

STRIVE FOR SUSTAINABILITY

Comprehensive Sustainability Plan 2020-25



Sustainability
CARLETON UNIVERSITY



Carleton
UNIVERSITY

The Board of Governors acknowledges and respects the Algonquin First Nation, on whose traditional territory the Carleton University campus is located.



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RANKED #2

UI Green Metric Sustainability Ranking in Canada

\$70 MILLION

Sponsored research funding from external sources

35% REDUCTION

Carbon reduction emissions intensity (since 2005)

ZERO WASTE

Food court and residence student dining location

31,202

Undergraduate and graduate students

Message from the President



Dear Members of the Carleton Community,

I am pleased to present Carleton University's comprehensive Sustainability Plan 2020-2025. This plan was developed in consultation with the campus community to reflect what our faculty, staff and students identified as key areas where the university can make the biggest sustainability impact, be it in our operations, teaching and learning or in the area of research.

This plan establishes key themes, goals and strategic actions that will guide the university over the next five years in our efforts to becoming a leader in addressing the complex challenges associated with climate change and sustainability.

As an institution, Carleton has had a long-standing commitment to sustainable operations, including recycling, and energy efficient design that dates back to the early 1990s.

Since that time, Carleton has made important progress through a number of key programs including; the creation of a university-wide Energy Master Plan which has delivered 35 per cent carbon emissions reduction and a program to certify all new and major renovations for sustainability features and performance. Other initiatives have resulted in achieving zero waste in our central food court and residence dining, Silver for AASHE Sustainability Tracking and Assessment Rating System (STARS) program, becoming a certified Fair Trade campus, and ranking second in Canada and 33rd globally among universities in the UI Green Metric international ranking system.

Together, over the next five years, we will continue our work as a campus community to becoming a more sustainable and environmentally resilient university.

Sincerely,

Benoit Antoine Bacon
President and Vice-Chancellor

Carleton Sustainability

As a distinguished research and teaching institution, Carleton University has a responsibility to lead and act decisively in addressing the challenges arising from climate change and in developing solutions and showcasing the opportunities that this presents for the campus community.

Our vision is to be a leading Canadian university that shapes and strengthens sustainability in society and contributes to the well-being of the community in which it operates.

Through the renewal of our Sustainability Plan, Carleton is committed to further embedding continuous environmental and sustainable improvement, and enhancing performance in all of our teaching, research and operations. A strong commitment to sustainability will help reduce Carleton's collective impact while ensuring that both existing and future generations of students, staff and faculty can continue to enjoy our unique and beautiful campus.

Carleton's plan will also play a key role in supporting the university's wider goal of integrating sustainability into its academic programs, research and engagement initiatives and ensure collaborative efforts across the campus. Through this plan, the university embraces the opportunity to both shape and strengthen sustainability and continue to build upon our accomplishments.

Carleton developed its first Sustainability Plan in 2013 with a view to establishing key initiatives, operational improvements and engagement. Since the launch of that first plan, Carleton has made progress through a number of key programs including; the creation of a university-wide Energy Master Plan which has delivered carbon emission reductions and a program to certify all new and major renovations for sustainability features and performance. Various other initiatives have resulted in achieving zero waste in our central food court and residence dining hall, Silver rating for AASHE Sustainability Tracking and Assessment Rating System (STARS) program, becoming a certified Fair Trade campus, and Carleton being ranked second in Canada and 35rd globally among universities in the UI Green Metric international ranking system.

This updated plan has been developed with involvement from the university community, faculty, staff and students. There is a renewed emphasis on reducing our collective impact, utilizing the campus as a living lab and developing it as a sustainable community.



Global Contributions

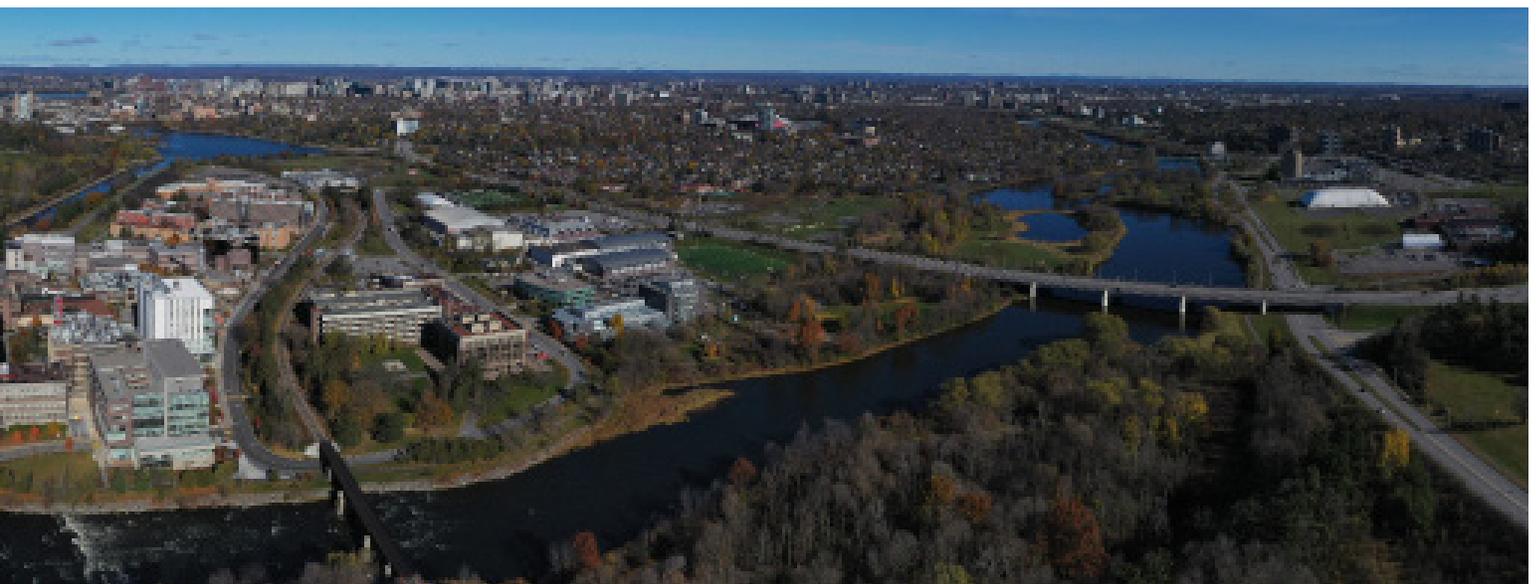
Carleton defines sustainability in an inclusive style, encompassing human and ecological health, social justice, secure livelihoods, and a better world for all generations. This plan is looking towards translating this broad and inclusive view of sustainability to measurable objectives at the campus level.

One of the most popular definitions of sustainability is actually a definition of sustainable development. It is from Our Common Future: The Report of the World Commission on Environment and Development, commonly known as the Brundtland Commission Report. This outlined sustainable development as the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

The interconnectedness and interdependence of the social, environmental, and economic components of sustainability are included throughout Our Common Future. The Brundtland Commission writes, “Our inability to promote the common interest in sustainable development is often a product of the relative neglect of economic and social justice, extending to all the opportunity to satisfy their aspirations for a better life.”

Today, sustainability is ever more emphasized by the concept’s simultaneous economic, environmental, and social dimensions. For example, businesses talk about the triple bottom line: people, planet, and profits and likewise, sustainability educators commonly refer to the Three E’s of sustainability: economy, ecology, and equity.

In 2015, the United Nations published ‘Transforming our world: the 2030 Agenda for Sustainable Development’, a “plan of action for people, planet and prosperity”. The publication outlines 17 Sustainable Development Goals and 169 targets, and seeks to build on previous efforts by outlining a 15-year agenda that balances “the three dimensions of sustainable development: the economic, social and environmental”. The relevance of our plan to these goals is profiled.



The Plan at a Glance

LEADERSHIP



- Zero instances of sustainability and environmental legal non-compliance.
- Achieve a Gold STARS rating by 2021.
- Report annually and publicly on the university's sustainability impacts and progress.
- Report annually through global best-practice standards and assessments.
- Ensure that community stakeholders are engaged in reporting and decision-making processes.

TEACHING AND LEARNING



- Track the number of courses and programs that enable students to understand and apply sustainability knowledge.
- All students graduating from Carleton to have exposure to sustainability principles through their degree program or wider initiatives.

RESEARCH



- Track the number of research programs and initiatives with links to campus sustainability operations and planning.
- Increase the number of communications on university sustainability research provided to the broader community.
- Track the impact (funding, awards, contracts etc.) of research programs and initiatives as related to sustainability.

ENERGY AND EMISSIONS



- Meet the objectives and targets identified in the Carleton University Energy Master Plan.
- Achieve a 50 per cent reduction in Scope 1 and 2 carbon emissions by 2030, 100 per cent by 2050, (based on a 2005 baseline).
- Increase the number of renewable or alternative energy projects on campus.
- Achieve annual energy (electricity and gas) consumption reductions.

SUSTAINABLE BUILDINGS



- Maintain a minimum 4 Green Globe rating (or equivalent external third-party sustainable certification) for all new builds or major renovations.



WATER

- Achieve annual water consumption reduction (intensity).



WASTE

- Achieve a zero waste campus (over 90 per cent diversion rate).
- Achieve a zero construction waste campus (over 90 per cent diversion).
- Ensure that community stakeholders are engaged in reporting and decision-making processes.



TRAVEL AND TRANSPORT

- Complete a Sustainable Transportation Strategy for the campus.
- Increase the number of university-owned electric vehicles.
- Establish Active Transportation rates (Bike and Walk) amongst staff, faculty and students.
- Establish Public Transportation (Bus and Train) rates amongst staff, faculty and students.



FOOD OPERATIONS

- Increase the percentage of local and sustainably sourced foods purchased through dining operations.
- Achieve commitments under the university's FairTrade Campus certification.



COMMUNITY ENGAGEMENT

- Increase the number of sustainability-themed events on campus to increase awareness.
- Evidence of increased student engagement with organizations working towards sustainability programs.
- Perception: Increase faculty/staff/student level of satisfaction in university sustainability issues.
- Participation: Increase faculty/staff/student level of participation in university sustainability issues.

Leadership

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

Effective and transparent governance is vital to the success of sustainability as by its mere application sustainability is embedded in all of the universities operations and is continually evolving in reach and expectations, especially among students. Sound governance requires structure, ongoing review and a culture of leadership.

Goal 1.1: Promote and foster a culture of sustainable leadership.

STRATEGIC ACTIONS:

- a. Demonstrate a visible and proactive commitment from the President, Executive Team and Senior Leadership, including Academic Leaders.
- b. Establish clear objectives and targets to drive continual improvement in the university's sustainability performance.
- c. Ensure key messages are incorporated in the university's strategic plan.
- d. Meet and, wherever possible, exceed legislative requirements, standards and agreements.
- e. Collaborate with divisions across the university (Academic, Research and Finance and Administration, and Students) to ensure the effective implementation of the Sustainability Plan.
- f. Identify opportunities, to enhance existing sustainability initiatives across operational programs and activities.
- g. Provide sufficient organizational and financial support for the university's sustainability program.

Goal 1.2: Embed sustainability into the ethos of Carleton.

STRATEGIC ACTIONS:

- a. Develop a university-wide Sustainability Policy to outline key strategic directions, to guide desired outcomes and, as a fundamental guideline, to help decision makers.
- b. Embed sustainability within university policies, strategies, procedures and practices as they come up for review and as appropriate.
- c. Promote and incorporate sustainability into recruitment and new staff orientation, and as appropriate professional development activities.
- d. Ensure that the university's approach to risk management is reviewed to allow for relevant aspects of sustainability risks and opportunities to be incorporated.
- e. Review and explore opportunities for the adoption of socially responsible investments.

SUSTAINABILITY IN ACTION

Carleton has been a member of AASHE (Association for the Advancement of Sustainability in Higher Education) since 2014 and has achieved a silver rating in the Sustainability Tracking, Assessment & Rating System™ (STARS®). This is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance. STARS is intended to engage and recognize the full spectrum of higher education institutions and encompasses long-term sustainability goals.

Goal 1.3: Demonstrate transparency and accountability in sustainability reporting.

STRATEGIC ACTIONS:

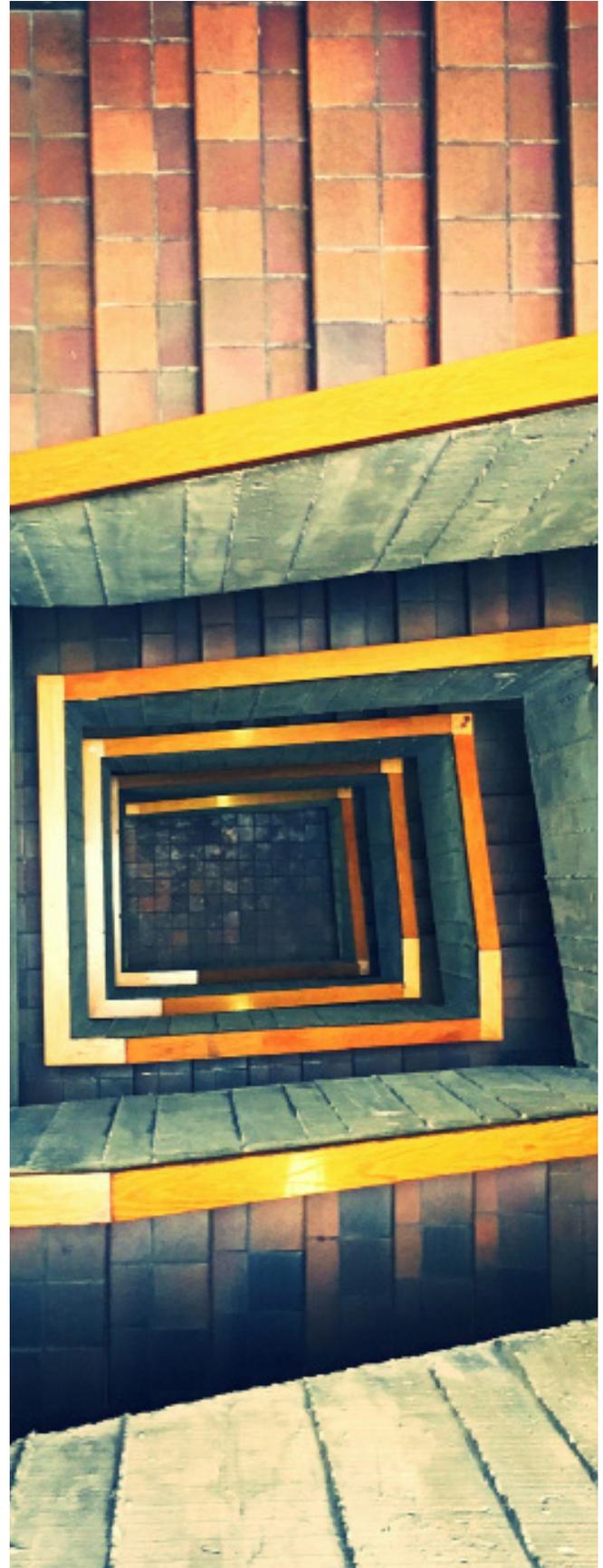
- a. Establish and deliver against operational sustainability targets, using key performance indicators to facilitate monitoring, evaluation and reporting.
- b. Develop and improve monitoring and reporting procedures, including the continued use of external ratings such as; Sustainability Tracking and Assessment Rating System (STARS) and UI Green Metric.
- c. Annually monitor and evaluate the implementation of the Sustainability Plan.
- d. Regularly report to staff, faculty, students and the wider Carleton community on the university's sustainability performance.
- e. Report annually to the Board of Governors Building Program Committee on the progress against the Sustainability Plan.

KEY TARGETS:

- Zero instances of environmental legal non-compliance.
- Achieve a Gold STARS rating by 2021.
- Report annually and publicly on the university's sustainability impacts and progress.
- Report annually through global best practice standards and assessments.
- Ensure that community stakeholders are engaged in reporting and decision-making processes.

RELEVANT SUSTAINABLE DEVELOPMENT GOALS:

- Goal 4 Quality Education
- Goal 9 Industry, Innovation and Infrastructure
- Goal 16 Peace, Justice and Strong Institutions
- Goal 17 Partnerships for the Goals



Teaching and Learning

Teaching and Learning at Carleton strives to inspire and support students to be leaders in sustainability and to continue to adapt for a sustainable future.

Carleton will continue to strengthen sustainability within formal teaching and learning programs and practices, and provide specialist interdisciplinary education in subjects linked to sustainability and the natural ecological environment. A key emphasis is on developing students to have both the skills and knowledge to succeed in their future sustainability careers.

The university also invites all students to connect with sustainability as part of their broader experience in Ottawa. All students will have the opportunity to develop a sense of citizenship and engage with sustainability issues regardless of their formal program of study. This increases the likelihood that Carleton graduates emerge as sustainable-focused students that make a positive contribution to sustainability throughout their lives.

Goal 2.1: Encourage and support the development of appropriate subjects and courses.

STRATEGIC ACTIONS:

- Review and profile our sustainability-focused and sustainability-related curriculum activity.
- Promote a range of undergraduate sustainability-related courses and programs.
- Promote a range of postgraduate sustainability-related courses and programs.
- Continue to encourage curriculum innovation by facilitating collaboration and interdisciplinary approaches.
- Ensure programs are informed and aligned to pathways outlined by relevant accreditation boards.

Goal 2.2: Develop ways to integrate sustainability into teaching and learning practices.

STRATEGIC ACTIONS:

- Develop and share practical resources about sustainable teaching practices.
- Encourage sharing of effective sustainable teaching practices across the university.
- Develop initiatives to integrate sustainability practice and operations into curriculum and academic programs.

Goal 2.3: Increase sustainability awareness among all students.

STRATEGIC ACTIONS:

- Create opportunities for students to engage with sustainability regardless of their course or specialty, for example through involvement in campus activities, working groups and other volunteer projects.
- Produce resources that enhance learning about sustainability outside the formal curriculum.
- Explore the possibility of assessing the sustainability awareness of all students.
- Further develop a focused experiential-learning experience for students and ensure on and off campus opportunities.

KEY TARGETS:

- Track the number of courses and programs that enable students to understand and apply sustainability knowledge.
- All students graduating from Carleton to have exposure to sustainability principles through their degree program or wider initiatives.

RELEVANT SUSTAINABLE DEVELOPMENT GOALS:

- Goal 4 Quality Education
- Goal 8 Decent work and economic growth
- Goal 13 Climate Action



SUSTAINABILITY IN ACTION

Across Carleton, the teaching and studying of sustainability occurs through a broad range of courses and programs. Carleton is committed to ensuring all our students gain the knowledge and understanding to become global citizens in a sustainable world. Sustainability-specific undergraduate and graduate programs currently include:

- Master's in Sustainable Energy Engineering and Policy, and Data Science
- Bachelor of Engineering in Sustainable and Renewable Energy Engineering
- Bachelor of Engineering in Architectural Conservation and Sustainability Engineering
- Bachelor's, Master's and Doctorate in Environmental Engineering, Environmental Science, and Environmental Studies
- Bachelor of Architectural Studies in Conservation and Sustainability

Carleton graduates have a variety of experiential learning opportunities, beyond their 4th year capstone programs, to including our participation in notable activities such as the Northern Nomad Tiny House: a net zero tiny house built through the collaborative efforts of Carleton architecture and engineering students, and the Solar Decathlon where Carleton engineering students placed first with Team Ontario in this international competition.

Research

Carleton University's focus on collaborative interdisciplinary research with social, environmental and economic impact continues to pay big dividends. Research funding at Carleton has increased more sharply in the last year than at every other comprehensive and medical university in the country. Sponsored research income from external sources at Carleton jumped to \$70,298,000 in 2018 compared to \$54,369,000 the previous year — a 29.3 per cent increase, according to the annual rankings from Research Infosource, one of Canada's leading R&D analysis organizations.

In addition, Carleton's corporate research income growth — research support from the private sector that is included in the sponsored research income total — was third among comprehensive universities in 2018.

This growth in funding and accompanying expertise places Carleton in a unique position to address the complex challenges associated with sustainability. Meeting global and local challenges will require us to harness the strength, breadth and depth of our research expertise and engage effectively to ensure it is applied. This depends on the ability of staff to maintain and strengthen the excellence of research within individual disciplines, as well as working with colleagues from other disciplines.

As we look forward, our community is charging ahead with more exciting research projects, awards and collaborations, that will enable Carleton to realize a capital advantage and build upon existing sustainability expertise.

Goal 3.1: Support Excellence in sustainability-related Research.

STRATEGIC ACTIONS:

- a. Review and profile research-related to sustainability and ensure Carleton sustainability research knowledge is communicated to the broader community.
- b. Engage researchers from multiple disciplines to enhance global and regional sustainability.
- c. Cultivate internal and external collaborations to advance interdisciplinary research on sustainability.
- d. Build upon Carleton's expertise and capacity in research to ensure we become known as a centre of excellence in sustainability.
- e. Continue to develop community based research opportunities and work alongside key partners to embrace our capital advantage.

Goal 3.2: Encourage sustainable Research practices.

STRATEGIC ACTIONS:

- a. Adopt methods and metrics to measure research outcomes and positive impacts relating to sustainability research.
- b. Encourage sharing effective sustainable research practices across the university.
- c. Recognize examples of research practices that support the sustainability program at the university.

Goal 3.3: Ensure strong Research links to campus sustainability operations and planning.

STRATEGIC ACTIONS:

- a. Increase the use of university sustainability issues, initiatives and facilities as a resource for academic inquiry (research, teaching and learning).
- b. Increase campus-based sustainability educational programs.
- c. Ensure university operations support wider research goals and collaborate in the development and implementation of campus initiatives informed by Carleton research.

SUSTAINABILITY IN ACTION

Research Partnerships

- **Centre for Advanced Building Envelope Research (CU-CABER):** CU-CABER as a new Centre will address a need that countries around the world have to seek clean technologies to reduce energy use and greenhouse gas emissions (GHGs), and to mitigate the risks of climate change. In response to this need, Carleton University, in partnership with Natural Resources Canada, will establish a new Centre for Advanced Building Envelope Research (CU-CABER). Ontario Research Fund (\$2.1M) and Natural Resources Canada (\$3M).
- **The PermafrostNet new NSERC Strategic Network led by Carleton:** The network unites key scholars and stakeholders from government agencies, industry and Indigenous communities with the common goal of boosting Canada's ability to adapt to permafrost thaw. Network research focuses on understanding and predicting permafrost thaw and its impact, to connect scales from field sites to national-scale prediction and to prototype knowledge products and practices with stakeholders. PermafrostNet is one of two NSERC Strategic Network awarded in 2019. It received \$5.5M over 5 years.
- **Energy and Emissions Research Laboratory:** An extremely active research group with one activity being the lead institute for a NSERC FlareNet Strategic Network to provide an evidence-based understanding of flare-generated emissions to enable science-based regulations and accurate pollutant inventories.
- **Carleton Building Performance Research Centre:** Advances state-of-the-art buildings and community design, and their operations, while improving comfort and usability. The Centre has over 40 graduate students and community/industry partners. Key research areas include; studies of residential and commercial buildings, campuses, and communities; building envelopes; advanced adaptive controls; renewable energy systems; energy storage and distribution systems; data analytics, mining, and visualization and building design and optimization. Partners include The MoCreebec Eeyoud First Nation and Natural Resources Canada
- **Human-Building Interaction Laboratory (HBILP):** Strives to understand two-way interaction between buildings and their occupants to maximize comfort while minimizing environmental impacts using a multidisciplinary approach. Experience has shown that designing buildings to be robust, versatile, and comfortable inherently causes occupants to act in sustainable ways. Partners include Delta Controls, Autodesk, Green Power Labs, NSERC, and Morrison Hershfield amongst others.
- **The Urbandale Centre for Home Energy Research:** A full-scale experimental facility that is used for conducting long-term explorations of novel and unproven concepts aimed at radically reducing the reliance of Canadian housing on conventional energy sources. Industrial partners include not only the lead construction firm, Urbandale, but also Apricus Solar Hot Water, Ecologix, T2Thermal 2000, as well as many other local SMEs associated with windows and floorings.

KEY TARGETS

- Track the number of research programs and initiatives with links to campus sustainability operations and planning.
- Increase the number of communications on university sustainability research provided to the broader community.
- Track the impact (funding, awards, contracts etc.) of research programs and initiatives as related to sustainability.

RELEVANT SUSTAINABLE DEVELOPMENT GOALS:

- Goal 6 Clean Water and Sanitation
- Goal 7 Affordable and Clean Energy
- Goal 9 Industry, Innovation and Infrastructure
- Goal 13 Climate Action
- Goal 14 Life below Water
- Goal 15 Life on Land

Operations

Carleton fully acknowledges the environmental impact of its operations and will continue to work towards a future where both operations and infrastructure embody and exemplify sustainability principles, best practice and innovation.

The university serves a community of more than 31,000 students and staff across a campus set against the Rideau Canal, which is a UNESCO heritage site, and the Rideau River. We are focused on leading by example. Carleton is committed to developing the campus in a sustainable manner, mitigating and adapting to the challenges of climate change and protecting and enhancing biodiversity to ensure future generations continue to enjoy it.

Our efforts to date have established the practice of embedding energy and sustainability into our programming. This has resulted in significant reductions of 35 per cent in carbon emissions and reductions in resource consumption and waste.

In this plan, we commit to achieving a 50 per cent reduction in Scope 1 and 2 carbon emissions by 2030 and 100 per cent by 2050 (2005 baseline). We are outlining plans for energy reduction and alternative energy generation to achieve these targets and will continue, where needed, to update our Energy Master Plan to reflect this.

We are also positioning our campus community to more clearly understand and act on the impacts of our supply chain and make additional progress towards becoming a zero-waste university.

Energy and Emissions

Goal 4.1: Establish Carleton as a leader in addressing carbon reduction and actively pursue a zero-carbon future.

STRATEGIC ACTIONS:

- a. Pursue the strategic objectives as identified in the Carleton Energy Master Plan.
- b. Minimize greenhouse gas emissions associated with the operation of the university campus and related infrastructure to support a progression to a 50 per cent reduction by 2030 and a zero-carbon campus by 2050.
- c. Increase the use of on-campus renewable energy sources.
- d. Reduce energy consumption through implementing energy efficiency and conservation measures.
- e. Implement innovations, upgrades, preventative maintenance and best practice solutions towards energy management and environmental protection.
- f. Actively engage the campus community in energy use and reduction through improved targeted communications and data sharing.

Sustainable Buildings and Biodiversity

Goal 4.2: Promote social, economic and environmental sustainability in the development and operations of both our built and natural environments.

STRATEGIC ACTIONS:

- a. Develop, renovate and maintain buildings in ways that achieves best practice, innovation and cost-effective environmentally sustainable design.
- b. Maintain space stewardship principles for the effective use of existing and new space and facilities.
- c. Ensure adequate prioritization for maintaining buildings and assets based on risk and life-cycle cost analysis.
- d. Develop a sustainability and environmental legal register to highlight both relevant legislation and compliance.
- e. Promote examples of sustainable building best practice and activities in a way that is visible to the university community and campus visitors.
- f. Pursue external third-party certification for all new construction and major renovation projects, for example Green Globes.
- g. Maximize the use of green space on campus and maintain university grounds in an environmentally sensitive way, having regard for the enhancement of local ecosystems, the use of native species and promoting the use of green spaces to grow food on campus.
- h. Enhance conservation and biodiversity outcomes through the management of our campus and increase communications and engagement towards biodiversity efforts.
- i. Review the feasibility for Carleton to provide more space for pollinator habitats.
- j. Minimize water consumption through conservation and efficiency measures, water reuse and recycling.

Goods and Services

Goal 4.3: Develop the capacity for all departments and faculties to include sustainability in the procurement of goods, services and in the supply chain.

STRATEGIC ACTIONS:

- a. Establish policies, procedures and guidelines that promote sustainable procurement.
- b. Embed the principles of sustainability within procurement activities to ensure the selection of products and services that provide value for money on a whole life cycle basis and achieve wider economic, social and environmental benefits.
- c. Adopt an institution-wide preference to purchase environmentally preferable products where appropriate.
- d. Ensure that employees, contractors, suppliers and vendors act both in accordance with the university's commitment to sustainability and support sustainability principles.
- e. Establish a system that increases the use of surplus goods by departments and Faculties.

Waste and Recycling

Goal 4.4: Become a zero-waste institution.

STRATEGIC ACTIONS:

- a. Minimize waste generated from university activities and going to landfill by adhering to the 'waste hierarchy': reduce, reuse, recycle, recover, treat and dispose.
- b. Decrease contamination levels from waste disposal and increase the collection of organics.
- c. Engage the university in its waste diversion goals and engage the campus community towards an ambition to be a zero-waste campus.
- d. Assess opportunities for reducing packaging waste and increasing the purchase of recycled content materials and products.
- e. Increase diversion of construction waste and waste arising from renovations and retrofits.
- f. Work with departments and vendors to eliminate single-use plastic service ware and event products.
- g. Manage and minimize the output of solid wastes, discharges of liquid wastes and airborne contaminants.

Operations

Travel and Transport

Goal 4.5: Encourage the campus community to travel in a sustainable manner and contribute to a low carbon future.

STRATEGIC ACTIONS:

- a. Promote and encourage sustainable and active forms of transportation (cycling and walking) by staff, faculty and students.
- b. Work towards minimizing the carbon impact of the university-owned vehicle fleet, by reviewing alternative fuels and power sources and reporting fuel consumption on an annual basis.
- c. Improve our understanding of other carbon intensive operations, such as those generated by air travel and commuting.
- d. Establish guidance to promote alternatives to air travel and adopt a travel hierarchy based on individual needs.

- e. Continue to encourage the use of carpooling and car sharing as a means of reducing the number of single occupancy vehicle trips taken by staff, faculty and students to and from campus.
- f. Explore opportunities to make public transport more accessible to people working, living and studying at Carleton.
- g. Ensure that high-quality video conferencing is readily available across campus.

Food and Dining

Goal 4.6: Support sustainable food systems.

STRATEGIC ACTIONS:

- a. Increase the availability of local and/or sustainably produced foods on campus.
- b. Continue to support a campus-wide food waste composting program.
- c. Continue to maintain being a Fair Trade campus and promote this and other food certification programs to the wider university community.



KEY TARGETS:

ENERGY AND EMISSIONS

- Meet the objectives and targets identified in the Carleton University Energy Master Plan.
- Achieve a 50 per cent reduction in Scope 1 and 2 carbon emissions by 2030, 100 per cent by 2050 (2005 baseline).
- Increase the number of renewable or alternative energy projects on campus.
- Achieve annual energy (electricity and gas) consumption reductions.

SUSTAINABLE BUILDINGS

- Maintain a minimum 4 Green Globe rating (or equivalent external third-party sustainable certification) for all new builds or major renovations.

WATER

- Achieve annual water consumption reduction (intensity).

WASTE

- Achieve a zero-waste campus (over 90 per cent diversion rate).
- Achieve a zero construction-waste campus (over 90 per cent diversion).

TRAVEL AND TRANSPORT

- Complete a Sustainable Transportation Strategy for the campus.
- Increase the number of university-owned electric vehicles.
- Establish Active Transportation rates (Cycling and Walking) amongst staff, faculty and students.
- Establish Public Transportation (Bus and Train) rates amongst staff, faculty and students.

FOOD OPERATIONS

- Increase the percentage of local and sustainably sourced foods purchased through dining operations.
- Achieve commitments under the university's FairTrade Campus certification.

RELEVANT SUSTAINABLE DEVELOPMENT GOALS:

- Goal 7 Affordable and Clean Energy
- Goal 9 Industry, Innovation and Infrastructure
- Goal 11 Sustainable Cities and Communities
- Goal 12 Responsible Consumption and Production

Community Engagement

Our progress in driving improvements towards sustainability are also dependent on the active involvement of all members of our university community. We will further develop a culture of sustainability amongst staff, faculty and students at the university, and facilitate the integration and culture of sustainability principles and practices.

Through a co-ordinated set of programs, the university will maximize opportunities for staff, faculty and students to engage with sustainability initiatives. The campus community will increasingly be asked to engage in collaborative action for sustainability. Fostering such levels of formal and informal engagement will mean that everyone is aware of the university's sustainability efforts, they are also clear about their own role within the program.

Goal 5.1: Raise awareness of the university's sustainability journey and milestones.

STRATEGIC ACTIONS:

- a. Implement a co-ordinated sustainability communications strategy.
- b. Revise the university's sustainability website to provide a comprehensive resource for the sustainability activity.
- c. Produce a range of resources that provide up-to-date information about sustainability issues.
- d. Increase the use of social media as a communication platform.
- e. Ensure sustainability issues feature in university-wide and divisional forums and communications.
- f. Include sustainability in student orientation activities.
- g. Profile the university's commitment to sustainability in staff appointments and advertisements.
- h. Feature sustainability in the orientation process for new staff.

Goal 5.2: Encourage sustainability inquiry and learning.

STRATEGIC ACTIONS:

- a. Support networks of engaged students and staff focused on sustainability.
- b. Identify sustainability advocates in departments to lead sustainability initiatives in their area, including the Sustainable Office program.
- c. Provide sustainability advocates with training, support, facilitation and resources to identify and implement initiatives.
- d. Develop training, tools and resources that provide staff and students with guidance on how to incorporate sustainability principles into their daily practices.

Goal 5.3: Create opportunities for staff, faculty and students to engage in sustainability-related initiatives and activities.

STRATEGIC ACTIONS:

- a. Involve staff, faculty and students in achieving collective challenges, working closely with CUSA, GSA and RRRA and other student bodies and sustainability-related organizations.
- b. Hold sustainability-focused events, including lectures, themed programs, such as Bike to Work Month, and participation in the annual Student Expo.
- c. Develop a sustainability-focused volunteer program allowing staff, faculty and students to volunteer their time to environmental projects.
- d. Partner with other Carleton-led initiatives, where appropriate, to promote sustainability across the campus.

KEY TARGETS

- Increase the number of sustainability events.
- Evidence of increased student engagement with organizations working towards sustainability programs.
- Perception: Increase staff/faculty/student level of satisfaction in university sustainability issues.
- Participation: Increase staff/faculty/student level of participation in university sustainability issues.

RELEVANT SUSTAINABLE DEVELOPMENT GOALS:

- Goal 12 Responsible Consumption and Production
- Goal 13 Climate Action



Sustainable Collaboration

Engagement encompasses the broader interactions of Carleton and wider society for the enrichment of both. At a university level, our mission is very much driven by the creation and dissemination of knowledge, and the betterment of our community. Focusing on where and how external relationships can strengthen our institution and increase understanding around sustainability is fundamental. After all, an effective ongoing transition

towards sustainability will only be possible through collaboration and wider engagement.

Carleton will embrace participation and strengthening relationships beyond our internal community of staff, faculty and students, and do so to advocate for sustainability and serve as a catalyst for change in our city, greater capital region and beyond.

Goal 6.1: Encourage inter-institutional collaboration.

STRATEGIC ACTIONS:

- a. Actively collaborate, share information, experiences and expertise to help build sustainability operations, with other organizations and higher education institutions.
- b. Regularly review best practice models from other tertiary education organizations to inform and strengthen the university's sustainability program.

Goal 6.2: Strengthen community-university partnerships.

STRATEGIC ACTIONS:

- a. Develop and actively maintain partnerships with local community groups to advance sustainability (for example Carbon 613).
- b. Create and participate in community-university groups to identify possible areas for joint activity.
- c. Work with Alumni and Donor Relations to develop and support networks with an interest in sustainability.
- d. Expand volunteer programs for staff, faculty and students.

Goal 6.3: Advocate for sustainability and celebrate achievement.

STRATEGIC ACTIONS:

- a. Maintain positive and proactive communications about university sustainability activities and performance.
- b. Report publicly on the sustainability performance of the university on an annual basis.
- c. Develop and promote sustainability-related publications and events for audiences on- and off-campus.
- d. Profile sustainability-related activities by staff and students online and where appropriate.
- e. Engage with relevant government bodies on sustainability-related initiatives and strategies.
- f. Engage with senior leaders to advocate for national and local public policies that support sustainability in universities or otherwise advance sustainability.

RELEVANT SUSTAINABLE DEVELOPMENT GOALS:

- Goal 9 Industry, Innovation and Infrastructure
- Goal 12 Responsible Consumption and Production
- Goal 17 Partnership for the Goals

SUSTAINABILITY IN ACTION

Advocating for a Sustainable Energy Future

At Carleton, we are ideally positioned to help inform, shape and define public thought and practices towards achieving a sustainable future. Our impact can be considerably enhanced by a state-of-the-art sustainable energy research hub within a new Sustainability and Energy Efficiency Research Centre. This will expand the impact of our research, teaching and operations, and inspire further partnerships towards making a real difference nationally. We have already started down this path through the creation of Efficiency Canada at Carleton.

Efficiency Canada is part advocacy organization, part think-tank, and part data-driven start-up. Efficiency Canada advocates towards making our country a global leader in energy efficiency.

The partnership with Carleton convenes people from across Canada's economy to work together to advance policies required to take full advantage of energy efficiency. We leverage the best research out there to build a more productive economy, sustainable environment, and a better life for Canadians.

Carleton also has two Canada Research Chairs: one in Climate Change Impacts/Adaptation in Northern Canada and the other in Governance for Sustainable Development. Furthermore, our researchers are participating in IPCC (Intergovernmental Panel on Climate Change) Participation, leading the next Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC).





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