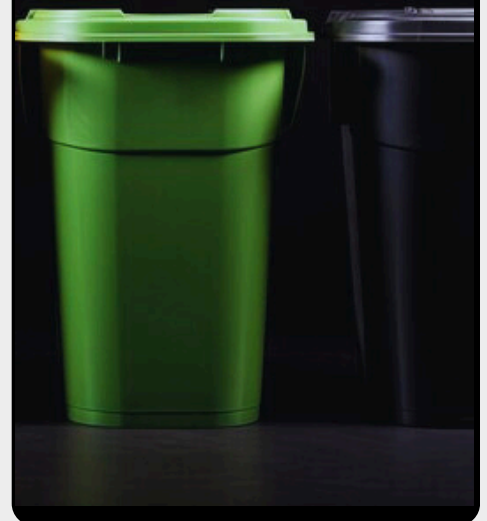
**Maintain a minimum 4 Green Globe rating for all new builds or major renovations.**

**Achieve annual water consumption reduction.**

## Waste

**Achieve a zero waste campus.**

**Achieve a zero construction waste campus.**



## Sustainable Travel

Complete a Sustainable Transportation Strategy.

Increase the number of university-owned electric vehicles.

Establish active transportation rates amongst the Carleton community.



## Engagement

Increase the number of sustainability-themed events on campus to increase awareness.

Increase student engagement with organizations working toward sustainability programs.

## Food Operations

Increase the percentage of local and sustainably sourced foods purchased through dining operations.

Maintain Carleton's Fair Trade Campus designation.





# Report Highlights

In the past year, we have made significant progress, demonstrating the dedication, hard work, and innovative approaches of our community and stakeholders in addressing complex sustainability challenges. Our objectives remain clear: to reduce our environmental impact, work towards equitable solutions to the issues we face, and drive broader change within the university and our communities. Our achievements across various initiatives highlight our progress, while the challenges that remain inspire and motivate us to continue our efforts.

## On-site Electricity

Approximately 30% of Carleton University's electricity is generated from through its on-campus co-generation plant. This initiative underscores Carleton's commitment to sustainability by significantly reducing reliance on external, purchased energy sources.

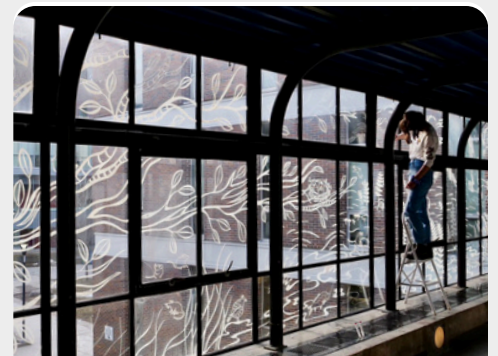
[→ Read more on page 13](#)



## Race to Zero

Carleton participated in the 2023-24 Campus Race to Zero Waste (CR2ZW), a competition that compares recycling and waste minimization against other participating universities across North America. As part of this program Carleton hosted a zero-waste basketball game and diverted an incredible 72.5% of recyclable materials from landfill.

[→ Read more on page 12](#)



## Nature Positive University

Carleton University joined the global Nature Positive initiative to restore species and ecosystems impacted by university activities while enhancing our positive influence on nature. Carleton is assessing its biodiversity baseline and will set measurable targets to boost campus biodiversity. Measures carried out include newly installed artwork to provide visual markers on walkways to prevent bird collisions and updated bird-friendly glazing. Additionally work was completed on new container garden in Architecture.

[→ Read more on page 18](#)



## Sustainability events on campus

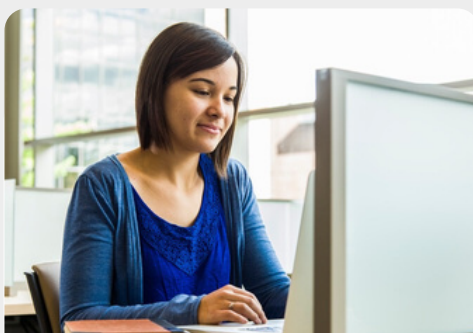
Carleton hosted a variety of sustainability events throughout the year to engage and educate the campus community. Highlights include a Sustainability Week, featuring themed days focused on environmental issues. The annual "Clean Up the Campus" event encouraging students, staff, and faculty to participate in beautifying the campus grounds. Facilities Management and Planning (FMP) held an open house to showcase their sustainability initiatives and ongoing projects. Additionally, Carleton organizes waste reduction events, promoting recycling, composting, and responsible waste management practices.

[→ Read more on page 18](#)

## Engaging with our suppliers

Carleton began to engage with our suppliers through a specific ESG Supplier Survey. The intent is to collaborate with current and future suppliers in understanding and mitigating negative environmental and societal impacts of the supply chain.

[→ Read more on page 15](#)



## Online Training

Carleton has developed a new online training program focused specifically on sustainability, providing accessible and comprehensive education for students, faculty, and staff. This initiative aims to equip the campus community with the knowledge and skills needed to implement sustainable practices in their daily activities and contribute to our overall sustainability goals.

[→ Read more on page 18](#)

## Greening the Workplace

Carleton has expanded its Green Workplace Program by adding eight new departments and office locations, significantly broadening its reach and impact. This inclusion aims to enhance sustainability practices across a wider range of university operations, fostering a more environmentally conscious campus community.

[→ Read more on page 18](#)

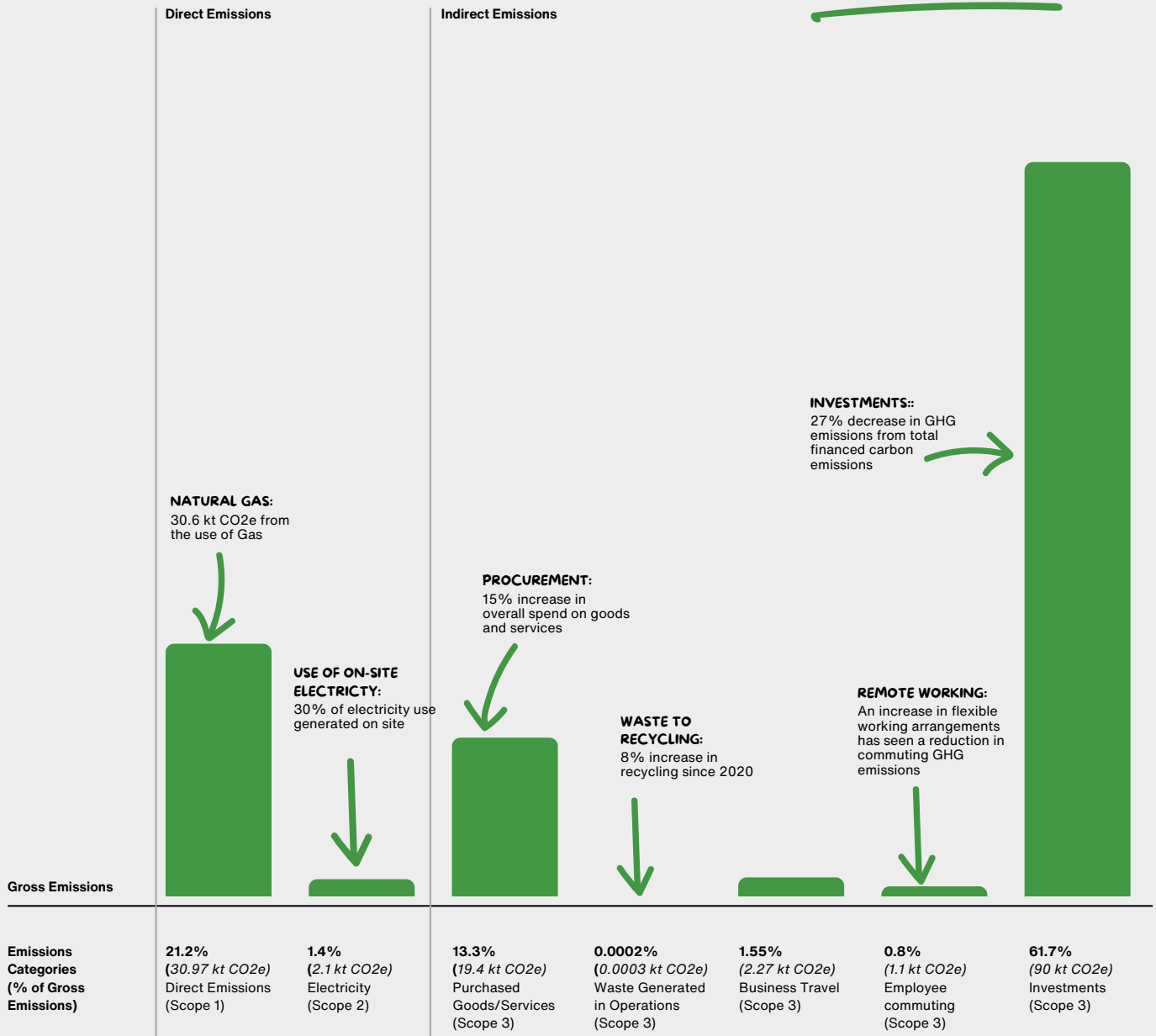
## Policy updates

Carleton's sustainability policy was updated to better integrate a holistic framework that encompasses environmental, social, and economic dimensions, ensuring a comprehensive approach to programs. This revision aims to foster collaboration across all university sectors, promoting a culture of sustainability that aligns with both local and global sustainability goals.

# Carleton's Comprehensive Carbon Footprint

In the 2023 calendar year, Carleton has seen a 15% decrease to our overall (Scope 1-3) carbon footprint. While there was an increase in Gas use and Procurement emissions, there were reductions in our Investment footprint.

**146 KILO TONS**  
GHG emissions



# Zero Waste

**Waste management at Carleton University is a long-standing commitment, marked by years of dedicated effort towards the principles of Reduce, Reuse, and Recycle. Carleton has consistently implemented a wide range of programs and initiatives to move closer to the goal of becoming a zero-waste campus.**

Carleton conducts annual waste audits to continually assess and improve its waste management practices. These audits, including those targeting specific locations such as food operations, have demonstrated impressive diversion rates of up to 90%. This ongoing dedication has enabled Carleton to operate two Certified Zero-Waste facilities, where over 90% of total waste is diverted from landfills.

Carleton's recycling operations are among the most comprehensive in higher education. Beyond the standard recycling streams for paper, plastic, and organics, the campus includes programs for large and personal e-waste, batteries, wood, scrap metal, toner cartridges, textbooks, pens, and hazardous waste.

In 2023-24, Carleton participated in the Campus Race to Zero Waste, hosting a zero-waste basketball game that successfully diverted 72.5% of recyclable materials from landfills, thanks to half-time promotions, peer engagement, and collaboration with dining services to reduce packaging and promote reusable options.

Food waste reduction remains a priority. Partnering with Aramark, Carleton uses Leanpath to track and reduce organic waste in its kitchens and cafeterias. Compost bins are strategically placed across campus, supported by clear labeling and a Sustainability Map to guide proper disposal.



## 90%

Carleton conducted two waste audits across the campus in 2023. The audits identified food locations with over 90 per cent diversion rate.



## 1000+

Carleton in partnership with Second Harvest provided 1,326 meals to individuals facing food insecurity and preventing 6,777 lbs of greenhouse gas emissions.

### Supporting students is a key focus

The Sprott Shares program offers a free reuse initiative where student essentials such as clothing and kitchen items are donated and given away to students in need. This program aligns with Carleton's commitment to sustainability by encouraging reuse and reducing waste.

The Unified Support Centre (USC) offers essential food support and advocacy, providing hampers to students in need and raising awareness about food insecurity through food drives and educational programming.

Carleton also encourages reuse through platforms like the Carleton University Reuse Base (CUrb) and Carleton Marketplace, which facilitate the resale and exchange of items within the community. Additionally, the Waste Wizard, a digital tool, helps users find proper disposal methods, reducing waste contamination and confusion.

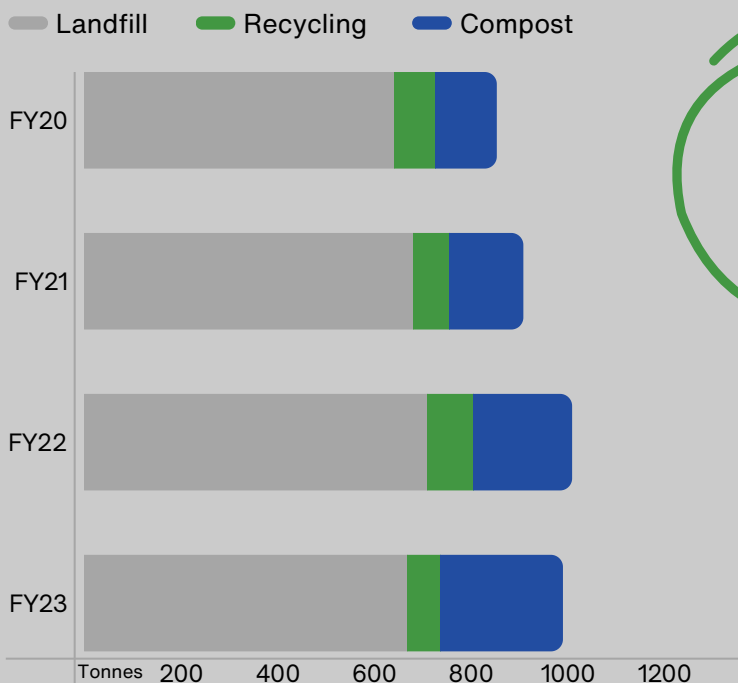
The overall waste diversion rate was up 3% with a total diversion rate of 33%.



The Waste Wizard is a digital tool available at Carleton University that helps users quickly and easily find the proper disposal methods for various items. By simply entering the name of the item, users can learn whether it can be recycled, composted, or requires special disposal, and find the appropriate drop-off locations on campus. The Waste Wizard aims to reduce waste contamination and confusion, making it easier for the Carleton community to manage waste responsibly.

### Waste diversion progress

Waste profile as a proportion of landfill, compost and recycling.



In the past year, Carleton has increased the amount recycled by 23%.

# Energy Consumption

**Energy consumption is a critical component of our sustainability initiatives.**

Carleton is dedicated to reducing energy use through various measures, such as upgrading infrastructure, implementing energy-efficient technologies, and encouraging energy-saving practices among students, faculty, and staff. Our Energy Management Plan provides a roadmap for achieving our energy reduction goals and enhancing overall campus energy performance, towards a carbon neutral campus (based on our 2005 baseline).

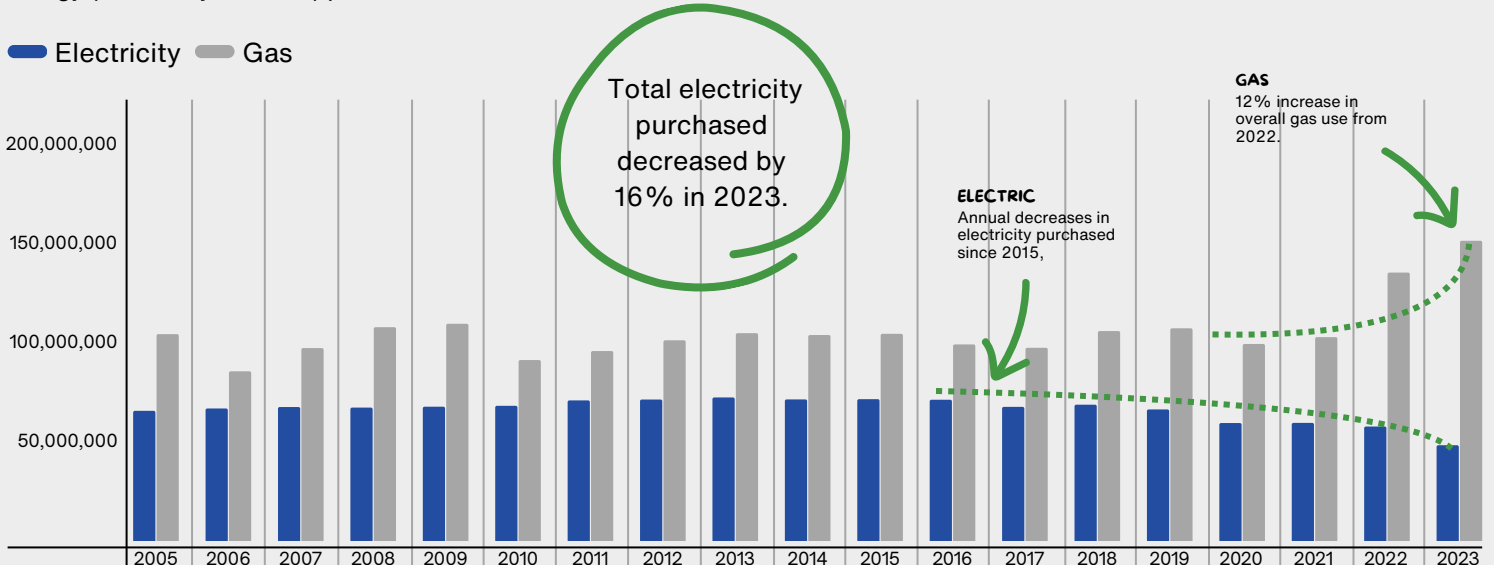
Overall Scope 1 and 2 GHG emissions showed a 11.2% reduction from our 2005 baseline.

In 2023, electricity consumption increased by 2%, but electricity purchases dropped by 16%, driven by a rise in on-campus electricity generation, which now covers nearly 30% of our total usage. However, natural gas consumption surged by 12%, contributing to an overall energy increase of 25%.

This rise is partly due to the return of campus activities and adjustments to heating and cooling systems following campus-wide indoor air evaluations conducted in response to COVID, which identified the need for increased fresh air circulation in buildings.

## Energy consumption

Energy (Electricity and Gas) purchased / kWh



### Scope 1 and 2 emission reduction

The initial objectives of cutting our scope 1 (direct) and scope 2 (indirect) emissions by 50 per cent by 2030, along with achieving carbon neutrality by 2050, remain unchanged; however, our strategy for attaining these targets has evolved. In 2023, we concentrated on creating low capital investment projects aimed at reducing Carleton's greenhouse gas emissions and energy footprint. Consequently, we have reassessed our original plans and discovered opportunities for carbon reduction through smaller, localized initiatives, as well as some larger, district-wide projects. These initiatives potentially include transitioning from natural gas water heating to air source heat pumps, implementing large electric steam boilers in the central heating plant, and enhancing our conventional lighting and HVAC systems.

To finance these initiatives, we aim to lower our peak electrical demand (and associated costs) by implementing a large battery storage system through a zero-capital, shared-revenue, and minimal-risk model, potentially yielding up to \$8 million in savings over an 11-year span.

Additionally, we are preparing a Request for Proposal (RFP) to establish Energy Savings Company (ESCO) Projects, which facilitate financing to achieve energy savings while reducing operational and maintenance expenses. The savings generated will be utilized to repay the capital investment within an agreed-upon timeframe. These savings could also be allocated to support carbon reduction initiatives and serve as seed funding for a revolving fund.

Looking ahead to our 2030 objectives, we intend to integrate our sustainability goals into significant capital projects, including the renovations of Loeb and Paterson Hall. Furthermore, we will continue collaborating with partners across campus to minimize energy consumption and carbon emissions while advancing the planning process for the next energy master plan in 2026.

### Co-generation in action

In 2023, we explored how our energy costs would have looked without the cogeneration (Cogen) system in place. Analyzing energy consumption and carbon tax pricing for the reporting year and comparing these figures to 2018 data, a period before both COVID-19 and the implementation of Cogeneration revealed that while we did use more natural gas to run the Cogeneration system, the electrical generation and carbon tax savings it provided resulted in a cost avoidance of \$2,181,708.



# Sustainable Travel

**Sustainable travel is essential for minimizing our environmental impact. Carleton promotes alternative transportation options, including cycling, public transit, and carpooling, to reduce the reliance on single-occupancy vehicles. We also encourage virtual meetings and events to minimize the need for travel, further contributing to our sustainability objectives.**

Carleton University is dedicated to fostering a sustainable future through comprehensive transportation initiatives that prioritize low-carbon alternatives and active commuting. Despite challenges with public transport links, including delays with the O-Train Line 2 and the continued closure of the Carleton station, the university has implemented various programs to support sustainable travel and reduce single-occupancy car use.

One successful initiative is the partnership with Bird Canada to provide on-campus e-scooter rentals. In 2023, there were a total of 1,425 rides, with an average ride duration of 10-20 minutes. This is an increase of almost 200% in usage compared to 2022. The pilot continues for the 2024 season, with promotions including safety awareness and free helmet giveaways to staff, faculty, and students. This initiative aims to reduce single-rider automobile use and promote healthy lifestyles.

Carleton participated in 'Let's Bike Ottawa Month,' with the staff and faculty teams, clocking over 6,500 km during the month. Additionally, bike workshops and tune-ups were provided, with over 100 staff members participating. By dedicating an entire month to cycling through the Let's Bike program, Carleton hopes to encourage staff and faculty to hop on their bikes, explore the city on two wheels, and experiment with a more active and sustainable alternative for their daily commutes to and from campus.

Carleton continues to provide and promote secure bike parking facilities on campus with over 200 spaces available to community members, ensuring greater protection against theft and damage. This is in addition to over 1000 bike parking spaces. Carleton also equipped the campus with two new bike maintenance stations to help our community access repair equipment when needed.



## 200%

Increase in e-scooter ridership originating or ending at Carleton.



## 6,700km

Carleton staff biked over 6,700 km as part of Let's Bike Ottawa Month.



## Providing alternatives to car use

The Carleton Rideau River Residence Association (RRRA) has established a bike rental program on campus. Bikes are rented by the day to residence and off-campus students, as well as faculty and staff members. The cost is just \$5 per day for faculty and off-campus students and free to residence students as part of their payments to RRRA through tuition. Carleton continues to promote its Employee Purchase Loan Program, assisting continuing employees in financing products that support the university's sustainability goals. This allows staff and faculty to finance the purchase of bicycles, including electric bicycles, and additional eligible items such as pannier bags, trailers, and security products, up to a loan value of \$5,000.

Carleton staff also enjoy the convenience of a free ride-matching program through a partnership with the City of Ottawa, courtesy of Carleton's online program 'Ottawa ride match.' Carleton staff and faculty members benefit from this carpooling service, offering a range of transportation options.

Carleton has established dedicated EV charging stations at key locations across campus. Permit holders with electric vehicles can use these stations for a small extra cost for up to four hours. Non-permit holders can access the EV charging stations as part of normal parking rates, making it easier and more convenient for everyone to choose electric vehicles. Carleton's commitment to sustainability extends to its fleet of over 100 vehicles owned. Currently, 61% of the fleet is electric, and Carleton is committed to further electrifying its fleet as vehicles need replacing.



# Engaging our Community

**Engaging the Carleton community is crucial for our sustainability efforts. Through educational programs, workshops, and events, we inspire students, faculty, and staff to act. Our partnerships with local organizations and participation in broader sustainability networks amplify our impact.**

Carleton's Green Workplace Program engages staff by promoting sustainable practices within departments. Covering topics like energy conservation, waste reduction, and sustainable transportation, the program encourages a shared commitment to sustainability. Workshops and training empower employees to make informed decisions that support our sustainability goals.

Aligned with the Green Workplace Program, Carleton's new online training deepens staff understanding of sustainability. It highlights ongoing projects, practical tips for daily sustainable practices, and the significance of small changes. This flexible, expert-guided training fits into busy schedules, helping staff advocate for sustainability within the community.

In 2023, Carleton held a number of Sustainability themed events and programs. This included a Sustainability Week, which promoted sustainable transport and waste and recycling. Other events included a Clean up the Campus initiative, Earth Hour and Waste promotions.

Carleton University has also joined the global Nature Positive initiative, aiming to restore ecosystems and species impacted by university activities. We are assessing our biodiversity baseline and setting measurable targets to enhance biodiversity on campus, aligning with the Nature Positive Universities program.

To prevent bird collisions, Carleton has applied visual markers to multiple campus buildings and incorporated bird-friendly design guidelines. In 2023, Carleton students carried out work to install artwork to provide a visual marker on walkways. This is in addition to buildings equipped with these features include the Engineering Design Centre extension, Health Sciences Building, Nicol Building, Pigiarvik, and Southam Hall.

We partner with SafeWings Ottawa to monitor bird collisions and identify buildings needing additional visual markers. Staff are encouraged to report collisions to SafeWings Ottawa or the Sustainability team, reinforcing our commitment to biodiversity and a nature-positive campus environment.

# Sustainable Procurement

In response to Bill S-211, the Fighting Against Forced Labour and Child Labour in Supply Chains Act, Carleton University has taken proactive steps to ensure our supply chain is free from forced and child labour. In 2023, we submitted compliance reports under the Act, underscoring our commitment to ethical and transparent business practices.

As part of our broader sustainability efforts, Carleton has implemented an ESG Supplier Survey. This initiative, in collaboration with both current and potential suppliers, aims to identify and mitigate the environmental and societal impacts associated with our supply chain. This aligns with Carleton’s Comprehensive Sustainability Plan and supports the integration of Environmental, Social, and Governance (ESG) considerations into our decision-making processes, as outlined in the Finance and Administration Strategic Plan.

In partnership with Tealbook, a global enterprise software company, we are inviting our suppliers to evaluate their ESG performance. The survey assesses policies, practices, and outcomes across five key areas: Health and Safety, Environment, Diversity, Governance, and Privacy. Suppliers can voluntarily complete their own Sustainability/ESG survey through Tealbook’s platform.

On campus, the CUrb (Carleton University Reuse Base) continues to play a crucial role in our sustainability initiatives by facilitating the resale and purchase of surplus items acquired with university funds. In 2023, twenty departments participated, selling or donating 169 items, including electronics, office furniture, scientific equipment, and even an e-bike. These efforts generated \$13,200 in sales for the departments involved and helped divert valuable resources from the landfill.



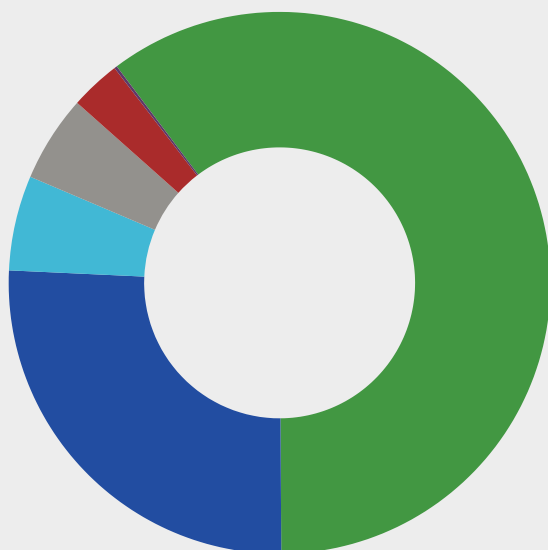
**\$13k**

Carleton University Reuse Base generated sales of \$13,200 through the reuse of equipment on the campus.



**5.4%**

Carleton University selected spend with diverse and small businesses is 5.4%. 60% of this is with small Enterprise Businesses.



## Breakdown of diverse spend 2023

- Small Enterprise Business - 60.2%
- Certified Aboriginal Business - 25.8%
- Women-owned Business - 5.7%
- Small Disadvantaged Business - 5.2%
- Minority-owned Business - 3%
- Veteran-owned Business - >1%

Appendix A

# Data Supplement

All data presented in this report is based on the calendar year, from January 1 to December 31.








Indicator	Metric	2020	2021	2022	2023
Campus Area (m2)	Total Campus Area	485,068	497,731	497,731	497,731
Campus Population (K)	Total Campus Population Total Number of Students Total Number of Faculty Total Number of Staff	33,898 31,522 1,004 1,372	33,427 30,903 1,049 1,475	32,530 30,027 1,053 1,450	32,845 30,231 1,062 1,552
Energy Consumption (MWh)	Natural Gas Electricity Owned Fleet Gasoline Use Owned Fleet Diesel Use Total Energy Consumption	99,403 59,341  158,744	102,858 62,024  164,882	135,546 67,611 363.4 278.3 203,798	151,646 68,999 101.3 81.6 220,828
Energy Intensity (MWh /m2)	Energy intensity	0.33	0.33	0.41	0.44
On-site Electricity Generation (MWh)	Total On-site Generation % Electricity Generated On-site	0 0	2,608 4%	10,036 15%	20,887 30%
Direct (Scope 1) GHG Emissions (kt CO2e) <sup>1</sup>	Facilities Natural Gas (Overall use) Building Emissions (%/Overall) Co-generation Emissions (%/Overall) Fleet Owned Fleet Diesel Use Owned Fleet Gasoline Use	18.3 18.3 (100%) 0 n/a n/a	18.9 17.8 (94.2%) 1.1 (5.8%) n/a n/a	24.9 20.7 (83.1%) 4.2 (16.9%) 0.29 0.08	27.8 19.1 (68.7%) 8.7 (31.3%) 0.31 0.03
Indirect (Scope 2) GHG Emissions (kt CO2e) <sup>1</sup>	Electricity - Location Based	1.8	1.8	1.7	2.1
Other Indirect (Scope 3) GHG Emissions (kt CO2e)	Category 1: Purchased Goods and Services Category 5: Waste Generated in Operations Category 6: Business Travel Category 7: Employee Commuting Category 15: Investments	14.6 0.0004 0.02 1.9 n/a	16.1 0.0004 0.15 1.9 n/a	17.9 0.0004 1.27 1.9 123	19.4 0.0003 2.27 1.1 90
Total GHG Emissions (kt CO2e)	Total Scope 1 Total Scope 1 and 2 Total Scope 3 Total Scope 1,2 and 3	18.3 20.1 16.5 36.6	18.9 20.7 18.2 38.8	25.3 27.0 144.0 171.1	30.97 33.07 112.7 145.8
Water Consumption (cubic metres)	Total Water Use	265,552	256,668	360,927	492,541
Water Intensity (cubic metres/m2)	Water Intensity	0.55	0.52	0.67	0.99
Waste Generated (metric tons)	Total Weight of Waste Generated Total Weight of Waste to Landfill Total Weight of Waste Composted Total Weight of Waste Recycled % Waste to Diverted from Landfill	853 641 86 126 25%	908 680 74 154 25%	1,010 709 95 205 30%	991 668 68 254 33%
University Vehicles	Total Number of University Owned Vehicles Total Number of University Owned Electric Vehicles % of University Owned Electric Vehicles	n/a n/a n/a	n/a n/a n/a	103 65 63.1%	107 70 66.3%
Campus Commuting	Modal Split % by Transit % by Car as Driver % by Car as Passenger % by Cycling % by Walking	61% 22% 7% 2% 8%	61% 22% 7% 2% 8%	61% 22% 7% 2% 8%	61% 22% 7% 2% 8%

<sup>1</sup> Carleton's GHG (scope 1 and 2) inventory underwent a thorough audit and validation by an independent third-party consultant.

Appendix B

# Sustainability Plan Progress

Sustainability Action	Status	Updates
<b>Leadership</b>		
Zero instances of sustainability and environmental legal non-compliance.		No legal non-compliance reported for 2023.
Achieve Gold rating in The Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking Assessment and Rating System (STARS).		Completed 2021. A review and gap analysis of the AASHE STARS 3.1 was conducted for future updates and application.
Report annually on Carleton's sustainability impacts and progress.		Annual reporting to the Carleton Board of Governors Building Program Committee and Board of Governors. The Annual Sustainability Report is published to the Carleton Sustainability Website. In addition, Sustainability Data Dashboards are maintained on the Carleton Sustainability Website, for data and program reporting.
Report annually through global best practice standards and assessments.		Carleton reports annually towards several standards and assessments. This includes in 2023; WWF Campus Living Planet, Nature Positive Universities, Net Zero Challenge and Canada's Greenest Employee. See 'Partnerships' page xx for more information.
Ensure that community stakeholders are engaged in reporting and decision-making processes.		The Carleton Annual Sustainability Report is published on the Carleton Sustainability Website.
<b>Energy and Emissions</b>		
Meet the objectives and targets identified in the Carleton University Energy Master Plan.		The Carleton Energy Master Plan was updated in 2021. The plan is still in early deployment and awaiting funding approval.
Achieve a 50% reduction in Scope 1 and 2 carbon emissions by 2030, and 100% by 2050 (based on 2005 baseline).		See GHG Emissions in Data Supplement
Increase the number of renewable or alternative energy projects on campus.		Ongoing review with solar rooftop review conducted for future consideration.
Achieve annual energy (electricity and gas) consumption reductions.		Overall consumption has increased year on year. Total electricity purchased decreased by 16% in 2023.
Maintain a minimum 4 Green Globe rating (or equivalent) for all new builds and major renovations.		All new buildings and renovations continue to be assessed to Green Globes.
<b>Water</b>		
Achieve annual water consumption reduction (intensity).		Water consumption increased in 2023. This was attributed to a new billing process.
<b>Zero Waste</b>		
Achieve a zero-waste campus (over 90% diversion rate).		Waste diverted from landfill remains below the 90% target. External audits found diversion rates to be between 80-90%, highlighting good practice in key locations including dining services.
Achieve a zero construction waste campus (over 90% diversion).		Procedure in development and consulting with stakeholders. Good practice highlights over 90% for individual projects.

Sustainability Action	Status	Notes
<b>Sustainable Travel</b>		
Complete a Sustainable Transportation Strategy for the campus.		The Carleton Sustainable Transportation Strategy was completed and utilised as part of transport demand management during O-Train shutdown.
Increase the number of university-owned electric vehicles.		Over 60% of all university owned vehicles are electric.
Establish Active Transportation rates amongst staff, faculty, and students.		Not yet began. Continued utilization of baseline data from the City of Ottawa (2014)
<b>Food Services</b>		
Increase the percentage of local and sustainably sourced foods purchased through dining operations.		Baseline data completed in 2022, resulting in increased local sourced programs.
Achieve commitments under Carleton's Fair Trade Campus designation.		Annual designation renewed in 2023.
<b>Community Engagement</b>		
Increase the number of sustainability-themed events on campus to increase awareness.		Additional sustainability events run throughout the year including a specific Sustainability Week, Bike to Work Month, Earth Hour, Clean up the Campus event and Student Expo.
Evidence of increased student engagement with organizations working toward sustainability programs.		Social media followers increased to 1,000. Increase in student engagement including specific examples of conservation projects, bike sharing and fair-trade.



**Energy and Sustainability  
Facilities Management and Planning  
Carleton University**

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